

January 27, 2021

BY EMAIL AND RESS

Ms. Christine E. Long
Board Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
P.O. Box 2319
Toronto, ON M4P 1E4

**Re: Upper Canada Transmission, Inc.'s ("NextBridge"), EB-2020-0150,
Interrogatory Responses of NextBridge**

Dear Ms. Long:

In accordance with Procedural Order No. 1 dated December 16, 2020, enclosed please find interrogatory responses filed by NextBridge in the above noted proceeding.

The attached responses include a redacted version of Energy Probe #20. Certain information requested by Energy Probe #20 is confidential and commercially sensitive, and, therefore, is not appropriate to be publicly disclosed. The requested cost breakout is highly sensitive business confidential information that if publicly disclosed would harm the competitive positions of NextBridge and its Engineering, Procurement and Construction contractor. The detailed cost breakout is the proprietary work product of NextBridge and its contractor, which is based on years of experience in developing large and complex transmission projects and the expending of significant time, money, and resources to develop a disciplined approach to budgeting. To publicly disclose this information would harm the competitive positions of NextBridge and its contractors in that it would give providers of similar competitive services information useful in making their own decisions, without expending the time and money necessary to gather and develop the data, and would allow providers of these competitive services to profit or otherwise derive benefits at the expense of NextBridge and its contractor. Specifically, publicly disclosing the cost breakout will provide competitors of NextBridge's with its internal disciplined approach to budgeting for the East West Tie line, which can be used to develop their own competing projects without developing this discipline themselves. Therefore, the unredacted, confidential attachment is being provided to the Board in accordance with the Board's *Practice Direction on Confidential Filings*.

Sincerely,



Digitally signed by
Jennifer Tidmarsh
Date: 2021.01.27
09:55:40 -05'00'

Jennifer Tidmarsh
Project Director

AMPCO INTERROGATORY #1

INTERROGATORY

Reference: Ref: Ex A T2 S1 P3

UCT is applying for recovery of \$5.331 million of pre-July 31, 2017 costs identified in the EB-2017-0182. Decision as being eligible for consideration as construction costs.

Please provide a breakdown and description of the Economic Participation costs of \$3.41 million.

RESPONSE

Please see the response to OEB Staff #54 and Energy Probe #2.

AMPCO INTERROGATORY #2

INTERROGATORY

Reference: Ex A T2 S1 P3

UTC seeks recovery of \$1.2 million in spares. Please explain what the spares consist of.

RESPONSE

Please see Exhibit C, Tab 2, Schedule 5 in the Application, which explains what the spares consist of, including towers, conductors, insulators, and arrestors.

AMPCO INTERROGATORY #3

INTERROGATORY

Reference: Ex A T3 S1 P3

The emergence of health threats associated with COVID-19 caused unforeseeable delays in current construction activities.

- a) Please discuss and quantify the cost, schedule and scope impacts to date.
- b) Going forward, please discuss and quantify the future potential impacts of COVID-19 on current construction cost, schedule and scope forecasts.

RESPONSE

- a) With regard to cost, COVID-19 costs incurred by the end of December 2020 are \$0.4 million as stated in NextBridge's Q4 2020 quarterly report, filed January 22, 2021 in EB-2017-0182. With regard to schedule and scope, as described in the letter from the IESO dated August 28, 2020 (found in the Application at Exhibit B, Tab 1, Schedule 1, Attachment 1, Page 2), the in-service date was revised to March 31, 2022 due to potential COVID-19 related impacts from steps taken to protect the health and safety of construction workers.
- b) Costs associated with the COVID-19 global pandemic have not been estimated in their entirety and will not be known until after construction is completed and the COVID-19 global pandemic is resolved.

AMPCO INTERROGATORY #4

INTERROGATORY

Reference: Ex A T3 S1 P3

The evidence indicates NextBridge has identified capital projects in accordance with its 10-year capital plan in its TSP following the March 31, 2022 in-service date but is not requesting these capital expenditures be included in a deferral account or added to the revenue requirement during the currently requested IR Term.

Please provide NextBridge's proposal regarding recovery of these costs beyond the requested IR Term.

RESPONSE

The depreciated book value of the capital expenditures would be added to rate base at NextBridge's next rebasing of revenue requirement, at the end of the IR term.

AMPCO INTERROGATORY #5

INTERROGATORY

Reference: Ex A T3 S1 P11

Given the proximity of the East-West Tie line to HONI's existing East-West transmission and station assets, maintenance can be optimized when work can be performed on both lines simultaneously (i.e., vegetation maintenance). These gained efficiencies are passed through to ratepayers as a reduced maintenance expense.

Please quantify the savings in maintenance expenses.

RESPONSE

During the RFP for the maintenance services provider, the presence of this optimization was considered as valuable in the provider selection. The avoided maintenance expenses are not quantifiable since a maintenance schedule for both lines has not been set. Once the line is in-service and maintenance activities begin, the HONI/Supercom partnership and NextBridge will align activities to maximize efficiencies in how crews perform work on both lines at the same time.

Please see the response to Staff #20 and #28 for more information on efficiencies with HONI as maintenance supplier.

AMPCO INTERROGATORY #6

INTERROGATORY

Reference: Ex A T3 S1 P12

This plan provides for increased reliability by taking advantage of new technology and equipment to reduce potential outages and gain additional situational awareness of real-time conditions at various critical crossings in the line.

Please provide details on the proposed new technology and equipment.

RESPONSE

An example of the new technology referenced is the use of right-of-way cameras. The East-West Tie line is in a remote region of Northwestern Ontario which is known for harsh weather conditions. The use of cameras will help facilitate situational awareness of the transmission line and increase the ability for NEET personnel to make assessments on the necessary response to potential issues on the transmission line in a timely fashion. Additionally, the use of cameras is expected to help avoid unnecessary physical trips by NEET field personnel or HONI/Supercom as the maintenance services provider by allowing potential issue to be visually confirmed remotely.

The two NEET field personnel will also utilize unmanned aerial vehicle (UAV) technology as a tool. This will allow personnel to validate findings of the maintenance services provider. NEET field personnel will be trained to operate the UAVs and are expected to routinely use them for maintenance validation and for spot inspections of areas that are not readily accessible or are environmentally sensitive. The UAV will allow personnel to quickly perform a detailed visual inspection and record the validation of findings, or in the case of a spot inspection, determine the general condition of the line, structure, and right-of-way in a specific area.

AMPCO INTERROGATORY #7

INTERROGATORY

Reference: Ex A T3 S1 P13

NextBridge is proposing to utilize a set of measures that best demonstrate its performance and address the performance standards for transmitters as set out in Chapter 4 of the Transmission System Code. The proposed performance measures and their associated RRFE performance outcomes are shown in Table 5.

Please provide targets for these Performance Measures over the IR term.

RESPONSE

Please see the response to Staff # 59 and #60 and Energy Probe #24.

AMPCO INTERROGATORY #8

INTERROGATORY

Reference: Ex A T3 S1 P16

The total OM&A expense is \$4.94 million in the Test Year (April 1, 2022 to March 31, 2023). Operations and Maintenance costs total \$1.27 million.

- a) Please provide a breakdown of the Operations and Maintenance activities and explain how the budget was derived.
- b) Please provide any targets for Operations and Maintenance activities over the IR Term.

RESPONSE

- a) Please see response to Staff #29.

The budget was estimated using a bottoms-up approach for what was expected to be needed to safely and reliably operate the transmission line.

- b) Please see response to Staff # 59 and #60, and Energy Probe #24.

AMPCO INTERROGATORY #9

INTERROGATORY

Reference: Ex A T7 S1 P1

Table 1 provides an asset summary.

- a) Please provide the quantity of each asset group installed to date.
- b) Please provide the cost per km of Overhead Transmission Lines installed.
- c) Please provide the cost per Steel Structure installed.
- d) Please provide the cost per insulator installed.

RESPONSE

- a) An update on the progress of construction and the installation of materials can be found in Attachment to SEC #9.
- b) b), c) and d) The requested information is not available as NextBridge does not separately track the costs of transmission lines, structures, and insulators installed to date. NextBridge does track the progress of completion, which can be found in the Attachment to SEC #9. NextBridge also tracks the costs of the East-West Tie line, and the latest reporting on costs can be found in the January 22, 2021 Quarterly Report filed in EB-2017-0182.

AMPCO INTERROGATORY #10

INTERROGATORY

Reference: Ex B T1 S1 Attachment 1

The East-West Tie Line is scheduled to come into service on March 31, 2022. The IESO Letter dated August 28, 2020 indicates an in-service date of March 31, 2022 does not represent an unacceptable risk to reliability. If the in-service date is delayed beyond March 31, 2022, but before the end of 2022, there may be additional costs to manage the resulting reliability risks; however, these costs are expected to be within the costs of the measures previously identified in the IESO's 2018 Addendum. The IESO maintains that delays beyond the end of 2022 would create an unacceptable amount of increased risk and cost uncertainties as noted in the IESO's 2018 Addendum.

Please discuss current threats to the schedule that could result in a project delay beyond the end of 2022.

RESPONSE

The current challenges to the project schedule are discussed in the Risk Management section in NextBridge's Q4 2020 quarterly report filed on January 22, 2021 filed in EB-2017-0182.

AMPCO INTERROGATORY #11

INTERROGATORY

Reference: Ex B T1 S4 P7

The East-West Tie line conductor is a three-phase transmission line comprised of one 1192.5 kcmil Aluminum Conductor Steel Reinforced "Grackle" conductor per phase, one 19#10 Alumoweld shield wire, and one 48 fibre OPGW. The steel towers will be Guyed-Y and self-supporting lattice towers. The insulators will be composite suspension insulators and glass/porcelain insulators.

Please confirm there is no current documented manufacturing defect related to glass/porcelain insulators.

RESPONSE

It has been determined that no porcelain insulators will be used on the East-West Tie line. Based on the letter from the insulator manufacturer attached to this response, NextBridge is not aware of any manufacturing defects with regard to the glass insulators that will be used on the East-West Tie line.

Date: 18 January 2021

Valard Construction
4209 – 99 Street
Edmonton, AB T6E 5V7
Attn: Adam Gray

Subject: Supply of Sediver Glass Insulators for the OEWT T/Line project

Dear Mr. Gray,

This is to confirm that all the insulators delivered for the subject project during 2019 & 2020, as per Domino PO No. 10191, were subject to Sediver's quality inspection procedures as well as the technical and QA specifications of this project.

Having successfully passed all the applicable QA testing procedures, we hereby confirm that all the insulators supplied by Sediver are free of manufacturing defects.

Yours Truly,



Ezio Del Bello
General Manager

AMPCO INTERROGATORY #12

INTERROGATORY

Reference: Ex B T1 S4 P12 Table 4

Please provide forecast costs and quantities for the Test Year for each Maintenance Activity in Table 4.

RESPONSE

Please see response to Staff #29.

AMPCO INTERROGATORY #13

INTERROGATORY

Reference: Ex C T2 S4 Page 1

A total of \$737.1 million in construction costs is forecasted to complete the East-West Tie line, of which 57% have already been incurred as of October 31, 2020.

Please discuss any contingency amounts spent to date.

RESPONSE

For a discussion of contingency amounts spent to date, please see NextBridge's Q4 2019 OEB Quarterly Report and the Response to OEB Request – February 2020 (found in the Application at Exhibit C, Tab 1, Schedule 1, Attachment 2 & 4) which specifically addresses this allocation of contingency.

AMPCO INTERROGATORY #14

INTERROGATORY

Reference: Ex C T2 S4 Page 2

The evidence indicates the Project Management Office meets on a monthly basis to discuss cost and activity tracking and identify any variances (whether positive or negative) and any unanticipated expenditures that need to be included in the next forecast. Each month this review assesses:

- Cost performance;
 - Schedule performance;
 - Identification of new risk factors;
 - Any major changes to forecast; and
 - Vendor performance.
- a) Please provide the start date for the project.
 - b) Please provide the latest cost performance information as an overall percentage against the construction budget.
 - c) Please provide the latest schedule performance information as an overall percentage against schedule plan.
 - d) Please discuss any major changes to the forecast in the last quarter.
 - e) Please file the OEB Quarterly Report for Q4 2020.
 - f) Please provide the construction cost forecast for the end of 2021.

RESPONSE

- a) NextBridge began construction of the East-West Tie line in September 2019.
- b) Please see the OEB Quarterly Report for Q4 2020, Section 3 "Construction Cost Update" filed in EB-2017-0182.
- c) Please see the Construction Report attached to SEC #9.
- d) Please see the OEB Quarterly Report for Q4 2020, Section 3 "Construction Cost Update" filed in EB-2017-0182.
- e) NextBridge filed this report on January 22, 2021 filed in EB-2017-0182.

- f) Please see the OEB Quarterly Report for Q4 2020, Section 3 “Construction Cost Update” filed in EB-2017-0182.

BOMA INTERROGATORY #1

INTERROGATORY

Reference: *Exhibit B/Tab 1/Schedule 4/Page 7 of 14*

Preamble:

The asset profile, as noted in Table 2 above, provides the average age of the components and the ESL. The ESL is defined as the average time duration in years that an asset can be expected to operate under normal system conditions and is determined by similar useful life data presented in HONI's rate case filings found in Board File No. EB-2019-0178 and Board File No. 2018-0275. Assets operating beyond ESL generally have a higher likelihood of failing or being in poor condition. The depreciation of the of the East-West Tie line is in line with the overall expected life of the assets that comprise the project.

Question:

- (a) Please provide the average age of the components and the ESL. Table 2 on Page of 14 does not do so.

RESPONSE

	Description	Quantity	Average Age of Components (Years)	ESL (Years) ¹
Conductor	The conductor of an overhead transmission line is the asset responsible for transporting electricity between system nodes.	892 circuit km	New	70
Steel Towers	Steel structures elevate transmission lines above the ground, providing clearance from ground objects and separation between the circuit conductors and other line components.	1227 Structures	New	90

Insulators	Insulators provide mechanical support for overhead conductors and must provide electrical isolation between the energized conductors they support and the grounded towers to which they are attached.	7368 Insulators	New	60
1. ESL is based on the proposed Projection Life taken from Statement E of the Fosters Depreciation Study performed for the Bruce to Milton Application.				

BOMA INTERROGATORY #2

INTERROGATORY

Reference: Exhibit C/Tab 1/Schedule 1/Attachment 1

Question:

- (a) Please confirm that pages 2 to 31 of the attachment should be labelled "Exhibit B Tab 1 Schedule 7 Attachment 1".

RESPONSE

- a) Pages 2 to 31 should be labelled "Exhibit C Tab 1 Schedule 1 Attachment 1".

ENERGY PROBE INTERROGATORY #1

INTERROGATORY

Reference: Upper Canada Transmission, Inc. (NextBridge) Transmission Licence ET-2011- 0222, Quarterly EWT Project Progress Report October 22, 2020, OEB File Number EB-2017- 0182

- a) Please provide an update to the Project Cost Report Update Table (page 31 of Report). Please add a column to indicate the Projected Total Final Budget and In-Service Asset Amounts.
- b) If the projected Final In-Service cost differs from that approved in the LTC application, please provide a variance report.
- c) Please provide an update on Risk Management and the Risk on the Project and discuss the impacts and mitigation required.
- d) Is NextBridge still projecting the In Service Date as March 31, 2022 (Appendix A)? If not, please provide the revised ISD and reasons for the change.
- e) Please provide an update on the Biinjitiwaabik Zaaging Anishinaabek (BZA) appeal. Please discuss how this affects the Project and participation by First Nations.

RESPONSE

- a) NextBridge updated the Project Cost Report Update Table in its January 22, 2021 quarterly report submitted in EB-2017-0182, which has been made part of the record in this case. See response to SEC #4. NextBridge currently has no In-Service Asset Amounts, since the East-West Tie line is a single asset and it is not yet in service, so there is no column to add. The Projected Total Final Budget forecast is already included in the table.
- b) If NextBridge incurs any costs above the \$737.1 million, these costs will be filed in a Construction Cost Variance Account and disposition will be sought in the second annual update.
- c) The updated risk management tables can be found in the January 22, 2021 quarterly report.
- d) Yes, NextBridge is still projecting the in-service date of March 31, 2022.

- e) An update on the Biinjitiwaabik Zaaging Anishinaabek (BZA) appeal can be found in the January 22, 2021 quarterly report.

Also, as explained in NextBridge's Q4 2019 quarterly report to the OEB submitted in EB-2017-0182, BZA requested that environmental permits be withheld due to their assertions that they were not adequately consulted on the East-West Tie line. Environmental permits were originally expected to be approved in September 2019, but the Ministry of Natural Resources and Forestry (MNRF) delayed the issuance of permits until March 2020. In the Q1 2020 quarterly report to the OEB submitted in EB-2017-0182, it was explained that MNRF deemed that NextBridge had addressed BZA's issues and were moving forward with supplying permits.

The appeal by BZA does not affect the participation opportunities provided to Indigenous communities on the East-West Tie line.

ENERGY PROBE INTERROGATORY #2

INTERROGATORY

Reference: Exhibit A, Tab 2, Schedule 1, Page 3, Recovery of \$5.331 million of pre-July 31, 2017 costs

- a) Please confirm that the \$31.24 million development costs were approved in the EB-2017-0182 Decision. Indicate any caveats e.g. audit.
- b) Please confirm that the \$5.331 million of pre-July 31, 2017 costs were not approved, but noted by the Board as eligible for consideration as construction costs (referred to as Phase Shift Costs).
- c) Please provide a detailed breakdown of the \$3.41 million Economic Participation costs.
- d) Please discuss why these Economic Participation costs are appropriately construction costs and should be recovered from ratepayers, for example as compared to the Environmental Assessment and land optioning costs.

RESPONSE

- a) Confirmed. There are no caveats.
- b) Confirmed.
- c) The breakdown of the \$3.41 million in Economic Participation costs is:
 - Payroll and employee expenses: \$0.9MM
 - Consulting and Legal Support: \$1.9MM
 - Indigenous Support for Negotiations: \$0.6MM
- d) In its Designation application¹, NextBridge conveyed that it was not in a position to estimate the costs associated with Indigenous economic participation until further engagement had been initiated with communities. Over the course of the project, NextBridge has worked with all communities identified by the Crown and gained a better understanding of the scope of potential economic participation in the East-

¹ Upper Canada Transmission, Inc. operating as NextBridge Infrastructure Application for Designation to Develop the East-West Tie Line dated January 4, 2013 (EB-2011-0140), at pages 46 and 116; Upper Canada Transmission, Inc. Response to Board Interrogatory 26 to all Applicants.

West Tie line. These costs were detailed as part of NextBridge's Leave to Construct Application and further detail provided as part of those proceedings.² As explained in Exhibit C, Tab 2, Schedule 3 Page 4 and Page 5, these prudently incurred costs are appropriate construction costs that should be recovered from ratepayers. For example, the participation agreements needed to be finalized well in advance of the filing of the Leave to Construction (LTC) application and the commencement of construction in order to 1) ensure costs in the LTC budget reflected these activities; 2) provide communities the time to train and employ community members for jobs before the commencement of the construction period; and 3) prepare Indigenous businesses to participate in procurements for construction contracts to maximize economic opportunities.

Additionally, as previously mentioned in the TSP at Exhibit B of the Application in this docket, NextBridge was required to meet the government of Ontario's policy objectives for Indigenous economic participation as laid out in the 2013 LTEP - Achieving Balance (published in December 2013) which would not have been possible without the proactive planning and investment of these funds. These investments, in parallel to provincial policy, also support the Truth and Reconciliation Commission of Canada's Call to Action 92 which calls for corporate Canada to lead on reconciliation by ensuring robust Indigenous economic participation in infrastructure projects such as the East-West Tie line which is in the interests of Ontario ratepayers.

² EB-2017-0182, Interrogatories filed January 25, 2018, Exhibit I.B.NextBridge.STAFF.22.

ENERGY PROBE INTERROGATORY #3

INTERROGATORY

Reference: Exhibit A, Tab 3, Schedule 1, Pages 5-7, Table 1 and Table 3; Exhibit E, Tab 1, Schedule 1, Table 3, Page 2, Table 3

Preamble: “NextBridge has identified capital projects in accordance with its 10-year capital plan in its TSP following the March 31, 2022 in-service date but is not requesting these capital expenditures be included in a deferral account or added to the revenue requirement during the currently requested IR Term. Therefore, economic assumptions concerning inflation and exchange rates that could affect the cost of the capital expenditures are not included in this Application.”

- a) Please confirm that the proposed Revenue Cap Index (RCI) is inflated at the OEB Index.
- b) Please project the RCI over the Term of the Plan under the assumption that no incremental capital except that in Table 3 is added over the 10 year term of the plan. Please reconcile with Exhibit A, Tab 3, Schedule 1, Table 9.
- c) Please indicate the result showing how much capital “head room” is available for each year of the term and the total capital for each year. Please indicate assumptions regarding revenue requirement components, including OM&A, depreciation taxes and return on capital.
- d) Please explain why UCT/Nextbridge expects to have additions to gross plant in service, and therefore rate base, annually over the IR Term but has not included them in the revenue requirement being submitted. For example, capital additions vs depreciation.
- e) Will this lead to large balances in the CCVA?

RESPONSE

- a) Consistent with the policy determinations set out in the OEB Report on Rate Setting Parameters and Benchmarking under the RRFE (EB-2010-0379) issued November 21, 2013 and updated December 4, 2013, the OEB has calculated the value of the inflation factor for incentive rate setting under the Price Cap IR and Annual Index plans, for rate changes effective in 2020, to be 2.0%. NextBridge has utilized this 2% as the inflation factor in the proposed RCI, described in Exhibit E, Tab 1, Schedule 1, Page 3.
- b) NextBridge is not requesting the incremental capital in Exhibit A, Tab 3, Schedule 1, Table 9 be added to rates over the IR term. Therefore, the RCI included in the Application is not impacted.

- c) NextBridge's IR proposals do not include any concept that is related to capital "head room" available for each year of the term and the total capital for each year, therefore there is no calculation to be performed.
- d) NextBridge disagrees with the premise of the question. NextBridge does not expect to have additions to gross plant in service, and therefore, rate base, annually over the IR term that have not been included in revenue requirements.
- e) Please see Exhibit B, Tab 1, Schedule 6. Further, the capital projects implemented during the IR term will not be eligible for inclusion in the CCVA. Therefore, those capital projects cannot lead to large balances in the CCVA.

ENERGY PROBE INTERROGATORY #4

INTERROGATORY

Reference: Exhibit A, Tab 3, Schedule 1, Page 10; Exhibit B, Tab 1, Schedule 4.

Preamble: “The majority of NextBridge’s maintenance services were competitively bid and will be awarded to a partnership between HONI and Supercom, which will result in a service level agreement to plan and organize the operation and maintenance of the assets.”

- a) Please provide a list of the services bid, the number of bidders and the range of costs (omit names except HONI/Supercom).
- b) Please provide more information on Supercom and its role in the HONI/Supercom services agreement.
- c) Please file a copy of the Service Agreement with HONI/Supercom.

RESPONSE

a) Below is the list of services bid.

Maintenance services including a detailed visual aerial inspection of one third of the transmission line on an annual basis, with the remaining two thirds of the line being aerially (alternatives will be considered) inspected for obvious and critical issues only. For the visual inspection, high resolution photos of each structure will be taken and reviewed further by the bidder’s transmission line subject matter experts. The detailed visual inspection will be submitted to NextBridge within 2 weeks and include the following transmission line, right-of-way and access inspection points;

- Steel structures
- Hardware
- Loose/damaged guys and missing/damaged guy guards
- Conductors, overhead shield wire and OPGW (broken strands, sag, clearance issues, etc.)
- Insulator assemblies
- Arrestors
- Vibration dampeners
- Backfill problems
- Erosion issues/Washouts
- Rock-fall
- Tree growth that may have encroached on limits of approach/hazard trees

- Public improvements/interference

The maintenance services agreement will also include responses to unplanned outages and emergencies. Response will be needed on a 24x7x365 basis and will require immediate action due to the serious effects of line outages and potential public safety impacts. Qualified personnel will need to be immediately dispatched to assess the event and develop a response plan. At a minimum the work plan will require the following items:

- Details outlining of all the required activities, timing and schedule/sequence
- Responsibility structure
- Material list
- Safe work plan
- Preliminary cost estimate based on time and material rates
- Applicable engineering resources and drawings
- Estimated restoration time
- Equipment list (i.e., cranes, trucking, helicopters, etc.)
- Access plan

The maintenance services provider will, upon notification of an emergency, in light of the circumstances of the emergency, endeavor to arrive in the area of the emergency within 24 hours to perform an initial assessment of the infrastructure, and prepare a work plan within 24 hours of the initial site visit for approval of NEET field personnel. Furthermore, in respect of such emergency, the maintenance services provider shall, in good faith, with reasonable and expeditious effort, deploy all labour, equipment and materials in accordance with the work plan approved by NEET field personnel, to perform the required restoration.

Maintenance services will include identification and storage of spare material. While NextBridge will have some spare material for the transmission line, a complete list of expected spare material will need to be developed, including costs and storage type and location(s).

Vegetation maintenance services during the operational phase of the transmission line will also be required.

Number of Bidders

NextBridge sent the RFP to 5 potential bidders, and three bid responses were received.

Range of Costs

The cost range was \$0.3M to \$0.4M annually.

b) Supercom Industries LP (Supercom) is a unique partnership of six First Nations who ensure maximum employment and economic benefits for Indigenous communities along the East-West Tie line area. Their focus includes facilitating training programs and the

procurement of materials, services, and labour from Indigenous communities. HONI and Supercom will be a limited partnership that links the focus areas of Supercom mentioned above with the long-established capacities and resources of HONI.

c) The maintenance services agreement with HONI/Supercom has not yet been finalized but is expected to be complete Q1 2021. It will be filed at that time.

ENERGY PROBE INTERROGATORY #5

INTERROGATORY

Reference: Exhibit A, Tab 3, Schedule 1, Pages 10 and 11

Preamble: “Asset condition assessments are conducted for each asset as they reach an individual age threshold, which varies depending on asset type. They are categorized as low, fair, and high risk assets relative to their likelihood of near-term failure. Low risk assets are ‘like new’ or have not yet reached an age where condition assessment is required. Since the East-West Tie line is new, all assets fall in the ‘like new’ category.”

- a) Provide the age threshold for each major category of assets.
- b) Why is Hydro One Transmission a reasonable proxy for Asset Condition Assessments, given the province-wide location of Hydro One Transmission assets? Comment if a subset reflecting operating conditions in Northern Ontario be more appropriate? What does Hydro One Transmission use for its current line assets?
- c) Please explain why Hydro One Sault Ste, Marie would not be a better comparator than Hydro One Transmission.

RESPONSE

- a) All assets are new. When referring to Asset Condition Assessment, each major component will receive a detailed inspection/condition assessment once every three years.
- b) NextBridge disagrees with the premise of this question. NextBridge did not use HONI as a proxy for asset condition. NextBridge utilized the Foster & Associate’s Study for the principles of useful life.
- c) See part b.

ENERGY PROBE INTERROGATORY #6

INTERROGATORY

Reference: Exhibit A, Tab 3, Schedule 1, Page 16, Table 6

Preamble: “The total OM&A expense is \$4.94 million in the Test Year (April 1, 2022 to March 31, 2023). There is no information comparing the OM&A to a change from the last approved OM&A, given this is NextBridge’s first request for revenue requirements. Further details on the OM&A costs are provided in the following Table 6.”

- a) How much of the OM&A is contracted services, including HONI/ Supercom?
- b) How much of the OM&A is controllable by UCT/NextBridge?
- c) Please list the amounts that are fixed and variable.
- d) Of the OM&A amount controlled by UCT/NextBridge please break out direct costs including Compensation Costs.
- e) Is Indigenous Participation a fixed annual amount?

RESPONSE

- a) See response to OEB Staff #29.
- b) All OM&A costs are controlled by UCT/NextBridge, however they are also dictated by what is needed on the East-West Tie line. Please see OEB Staff #4 for a list of potential risks that may need to be mitigated on the East-West Tie line and NextBridge will manage those costs within the amount budgeted for the entire IR Term.
- c) All OM&A is contractual but not completely fixed.
- d) All OM&A costs are controlled by UCT/NextBridge. As noted in Exhibit F, Tab 5, Schedule 1, NextBridge has no employees. All personnel used to support NextBridge work for affiliate partners or through a service agreement with HONI/Supercom.
- e) Amounts are from East-West Tie line project agreements negotiated to mitigate against adverse impacts to Indigenous rights and interests. A portion of the budget increases by the annual rate of inflation year over year as some of these agreements contain a mechanism for inflation. See also the response to Staff# 26 f.

ENERGY PROBE INTERROGATORY #7

INTERROGATORY

Reference: Exhibit A, Tab 3, Schedule 1, Page 17

Preamble: “NextBridge anticipates that the initial financing of the East-West Tie line will occur after the OEB issues its decision and order in this proceeding, since the initial financing will occur in close proximity to the in-service date and NextBridge is requesting either interim or final rates prior to the in-service date. Therefore, NextBridge proposes to use a DRVA to track and conduct a one-time update to the revenue requirements at the first annual update for rates in 2023 to reflect NextBridge’s actual long-term cost of debt.”

- a) Please provide the basis of/type of financing for Long Term and Short Term debt and the rates forecast for LT and ST debt in the table on Page 17.
- b) Why cannot UCT/NextBridge not procure the initial debt required for the project? Are there specific reasons, such as the assets are not in service until April 1 2022? Please discuss.

RESPONSE

- a) The rates for LT and ST debt in the table on page 17 are from the OEB-approved cost of capital parameters for 2020, released on October 31, 2019, as described in Exhibit G, Tab 2, Schedule 2.
- b) The specific reasons for procuring long-term debt close to the initial in service date are: 1) having the East-West Tie line near completion and the certainty of cost recovery will provide the East-West Tie line with better financing rates, which, in turn, will benefit ratepayers, and 2) the East-West Tie line structure, including the buy-in of Bamkushwada, LP, are not expected to be completed until near the in-service date.

ENERGY PROBE INTERROGATORY #8

INTERROGATORY

Reference: Exhibit A, Tab 3, Schedule 1, Page 18

Preamble: “The establishment and approval of the accounting orders for a CCVA to be made effective the same date of the filing of this Application, as described in Exhibit H, Tab 1, Schedule 1.”

- a) What Threshold is proposed for the CCVA?
- b) Please relate this to the Revenue Requirement and the OEB guidance in this regard.

RESPONSE

- a) NextBridge has not proposed a balance for the CCVA, but has requested the OEB to allow NextBridge to establish the accounts. NextBridge will follow the materiality thresholds defined by the OEB in the Chapter 2 Filing Requirements, dated February 11, 2016.
- b) NextBridge's materiality threshold, as related to the Revenue Requirement and the OEB guidance, is \$278,500 (i.e., 0.5% of Revenue Requirement, or \$55,700,000 x 0.5% = \$278,500).

ENERGY PROBE INTERROGATORY #9

INTERROGATORY

Reference: Exhibit A, Tab 5, Schedule 1, Page 1, Attachment 1: 2018 and 2019 Audited Financial Statements

- a) Please File 2020 Unaudited Statements.
- b) Please highlight/discuss major changes from 2019.

RESPONSE

- a) and b)

Consistent with Section 2.3.3 of the OEB's filing requirements, NextBridge included two years of audited financial statements, and, therefore, is not required to file draft financial statements. While NextBridge has met the OEB's filing requirements, in response to this request, NextBridge will file its 2020 audited financial statements once they are finalized by the end of March 2021.

ENERGY PROBE INTERROGATORY #10

INTERROGATORY

Reference: Exhibit A, Tab 6, Schedule 1, pages 3 and 4

- a) Please indicate which of the corporate entities shown in Exhibit A, Tab 6, Schedule 1, pages 3 and 4 have employees and which corporate entities do not have employees.
- b) Which corporate entities shown on pages 3 and 4 are electricity transmitters regulated by the OEB under the OEB Act?
- c) Do the electricity transmitters identified in the answer to part (b) have offices in Ontario? If the answer is yes, please provide the addresses of the offices, the number of employees who work there, and the title of the highest ranking employee who works out of each office. If the answer is no, please explain why not. If there are plans to open offices in Ontario, please describe those plans.

RESPONSE

- a) NextEra, Enbridge, and OMERs have employees. NextBridge, Upper Canada Transmission, and Upper Canada Transmission 2 do not have employees, all individuals who work on the East-West Tie line are employees of its partner entities. Bamkushwada does not have any employees, all individuals who work on the East-West Tie line are employees of their respective First Nation community.
- b) Upper Canada Transmission.
- c) Yes. The office is located at 2200 Yonge St, Suite 1712, Toronto, Ontario, M4S 2C6. Three employees work out of this office. The highest-ranking employee has the title of President, NextEra Energy Transmission – Canada. This person is also the Project Director for the East-West Tie line.

ENERGY PROBE INTERROGATORY #11

INTERROGATORY

Reference: Exhibit A, Tab 6, Schedule 1, Page 5

Preamble: “In connection with the anticipated economic participation by BLP in the East-West Tie line after commercial operation date, NextBridge expects to request the OEB’s permission to transfer the transmission license from UCT to a newly established special purpose vehicle such that the transmission license and all or substantially all of the East-West Tie line assets are held by a single entity”

- a) Is the “newly established special purpose vehicle” the corporate entity identified as UCT2 on page 4?
- b) The sentence quoted in the Preamble implies that prior to the transfer the East-West Tie assets will be held by several corporate entities. Please file a table that shows the corporate entities in question, the assets held and their estimated value prior to the transfer.
- c) Please confirm there will be a period between the start of commercial operation and the transfer of assets where the rate base of UCT will consist of assets owned by different corporate entities.

RESPONSE

- a) Yes.
- b) The reading of the preamble is incorrect. NextBridge Infrastructure, LP (NextBridge) will hold the East-West Tie line assets prior to and after the in-service date. At no point are the assets of NextBridge held by several corporate entities.
- c) Please see part b of this response. Not confirmed.

ENERGY PROBE INTERROGATORY #12

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 1, Attachment 1, Page 2, IESO Letter August 2020:Exhibit B, Tab 1, Schedule 5, Attachment 3, Page 7, Table 2

Preamble: “To summarize, the IESO does not expect an increased risk to reliability if the project’s in-service date is delayed to March 31, 2022 and, therefore, has determined that an in-service date of March 31, 2022 does not present an unacceptable risk to reliability. If the in service date is delayed beyond March 31, 2022, but before the end of 2022, there may be additional costs to manage the resulting reliability risks; however, these costs are expected to be within the costs of the measures previously identified in the IESO’s 2018 Addendum. The IESO maintains that delays beyond the end of 2022 would create an unacceptable amount of increased risk and cost uncertainties as noted above and in the IESO’s 2018 Addendum.”

- a) What are the Costs to manage the Reliability Risk if the EWT ISD is beyond March 2022?
- b) Who will bear these costs?
- c) Does UCT/NextBridge have a high degree of confidence that additional delays are unlikely before the OEB accepting a March 31, 2022 in-service date.
- d) Why should not UCT/NextBridge be subject to Financial Penalties if the ISD is delayed beyond March 31.2022? Please discuss.

RESPONSE

- a) NextBridge does not know the current costs the IESO would incur to manage reliability risk. The most recent costs are filed in the IESO’s *Addendum to the 2017 Updated Assessment for the Need for the East-West Tie Expansion - Reliability Impacts and the Projected System Costs of a Delay to the Project In-service Date* filed in Exhibit B, Tab 1, Schedule 5, Attachment 3 of the Application.
- b) See (c) and (d). As no costs are anticipated to be incurred, there is no need for anyone to bear the costs. If there are any costs, it is NextBridge’s general understanding that the IESO allocates these costs to ratepayers if they are prudently incurred.
- c) Yes, NextBridge has a high degree of confidence that it will make the March 31, 2022 in-service date, barring any unforeseen events.

- d) NextBridge expects to meet the projected in-service date, and, therefore, if such date is met, there will be no additional IESO incurred costs after March 31, 2022 due to East-West Tie line not being in service.

It would not be reasonable or appropriate to expect NextBridge to pay annual system costs after March 31, 2022 due to delays in placing the East-West Tie in service as a result of unforeseen actions that were not within NextBridge's control.

ENERGY PROBE INTERROGATORY #13

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 4, page 2

Preamble: “NextBridge will have two NEET personnel dedicated to field operations. In order to reduce employment and overhead costs, the individuals will be employees of NEET. The decision to use two dedicated field personnel has been based on the experience of NEET from currently operational projects. The East-West Tie project has an extensive geographic area, not only from the 450 km of ROW, but also from the access roads that are used to reach the ROW through remote and rugged terrain. The two individuals must be available to reach these areas quickly and will be based in separate areas of the line.”

- a) Please explain how having the two employees as personnel of NEET instead of UCT/NextBridge reduces employment and overhead costs?
- b) Please explain how the two NEET employees will be able to cover 450 km of ROW and how will they be able to reach ROW through “remote and rugged terrain” quickly and the duties of these two NEET employees once they arrive at a ROW location.
- c) Since there are only two employees how will NEET provide the required services if either one or both are not available due to vacation, illness, or family emergencies?

RESPONSE

- a) Please see the response of Staff #13 c.
- b) NextBridge will be maintaining a rigorous annual inspection regime (see Staff #23 and Energy Probe #25) that will ensure that the need to reach the right of way quickly will be greatly minimized since emergencies will be prevented before occurring. Additionally, the use of right of way cameras is expected to help avoid unnecessary physical trips by NEET field personnel or HONI/Supercom as the maintenance services provider by allowing potential issues to be visually confirmed remotely (see AMPCO #6 and HONI #7). Nonetheless, in the event of an emergency the two NEET field personnel will be based in the East-West Tie line area and will be equipped with necessary equipment to access the right-of-way for required activities, i.e., including trucks, UTVs, UAVs, and communication tools. In the event helicopter access is required, the contracted maintenance services of HONI/Supercom includes provisions for helicopter access if the situation arises. The roles and responsibilities of the NEET field personnel can be found in Exhibit B, Tab 1, Schedule 4, Page 2 of 14 in the Application and the response to Staff #18 a.

- c) The two NEET field personnel will back each other up during planned absences such as vacations and short-term illnesses or family emergencies. If a field personnel shortfall is encountered where additional support is required in the East-West Tie line area, NEET and its affiliates have qualified personnel performing similar duties across North America, including personnel in Ontario, who will travel to the East-West Tie line area on short notice should the need arise.

ENERGY PROBE INTERROGATORY #14

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 4, Page 7, Table 2. Quantity of Major Transmission Assets Exhibit C, Tab 1, Schedule 1, Page 2 of 3 Table 1. Gross Plant Summary (\$ M)

Preamble: “The asset profile, as noted in Table 2 above, provides the average age of the components and the ESL. The ESL is defined as the average time duration in years that an asset can be expected to operate under normal system conditions and is determined by similar useful life data presented in HONI’s rate case filings found in Board File No. EB-2019- 0178 and Board File No. EB-2018-0275.”

- a) Please list the Hydro One Transmission/UCT interface/connection points.
- b) Please confirm that all Stations and Transformers and associated costs are owned by Hydro One Transmission.
- c) What costs at Stations are included in UCT Assets costs?
- d) Please provide the asset life for each category in Table 2.
- e) Please provide the Net Book value of each of the the categories of assets at the ISD of March 31, 2022.
- f) Please confirm the Opening Rate Base on April 1, 2022.
- g) If the Project is delayed how will this affect Opening Rate Base?

RESPONSE

- a) Please see table below:

Component	Circuit	Start Structure	Stop Structure	Description
Conductor	M37L	A001	C279	NextBridge owns tower, Hydro One owns last span into stations. Demarcation point is the Vang on the tower where Hydro One insulator attaches to NextBridge Tower.
OHSW (Shield Wire)	M37L	A001	C279	NextBridge owns tower, Hydro One owns last span into stations. Demarcation point is the Vang on the tower where Hydro One insulator attaches to NextBridge Tower.

Component	Circuit	Start Structure	Stop Structure	Description
OPGW (Optical Ground Wire)	M37L	A001	C279	NextBridge owns tower and OPGW splice case, Hydro One owns last span into stations. Demarcation point is the splice inside the splice case on the tower.
Conductor	M38L	A001	C279	NextBridge owns tower, Hydro One owns last span into stations. Demarcation point is the Vang on the tower where Hydro One insulator attaches to NextBridge Tower.
OHSW (Shield Wire)	M38L	A001	C279	NextBridge owns tower, Hydro One owns last span into stations. Demarcation point is the Vang on the tower where Hydro One insulator attaches to NextBridge Tower.
OPGW (Optical Ground Wire)	M38L	A001	C279	NextBridge owns tower and OPGW splice case, Hydro One owns last span into stations. Demarcation point is the splice inside the splice case on the tower.
Conductor	W36M	D001	F233, F235	NextBridge owns tower, Hydro One owns last span into stations. Demarcation point is the Vang on the tower where Hydro One insulator attaches to NextBridge Tower.
OHSW (Shield Wire)	W36M	D001	F233, F235	NextBridge owns tower, Hydro One owns last span into stations. Demarcation point is the Vang on the tower where Hydro One insulator attaches to NextBridge Tower.
OPGW (Optical Ground Wire)	W36M	D001	F233, F235	NextBridge owns tower and OPGW splice case, Hydro One owns last span into stations. Demarcation point is the splice inside the splice case on the tower.
Conductor	W35M	D001	F233, F235	NextBridge owns tower, Hydro One owns last span into stations. Demarcation point is the Vang on the tower where Hydro One insulator attaches to NextBridge Tower.

Component	Circuit	Start Structure	Stop Structure	Description
OHSW (Shield Wire)	W35M	D001	F233, F235	NextBridge owns tower, Hydro One owns last span into stations. Demarcation point is the Vang on the tower where Hydro One insulator attaches to NextBridge Tower.
OPGW (Optical Ground Wire)	W35M	D001	F233, F235	NextBridge owns tower and OPGW splice case, Hydro One owns last span into stations. Demarcation point is the splice inside the splice case on the tower.

- b) Yes, confirming all stations and transformers and associated costs are owned by Hydro One Transmission.
- c) NextBridge does not have station costs.
- d) Please see response to BOMA #1.
- e) Please see Exhibit C, Tab 4, Schedule 1, Attachment 3, Page 2 – “Fixed Asset Continuity Schedule.” The column “Cost Opening balance” provides the Net Book Value on April 1, 2022 (Note – on April 1, 2022 the Net Book Value is equivalent to Gross Book Value as there is no accumulated depreciation as of April 1, 2022.)
- f) Opening rate base on April 1, 2022 is \$774.9 million, as shown in Exhibit C, Tab 1, Schedule 1, Page 3, Table 3.
- g) Opening rate base would not be impacted if the East-West Tie line is delayed. If construction costs are impacted by the delay, the CCVA will be used to account for the cost differences.

ENERGY PROBE INTERROGATORY #15

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 4, Page 9

Preamble: “As explained in Exhibit F, Tab 6, Schedule 1, NextBridge, through its partner affiliate agreement with NEET will work with NEET and its affiliates to undertake a strategic and methodical asset management process, drawing upon the NEET transmission family of companies with extensive expertise and experience monitoring its transmission system assets.”

- a) Please file the NEET Service Level Agreement.
- b) When will UCT/NextBridge file an Asset Management/Transmission System Plan?

RESPONSE

- a) The NEET Service Level Agreement has not been finalized. When it is complete, NextBridge will file a copy. The Agreement is expected to be complete by the end of Q1 2021.
- b) Exhibit B of NextBridge’s Application is the Transmission System Plan, which includes the Asset Management Plan at Exhibit B, Tab 1, Schedule 4.

ENERGY PROBE INTERROGATORY #16

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 4, Page 12, Table 4

Preamble: “The maintenance services include all planned and corrective maintenance services of the transmission line assets and ROW, in accordance with the requirements and obligations of UCT’s transmission licence.”

- a) Please file the Service Level agreement with Hydro One Transmission.
- b) Please provide a version of Table 4 with the budgeted costs for each Activity.
- c) Please relate the costs to annual OM&A and Capitalized OM&A

RESPONSE

- a) NextBridge will file the Service Level agreement with Hydro One when it is finalized by the end of Q1 2021.
- b) Please see Staff #29 for a breakout of the costs for each activity in Table 4.
- c) NextBridge disagrees with the premise of the question. There are no capitalized OM&A costs included in the Application. Annual OM&A is shown in Exhibit F, Tab 4, Schedule 1, Page 2.

ENERGY PROBE INTERROGATORY #17

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 6, Page 2, Table 1

Preamble: “The following Table 1 provides a summary of NextBridge’s overall capital expenditures plan. With the exception of expenditures in 2022 (the Test Year), none of the remaining years’ expenditures which will be requested to be included in the currently requested revenue requirement in this case nor recorded in a deferral account. NextBridge proposes to seek prudence(sic) for these expenditures as part of its next rebasing that will occur at the end of the IR Term.”

- a) Why are there no other Capital Expenditures, for example replacement of damaged assets?
- b) Please provide a Table that shows all of the Capital Expenditures for the Deferred IRM period 2022-2031, included those listed in Table 1.
- c) Why has UCT/ NextBridge not Prepared a Transmission System Plan that sets out the Assets that will be replaced during the 10 year IRM period?
- d) Please provide a projection of the UCT/NextBridge Gross and net assets and regulatory Rate Base for the IRM period.

RESPONSE

- a) The capital expenditures in Exhibit B, Tab 1, Schedule 6, Page 2, Table 1, are what NextBridge expects to incur during the IR Term. As the asset is new, replacement of damaged assets is not expected during the IR Term, absent an unexpected event. To address unexpected events, NextBridge has included a spare strategy as set forth in Exhibit C, Tabs 1 and 2. The spare strategy will help ensure prompt replacement of potentially damaged assets during the IR term.
- b) The capital expenditures for the IR period are in Exhibit B, Tab 1, Schedule 6, Page 2, Table 1, and further explained by category in Exhibit B, Tab 1, Schedule 6, Page 3 through Page 7.
- c) Please see the response to part a.
- d) NextBridge is not requesting capital expenditures to be added to rate base over the IR term. Therefore, the gross plant shown in Exhibit C, Tab 1, Schedule 1, Page 3, Table 3 of \$775.2 million is not expected to change over the IR period. The net plant value would decrease annually by the depreciation expense of \$9.3 million shown in Exhibit F, Tab 11, Schedule 1, Page 1, Table 1.

ENERGY PROBE INTERROGATORY #18

INTERROGATORY

Reference: Exhibit B, Tab 1, Schedule 7, Attachment 1, Page 17, Figure 11, CRA Benchmark Study.

- a) Please provide a Table showing the EWT Original Designation and New EWT Costs for each category
 - Towers and Fixtures
 - Poles and Fixtures
 - Structural Steel Erected
 - Overhead conductors
- b) Please indicate for each of the comparator projects
 - Number of Delivery Points
 - Transformer Stations
- c) Why have the costs of New EWT risen to equal those of the Niagara Reinforcement Project based on physical and asset characteristics? Please discuss.
- d) Please provide a tabular comparison of the New EWT to the competing Hydro One Transmission project.

RESPONSE

- a) Please see Exhibit C, Tab 4, Schedule 1, Attachment 3, Page 2 (Fixed Asset Continuity Schedule.) This schedule was not created in the East-West Tie line Original Designation, and, therefore, it cannot be compared.
- b) Stations were not part of the CRA Benchmark Study. NextBridge is a transmission line only project, therefore, comparable transmission projects with stations were adjusted to only include transmission line costs. Customer delivery points are not relevant to the analysis, and, therefore, were not included.
- c) NextBridge disagrees with the premise of the question. The Niagara Reinforcement project in the CRA Benchmark was \$119.4 million, while the East-West Tie line is \$773.7 million.
- d) Please see response to Staff #48.

ENERGY PROBE INTERROGATORY #19

INTERROGATORY

Reference: Exhibit C, Tab 2, Schedule 4, page 1

Please file a breakout of the table that lists the work performed by NextBridge and its affiliates as a separate column.

RESPONSE

Exhibit C, Tab 2, Schedule 4, page 1 sets forth the cost categories for construction. NextBridge has contracted with its partner entities (namely NextEra and Enbridge) to lead certain disciplines in each of the overall cost categories. The table below lists the leads by cost category.

Cost Category	Entity
Engineering and Construction	NextEra
Environmental & Remediation Activities	NextEra
Indigenous Activities	Enbridge
Land Rights	Enbridge
Other Consultation	Enbridge
Regulatory	NextEra (Rate Case)/Enbridge (Leave to Construct and Land Issues)
East-West Tie Line Project Management	NextEra

ENERGY PROBE INTERROGATORY #20

INTERROGATORY

Reference: Exhibit C, Tab 2, Schedule 4, page 4

Preamble: “Securing a fixed price engineering, procurement, and construction (“EPC”) contract with the general contractor that assigns the risk for certain aspects of the East-West Tie line including labor cost changes, weather impacts during construction, sub-surface risk mitigation, and material costs.”

- a) Did NextBridge consider other forms of contract besides EPC such as Design-Build? If the answer is yes, please describe all forms of contract that were considered, and compare them to EPC giving reasons why they were rejected. If the answer is no, please explain why not.
- b) Please confirm that EPC is the costliest form of contract because the EPC contractor assumes risk for labour cost changes, weather impacts during construction, sub-surface risk mitigation, and material costs whereas in other forms of contract the owner assumes some of these risks.
- c) Please confirm that there is no estimate of Contingency shown in the table at Exhibit C, Tab 2, Schedule 4, page 1 because the EPC contractor has assumed all risks.
- d) Please file a breakout of the table at Exhibit C, Tab 2, Schedule 4, page 1, that shows the costs included in the EPC contract as a separate column.

RESPONSE

- a) The form of contract that NextBridge used to procure the General Contractor is a hybrid EPC contract that has been used on similar transmission line projects by NEET and its affiliates and, therefore, is not a pure EPC form of contract. In this hybrid contract NextBridge performs certain engineering and procurement tasks, while delegating other engineering and procurement items to the General Contractor that are better suited to be performed by a contractor. Also, while the hybrid contract takes advantage of aspects of the EPC model, it delegates certain risks to both NextBridge and the General Contractor to optimize the overall cost effectiveness of the EPC work. NextBridge did not consider any other contracting methods for the East-West Tie line project since its extensive experience with this form of contracting shows it provides the greatest cost efficiencies over other alternatives.
- b) NextBridge disagrees with the premise that EPC is the costliest form of contract. Notwithstanding NextBridge’s position, as explained in part a. NextBridge did not use a pure EPC contracting model.

- c) See the responses to Staff #52 and #53.
- d) Below is a redacted breakout of the table at Exhibit C, Tab 2, Schedule 4, page 1 and EPC costs. The Confidential Attachment shows the costs included in the EPC contract as a separate column. The information provided in the Confidential Attachment is confidential and commercially sensitive, and, therefore, is not appropriately publicly disclosed. The requested cost breakout is highly sensitive business confidential information that if publicly disclosed would harm the competitive positions of NextBridge and its EPC contractor. The detailed cost breakout is the proprietary work product of NextBridge and its contractor, which is based on years of experience in developing large and complex transmission projects and the expending of significant time, money, and resources to develop a disciplined approach to budgeting. To publicly disclose this information would harm the competitive positions of NextBridge and its contractors in that it would give providers of similar competitive services information useful in making their own decisions, without expending the time and money necessary to gather and develop the data, and would allow providers of these competitive services to profit or otherwise derive benefits at the expense of NextBridge and its contractor. Specifically, publicly disclosing the cost breakout will provide competitors of NextBridge's with its internal disciplined approach to budgeting for the East-West Tie line, which can used to develop their own competing projects without developing this discipline themselves. This concern is particularly relevant given there is a known competitor, Hydro One Network Inc. in this docket. Therefore, the unredacted, confidential Attachment is being provided to the Board in accordance with the Board's *Practice Direction on Confidential Filings*.

			EPC
	Engineering & Construction	614.3	
1	Engineering, Design and Procurement	8.5	
2	Materials and Equipment	66.9	
8	Site Clearing, Access	140.6	
9	Construction	398.2	
	Environmental & Remediation Activities	31.6	
3	Environmental and Regulatory Approvals	19.1	
10	Site Remediation	12.5	
	Indigenous Activities	23.7	
5	Indigenous Economic Participation	9.7	
6	Indigenous Consultation	13.9	
4	Land Rights (excludes Aboriginal)	23.8	
7	Other Consultation	2.5	

11	Contingency	n/a	n/a
12	Regulatory	5.4	
13	EWT Management	4.9	
	Total Project Spend	706.1	
14	Interest During Construction (IDC)	31.0	
	Total Construction Cost	737.1	

ENERGY PROBE INTERROGATORY #21

INTERROGATORY

Reference: Exhibit C, Tab 2, Schedule 4, page 33

Preamble: “NextBridge records IDC at the OEB prescribed quarterly rate for CWIP on actual expenditures from August 2017 through Q3 2020. The current quarter’s rate of 2.03% (Q4 2020 rate) was used to estimate the remaining forecasted IDC, based on the forecasted construction schedule.”

Will the IDC from Q3 2020 to the in-service date of March 31, 2022 will also be at the OEB prescribed quarterly rate for CWIP? If the answer is no, please explain why not and provide the IDC rate.

RESPONSE

NextBridge will use the OEB prescribed quarterly rate for CWIP for IDC through the in-service date.

ENERGY PROBE INTERROGATORY #22

INTERROGATORY

Reference: Exhibit C, Tab 2, Schedule 4, Attachment 1

Does NextBridge Infrastructure have a Procurement Policy for Affiliate Services? If the answer is yes, please file it. If the answer is no, please explain why not.

RESPONSE

NextBridge does not have affiliates under the Affiliate Relationship Code, see response to Staff #28.

However, NextBridge has shared services and the procurement of shared services from NextBridge's partners is set forth at Exhibit F, Tab 6, Schedule 1 of the Application. As outlined, NextBridge's shared services are charged at cost, and, therefore, a competitive bidding process would not yield further savings to customers.

ENERGY PROBE INTERROGATORY #23

INTERROGATORY

Reference: Exhibit C, Tab 6, Schedule 1, Page 1, Customer Connection & Cost recovery Agreement.

- a) Please provide an update on the status of the Agreement.
- b) How can the OEB approve the UCT/NextBridge Revenue Requirement without examining the Costs contained in the Agreement?

RESPONSE

- a) The Customer Connection and Cost Recovery Agreement (CCCRA) is expected to be finalized by September 2021 and will be filed with the OEB in this proceeding at that time.
- b) NextBridge is not seeking to recover costs under the CCCRA. As stated in Exhibit C, Tab 6, Schedule 1, Page 1, "The engineering and construction cost of the Hydro One work will be included in Hydro One's rate base in accordance with the decision(s) of the Ontario Energy Board in EB-2017-0194." The costs will be examined in HONI's rate proceedings.

ENERGY PROBE INTERROGATORY #24

INTERROGATORY

Reference: Exhibit D, Tab 1, Schedule 1, Page 2, Table 1, Performance Measures;
Exhibit D, Tab 1, Schedule 2, Page 1

- a) UCT/NextBridge receives power at the west and delivers power to Hydro One in the East -why does this not constitute delivery points? Please discuss in context of the Transmission System Code.
- b) Why has UCT/NextBridge only adopted Average System Availability and not other Transmission Reliability Indicators such as SAIDI(T) and SAIFI(T).
- c) Please confirm that these other indicators will be monitored and reported.

RESPONSE

- a) NextBridge is not delivering power to a customer who has load. The delivery of power is from one Hydro One substation via NextBridge's East-West Tie line to another Hydro One substation and not to a customer with a load delivery point. The delivery to a customer load delivery point would be effectuated by Hydro One or another transmitter. Similarly situated transmitters have explained the same in their applications. See, e.g., Application of Niagara Reinforcement Limited Partnership, EB-2018-0275 Exhibit A Tab 2 Schedule 2 Page 2 of 4 and Exhibit A Tab 3 Schedule 1 Page 10 of 18. This understanding that single asset, transmission line only transmitters do not have customer delivery points is consistent with the Transmission System Code, which discusses performance standards in the context of a customer delivery point.
- b) NextBridge has not adopted SAIDI(T) and SAIFI(T), because NextBridge does not have any customer delivery points (or meter assets), which are required for and the basis of interruption-based reliability performance measures like SAIDI(T) and SAIFI(T).
- c) NextBridge does not confirm that Transmission Reliability Indicators such as SAIDI(T) and SAIFI(T) will be monitored and reported for the reasons noted in part b.

ENERGY PROBE INTERROGATORY #25

INTERROGATORY

Reference: Exhibit F, Tab 4, Schedule 2, Attachment 1, Page 35, TVMP

Preamble: “The Leader Vegetation Management - T/S will maintain the processes, standards and documentation to ensure that the vegetation in the transmission system is properly maintained. This TVMP shall be reviewed and updated as necessary based on adopted revisions to FAC-003-1 requirements or as changing field conditions and circumstances warrant.”

- a) Why is the NextEra Energy TVM Agreement filed? Please confirm that UCT/NextBridge will contract with Hydro One for vegetation management.
- b) Please either confirm Hydro One will perform vegetation management under the same terms/conditions specified in the NextEra Energy Document, or file the appropriate Hydro One TVMP document(s).
- c) Please summarize the Annual Targets for TVM (km line)
- d) What is the forecast Hydro One annual TVM cost? Will this include escalation provisions?

RESPONSE

- a) Confirmed. The NextEra Energy TVMP was filed as a placeholder until the Maintenance Services Agreement was completed. As part of the Maintenance Services Agreement, HONI/Supercom will be performing vegetation management for UCT/NextBridge and UCT/NextBridge will utilize the HONI TVMP.
- b) Confirmed. As part of the Maintenance Services Agreement, HONI/Supercom will be performing vegetation management for UCT/NextBridge and will follow the appropriate HONI TVMP. Once the Maintenance Services Agreement is signed, the HONI TVMP will be adopted, and UCT/NextBridge will file the appropriate HONI TVMP documents.
- c) One of NextBridge’s targets requires that the entire 450km East-West Tie line will be inspected on annual basis, as required by North American Electric Reliability Corporation Reliability Standard FAC-003-4 and its successor versions. In addition, NextBridge is targeting 0 (zero) vegetation caused outages. NextBridge’s annual inspection plan includes aerial inspections of the entire length of the right-of-way, followed by appropriate vegetation remediation measures resulting from the inspections. This approach will proactively manage vegetation and support

NextBridge's target of 0 (zero) vegetation caused outages.

- d) There is no specific line item for TVM annual inspection cost. Rather the annual inspection costs are part of the overall \$400,000 budget in the maintenance services contract with HONI/Supercom. The \$400,000 budget is firm for 3 years, with an available extension for two additional years, and, therefore, there is no escalation included.

ENERGY PROBE INTERROGATORY #26

INTERROGATORY

Reference: Exhibit F, Tab 6, Schedule 1, Page 1

Preamble: “NextBridge will not be charged a flat or already determined corporate cost allocation from any parent or partner entities. Charges where appropriate, will come from personnel directly supporting NextBridge. Personnel account for the amount of time spent on NextBridge work in a time recording system. The resulting cost NextBridge will receive is that amount of time, worked on NextBridge, multiplied by the earnings paid to that employee. The earnings include the hourly amount of salary plus an adder representative of the benefits paid to that employee.”

- a) Please File the Service Level Agreement(s) as per the OEB Affiliate Relations Code for Electricity Distributors and Transmitters.
- b) Are the costs of Directors and Board Meetings a cost charged to UCT/Nextbridge? Please provide an estimate for 2021/22.
- c) Please provide a list/estimate of inter corporate affiliate charges for 2021/22.

RESPONSE

- a) Please see the response to Staff #28 b on why the OEB Affiliate Relations Code is not applicable. Notwithstanding, the NEET and HONI service agreements are expected to be filed in Q1 2021.
- b) No.
- c) NextBridge will not receive inter corporate affiliate charges from any parent or partner entities, as described in Exhibit F, Tab 6, Schedule 1, Page 1. Activities expected to be provided by parent or partner employees are described in Exhibit F, Tab 4.

ENERGY PROBE INTERROGATORY #27

INTERROGATORY

Reference: Exhibit F, Tab 11, Schedule 1

- a) Please file the Depreciation Study that underlies the annual \$9.26 million Depreciation Amount and Depreciation Rates shown.
- b) Please provide a comparison to Hydro One Transmission depreciation rates.

RESPONSE

- a) To avoid additional costs and because the East-West tie line is new construction, NextBridge did not perform a separate depreciation study, as explained in Exhibit F, Tab 11, Schedule 1, Page 1 of the Application. NextBridge applied the principles for useful life from the Foster Associates Inc. study used in support of HONI's 2020 to 2022 rate application (EB-2019-0082.)
- b) NextBridge depreciation rates were derived from the Foster Associates Inc. study, which HONI also used, therefore there is no comparison to provide. Depreciation rates by major fixed asset category are shown in Exhibit F, Tab 11, Schedule 1, Page 2 of the Application. As NextBridge applied principles from the Foster Associates Inc. study used in support of HONI's 2020 to 2022 rate application (EB-2019-0082), these rates are aligned on a component level.

ENERGY PROBE INTERROGATORY #28

INTERROGATORY

Reference: Exhibit F, Tab 16, Schedule 1

Preamble: “NextBridge will apply for a Z-factor account (see Exhibit H) if material costs are incurred for unforeseen events for reasons beyond the company's control that occur during the IR Term. NextBridge will not include the planned capital expenditures outlined in Exhibit B as part of any Z-factor account.”

Please Provide the Threshold Calculation for a Z-factor claim.

RESPONSE

NextBridge will utilize the materiality threshold defined by the OEB in the Chapter 2 Filing Requirements for Transmitters, updated February 11, 2016, in Section 2.1.1 which would be 0.5% of the annual transmission revenue requirement. For NextBridge, this equates to \$278,500.

ENERGY PROBE INTERROGATORY #29

INTERROGATORY

Reference: Exhibit G, Tab 1, Schedule 1

Preamble: “Consistent with the OEB’s Cost of Capital report, the deemed long-term debt rate should be used where a rate-regulated electricity utility does not have third party debt. Currently, NextBridge does not have existing debt at third-party market rates. NextBridge will issue third-party debt to finance the East-West Tie line’s long-term debt component of 56%. This financing transaction is estimated to occur in late 2021 or early 2022.”

- a) What options will UCT/NextBridge consider to raise the 56% LT Debt amount? Discuss options such as Shareholder Loans, Market Issuance, Private capital etc.
- b) Has UCT NextBridge sought opinions from the Rating Agencies? If so summarize these.
- c) For the Recent Financings (2018-2020) in Table 1 please indicate the Amounts, Term and effective rates and how this informs the appropriate LT debt Rate for UCT/Nextbridge.
- d) Please compare the assumed LT debt rate of 3.21% to that of Hydro One (average and recent issues)
- e) If the cost of Capital exceeds the current estimates, will UCT/NextBridge file an update or rely on the Cost of Capital variance account? Please discuss with reference to materiality of potential changes.

RESPONSE

- a) As explained in Exhibit A, Tab 5, Schedule 3 of the Application, NextBridge will seek a private placement debt offering.
- b) As explained in Exhibit A, Tab 5, Schedule 3 of the Application, NextBridge expects to obtain at least one rating agency credit rating, close to the in-service date. NextBridge has not yet sought an opinion from a Rating Agency. Please also reference Staff #8.
- c) The financings shown in the referenced Table 1 are not intended to inform the appropriate LT debt rate for NextBridge. Table 1 is a sample of financings to demonstrate the extensive ability of NextEra, Enbridge, and OMERs to achieve attractive financing for East-West Tie line. Financing rates can vary widely depending on the asset, regulation, and timing of financing.

- d) The assumed debt rate of 3.21% is based on the OEB cost of capital parameters issued October 31, 2019. A comparison to HONIs debt would be burdensome and not applicable as the 3.21% is the OEB's prescribed rate and not that of NextBridge.
- e) As explained in Exhibit H, Tab 1, Schedule 1, Page 5, NextBridge has requested the establishment of a Debt Rate Variance Account (DRVA) to track the differences in the long-term and short-term debt rate used in the calculation of NextBridge's revenue requirement in this application and the actual long-term and short-term debt rate secured by NextBridge to finance the East-West Tie line. NextBridge proposes to seek initial disposition of the balance in the DRVA in the second annual update following in-service. NextBridge cannot forecast the changes in interest rates expected between this application and the issuance of debt.

ENERGY PROBE INTERROGATORY #30

INTERROGATORY

Reference: Exhibit H, Tab 1, Schedule 1, Page 1

Preamble: “NextBridge seeks Board approval to establish five new deferral/variance accounts. NextBridge does not have any existing deferral and variance accounts for which it is seeking continuation or disposition of in this Application. All requested accounts are symmetrical and could reflect in positive or negative adjustments to the requested revenue requirement:

- Taxes or Payments in Lieu of Taxes Variance Account,(account 1592)
- Revenue Differential Variance Account (RDVA)
- Construction Cost Variance Account (CCVA)
- Debt Rate Variance Account (DRVA)
- Z-Factor Treatment (Account 1572 – Extraordinary Event Costs)”

- a) Please confirm that the RDVA only applies to the impact of delays in the ISD.
- b) How/when will the balance of the CCVA be reviewed and disposed of?
- c) When will the Cost of Capital be determined and will this and the DRVA be subject of Board Review?
- d) Please confirm that the Board does not approve Z factor accounts in advance but requires the utility to apply reflecting the circumstances related to the request.

RESPONSE

- a) Not confirmed. The RDVA will track the revenue impact for differences in the current in-service date of March 31, 2022 versus revenues associated with an in-service date prior to or after March 31, 2022.
- b) NextBridge proposes to seek initial disposition of the CCVA in the second annual update following in-service. This update is expected to be filed in 2023 for inclusion in 2024 UTR rates. NextBridge proposes to leave the CCVA open for the remainder of the IR term, and seek final disposition at the end of the IR term in the next rebasing application.
- c) NextBridge expects to know the actual cost of long-term debt closer to the March 31, 2022 in-service date. The DRVA will be audited prior to disposition in the

second annual update following the in-service date, and subject to prudence review by the OEB at the time of disposition.

- d) Yes, NextBridge will apply for Z-factor treatment if material costs are incurred for unforeseen events during the IR term.

HONI INTERROGATORY #1

INTERROGATORY

Issue List Item:

#1 General

References:

Exhibit B, Tab 1, Schedule 1, Attachment 1 (IESO Letter)

*“The IESO understands that NextBridge experienced a temporary suspension of construction activities on the East-West Tie Line Project, between **April 3, 2020 and May 19, 2020**, due to the potential COVID-19 related impacts to the health and safety of its construction workers. As per the Ontario Energy Board’s February 11, 2019 Decision and Order, the East -West Tie Line Project is to be in-service for October 28, 2021. **According to NextBridge, mitigating the schedule risk caused by the temporary suspension of construction, could result in increased costs to the project (between \$15-\$20 million).** The IESO understands that NextBridge’s preference is to avoid these additional costs; however, doing so would require extending the in-service date to March 31, 2022.”*
[Emphasis added]

Questions:

- a) Is the Project still on schedule for a March 31, 2022, in-service date? If not, what is the new date?
- b) Please provide details of how the temporary suspension of construction cost estimate of \$15-\$20 million, referenced in the above excerpt, was calculated?
- c) Did NextBridge incur any of these costs, regardless of the in-service delay accepted by the IESO? And if so, are they included in the COVID deferral account?

RESPONSE

- a) Yes, the East-West Tie line is still on schedule for a March 31, 2022 in-service date.
- b) For clarity, the costs of \$15-\$20 million are costs that NextBridge would have had to spend in order to accelerate the East-West Tie line to meet the original October 28, 2021 in service date. Due to the winter road restriction in the Overall Benefits Permit, only one winter construction season remains to complete construction on the approximately 80 kilometer transmission line segment in the Lake Superior caribou

habitat. To mitigate this schedule risk and ensure an October 28, 2021 in service date, NextBridge was seeking an amendment to this condition which would allow for all-season roads to be built in order to extend the construction season. However, the building of these roads could result in an increased cost to the East-West Tie line of between \$15-\$20 million. NextBridge's preference was to avoid these additional costs to customers, and, at the same time, comply with the current condition. NextBridge approached the IESO to ask for an additional winter construction season (i.e., the extension of the in-service date to March 31, 2022) in order to avoid building these roads and incurring these costs.

- c) NextBridge has not built these all-season roads in caribou habitat and did not incur those costs.

HONI INTERROGATORY #2

INTERROGATORY

Issue List Item:

#7 – Deferral/Variance Accounts

Topic:

Construction Cost Variance Account

References:

Exhibit H, Tab 1, Schedule 1, Attachment 3

“This account will track any difference in revenue requirement and includes:

- Differences between forecasted construction costs in this Application and the actual final project construction costs, including IDC;*
- COVID-19 related capital costs incurred during construction in excess of forecasted construction costs in this Application;*
- directly related costs associated with construction that extend past the in-service date such as environmental costs that are a result of commitments in the OBP and/or Amended EA for construction monitoring and mitigation programs that are not already accounted for in the construction costs (i.e., environmental mitigation costs of \$1 million that were included but occur post in-service date because they were known and quantifiable amounts).”*

Exhibit B, Tab 1, Schedule 1, Attachment 1

Exhibit C, Tab 1, Schedule 1, Attachments – Quarterly Reports

Questions:

- a) Please confirm that NextBridge is planning to track COVID-19 costs in the Construction Cost Variance Account (CCVA) and that the expectation is that these costs will eventually be included in CWIP or the capital cost of the asset? Please explain how NextBridge expects to differentiate between the two items it intends to track in this account. Specifically, how the difference between forecast construction costs and actual construction costs overruns will be calculated, and how COVID-19 related costs will be verified.
- b) Please confirm that NextBridge informed the IESO that COVID-19 impacted operations from April 13 to May 19, 2020 (Exhibit B, Tab 1, Schedule 1, Attachment 1)?

- c) Please confirm that in NextBridge's Quarter 3 Project reporting, submitted October 22, 2020, the reported costs related to COVID-19 were \$100 CAD.
- d) Since COVID-19 interrupted operations in April-May 2020, please explain why a new estimate of its cost impact cannot be provided at this time?
- e) Please outline the rationale as to why the OEB should deviate from its policies and allow NextBridge to record those COVID-19-related items in the proposed non-generic DVA requested in this Application versus being dealt with as part of the ongoing COVID-19 deferral account consultation?
- f) How does the December 16, 2020, release of the OEB Staff Proposal "Consultation on the Deferral Account—Impacts Arising from the COVID-19 Emergency" impact NextBridge's assessment and tracking of COVID-19-related capital costs?
- g) Please confirm or correct Hydro One's understanding of Table 1 in Exhibit H, Tab 1, Schedule 1, page 4. Does the second line "Variance Account (as incurred)" show in years 2-5, actual OM&A numbers expected, or is it showing the return expected if costs have been capitalized? Is the intention that the deferral account will continue for the entire 10 years of the rebasing period?
- h) Please provide the accounting entries that will apply to disposition of the CCVA.

RESPONSE

- a) Please see response to SEC #17.
- b) Yes, NextBridge informed the IESO that the COVID-19 pandemic had caused the temporary suspension of all construction activities as of April 3, 2020.
- c) Yes, the NextBridge Q3 2020 quarterly report filed in EB-2017-0182 had footnote 4 which stated, "Construction related costs due to COVID-19 are not included in the table above; as of Q3 2020, less than \$100 CAD have been incurred."
- d) Please refer to Staff #40 b and c.
- e) NextBridge disagrees with the premise of HONI's question. There is no OEB established ratemaking policy regarding how NextBridge, as a new transmitter constructing a sole asset, should record COVID-19 costs. The OEB's consultation process on this subject matter is on-going. Therefore, NextBridge is not asking for a deviation, as there is no set policy to deviate from.

- f) The OEB Staff Proposal, which is part of the consultation process, did not directly address NextBridge unique situation in which it is a new transmitter, with no rates, and is in the process of constructing its sole asset. Therefore, NextBridge's request that the Board to approve the creation of a subaccount of Account 2055 for COVID-19 related costs (outlined in its April 22, 2020 letter to the Board) continues to be NextBridge's request after the OEB Staff Proposal.
- g) Table 1 in Exhibit H, Tab 1, Schedule 1, page 4, row "Variance Account" for years 2-5 relate to environmental costs directly incurred for construction, and, therefore, are not OM&A costs. NextBridge seeks to leave the account open for the IR term to account for activities that are a direct result of construction, such as environmental costs associated with the Overall Benefits Permit and Amended EA.
- h) Draft accounting entries to dispose of the CCVA, including interest:
 - Dr/Cr: 1508 Other Regulatory Assets – Sub-account: Construction Cost
 - Revenue Requirement Variance
 - Dr/Cr: Cash (via UTR)

HONI INTERROGATORY #3

INTERROGATORY

Issue List Item:

#6 Rate Base and Cost of Capital

References:

Exhibit B, Tab 1, Schedule 6 – Capital Expenditures Plan

“NextBridge will continue to complete an annual capital investment planning process to continually refine a plan that appropriately reflects operational needs, while minimizing rate impacts by not requesting these annual capital expenditures be added to rate base over the IR Term.”

Exhibit A, Tab 3, Schedule 1, page 6 – Executive Summary

“NextBridge proposes a 0% Productivity Factor (“X”) to be applied annually over the 2023 to 2031 period. NextBridge is a new entrant and has a structure unlike other transmission and distribution companies in Ontario. NextBridge’s proposal reflects these circumstances and is appropriate for the following reasons:

- *NextBridge’s assets are new, and, therefore, minimal OM&A was included in the Test Year revenue requirement. Changes in OM&A have to be absorbed within the RCI construct.*
- *NextBridge’s only controllable costs are OM&A where productivity is normally realized. Because of the small amount of OM&A and also in comparison to the non-controllable costs (e.g. cost of capital, depreciation, income tax), productivity is nearly impossible to realize.”*

Questions:

- a) On page 2 of reference 1, NextBridge writes: “During the IR Term, the expenditures will be depreciated, and that depreciation expense is not being sought for recovery in the current application.” What is the annual depreciation associated with assets shown in Table 1?
- b) Did NextBridge look at the Settlement Capital Adjustment Factor that has been approved by the Board for the NRLP and B2M LP revenue cap applications? Both of these companies are also “one-asset companies” with relatively new assets and minimal short-term investment requirements and therefore are very comparable to NextBridge from a revenue requirement setting perspective. To align with the regulatory treatment afforded

to NRLP and B2M LP, please provide a revenue requirement sensitivity analysis comparing: (i) the revenue requirements over the 10-year rate period requested in this Application (as provided in Exhibit E, Tab 1, Schedule 1, Table 3; (ii) the 10-year revenue requirements calculated using a Settlement Capital Adjustment Factor analogous to that agreed to by NRLP and B2M LP (0.6)¹; and (iii) the 10-year revenue requirements calculated using a Settlement Capital Adjustment Factor of 0.9, given the larger declining rate base for NextBridge. Additionally, for ii) and iii), please forecast the revenue requirement over the 10-year rate period assuming that NextBridge was approved for only half of inflation, analogous to NRLP. Comparing these revenue requirement adjustments to those proposed by NextBridge (a forecast 2% inflation rate and no productivity adjustments), why does NextBridge believe its proposal is fair to ratepayers given the recent OEB revenue-requirement setting approvals for single-asset transmitters.

- c) Please provide a revenue requirement analysis for the 5-year period after the applied-for deferral period (e.g. years 11–15), that includes the added capital expenditures forecast in Table 1 of Exhibit B, Tab 6, Schedule 1. Please provide all assumptions, including tax (e.g. tax loss carryforwards).

RESPONSE

- a) Actual depreciation expense will depend on the final value of the asset placed in service. Please see response to Staff #34 b for estimated net book value of the capital expenditures at the end of the IR term.
- b) NextBridge has not conducted the requested analysis and/or comparison. NextBridge stands by the approach used to calculate revenue requirement in this application and has not adopted the settlement factors agreed to by B2M and NRLP. NextBridge is proposing a different IR structure that is not analogous to B2M and NRLP.
- c) NextBridge has not conducted the requested analysis and/or comparison.

HONI INTERROGATORY #4

INTERROGATORY

Issue List Item:

#6 Rate Base and Cost of Capital

References:

Exhibit B, Tab 1, Schedule 6 – Capital Expenditures Plan

1. *“NextBridge’s proposal to mitigate the potential for overearning is to not include in the revenue requirement during the currently requested IR Term and not record it in a deferral account:
 - i. any additional OM&A costs above the rates set in this Application; nor
 - ii. any increased financing costs as a result of maturing and reissuing debt throughout the IR Term.”*
2. *“This plan offsets future OM&A costs with base capital expenditures, and provides for increased reliability by taking advantage of new technology and equipment to gain additional situational awareness of real-time conditions at various critical crossings in the line. The capital expenditures for the East-West Tie line to be spent over the IR Term can be divided into three areas: general plant; storage yard; and reliability”*

Questions:

- a) With respect to (i) in Reference 1, how is this different from any other cost of service approval granted by the OEB?
- b) Regarding Reference 2 above, what is the useful lives of the assets that NextBridge is planning to add to capital expenditures versus charging to OM&A?

RESPONSE

- a) The question is vague, however, NextBridge is different from other cost of service applications as NextBridge proposes a 9 year and 9 month IR term, while other applications have proposed a 5 year IR term.
- b) NextBridge has not determined a useful life for the assets in the capital expenditure plan yet; however, consistent with typical capitalization criteria the life would be in excess of one year.

HONI INTERROGATORY #5

INTERROGATORY

Issue List Item:

#6 Rate Base and Cost of Capital

References:

Reference 1 – Exhibit C, Tab 2, Schedule 4 – Forecast Construction Costs

- i. *“The fees for these permits (federal permits issued under subsection 28(2) of the Indian Act) are paid to the federal government to be held in trust for the First Nations **and paid during construction and annually** for the life of the East-West Tie line.” [Emphasis added]*
- ii. *“The majority of these functions are performed by NextBridge partner organizations and are provided at an hourly rate ensuring a much more cost effective process than hiring external firms or incurring the costs of establishing NextBridge employees. During the monthly review of costs, the Project Director analyzes the number of hours spent on these activities. At one review, it was noticed and decided on that the number of hours could be reduced if certain internal financial reporting activities were consolidated, thus reducing costs.”*

Reference 2 – Exhibit F, Tab 4, Schedule 2

“While a corporate allocation charge from any partners working on the project is not included in OM&A costs, NextBridge did include costs of three resources that would directly charge less than half of their time to the project to support the financial aspects of the partnership. These costs are for direct charges to NextBridge associated with maintaining the partnership financials, accounting, tax filings, managing the debt and associated compliance obligations, preparation of any regulatory accounting (including annual updates to the OEB), coordinating required financial audits, and reporting to the partners and Project Director monthly on the financial integrity of the partnership. This allows NextBridge to utilize economies of scale in the partner entities to supply corporate services at a discount to ratepayers, rather than hiring employees or utilizing outside contracted resources.”

Questions:

- a) The Reference 1(i) costs are shown under Forecast Construction Costs. Does this mean that the plan is to capitalize the annual cost or to charge to OM&A?
- b) For Reference 2 – Please confirm that the “partners working on the project” that are not included in OM&A costs, are not entities regulated by the OEB. Please provide any applicable affiliate agreements.

RESPONSE

- a) Annual costs during construction through the in-service date will be capitalized. After the in-service date, these annual costs are part of OM&A.
- b) NextBridge disagrees with the premise of the question, and the question is vague and unclear: "Please confirm that the "partners working on the project" that **are not** included in OM&A costs, **are not** entities regulated by the OEB." Therefore, no response can be provided.

HONI INTERROGATORY #6

INTERROGATORY

Issue List Item:

#5 Operations, Maintenance and Administrative Costs

#6 Rate Base and Cost of Capital

Topic:

Transmission Cost Benchmarking Study – Capital & OM&A Comparison

References:

Reference 1 – Exhibit B, Tab 1, Schedule 7 Attachment 1, Transmission Cost Benchmarking Study

Reference 2 – Exhibit F, Tab 4, Schedule 1

Reference 3 – Exhibit C, Tab 1, Schedule 1

Questions:

- a) In Reference 1, please clarify why the Figure 3 total cost for the new EWT of \$773,713 was discounted to \$740,521 in Figure 4. In this clarification, please take into consideration the NextBridge Statement of Average Rate Base provided at Reference 3, page 3 of 3. In the Application, NextBridge is calculating its average rate base of \$770.4M, based on an April 1, 2022 gross plant cost of \$774.9M. Please align the \$774.9M with the discounted value utilized by Charles River Associates (CRA) for the purposes of the comparisons completed.
- b) Please confirm that the values used in the EWT project in Figure 3 of Reference 1 are still forecast numbers. Please confirm that these forecast values have been compared against actual costs for all the other projects and that CRA has made no adjustment to account for the fact that the EWT costs remain forecast costs. Please comment on whether a further sensitivity analysis should be in effect when comparing the total construction costs of the EWT. In responding to this question, please keep in mind that NextBridge is requesting a construction costs variance account as part of this Application.
- c) Figure 3 of Reference 1 provides the following values: (i) construction costs of \$578,948 and (ii) total costs of \$773,713. CRA explains in the report that the relative share of construction costs to total project cost varied widely across projects studied. Please confirm that none of the projects CRA elected to compare to EWT had construction costs

representing 75% of total costs? How does this impact the comparability of the projects?

- d) Please clarify why *materials* were weighted/extrapolated/discounted at significantly different rates than the other categories, including construction?
- e) In section 2.1 of CRA's Benchmarking Study, CRA writes:

"To escalate Materials costs, CRA used a blend of Handy-Whitman's Towers & Fixtures and project costs have large commodity components, even within Canada, these material elements would be expected to track the CAD equivalent of the USD index. The index escalation was therefore compounded with the exchange rate changes to arrive at an effective CAD Handy-Whitman index.

Material costs are driven largely by the economy at the time the project's material were tendered. Changes in the price of commodities such as steel, aluminum and to a lesser extent, copper, drive changes to the price of materials. The volatility exhibited by these commodities makes it difficult to determine a constant annual growth rate for the purposes of cost escalation. Therefore, it is prudent in this case, to use with industry-standard best practice and use the Handy-Whitman Indices for transmission material costs. The Handy-Whitman index has been used by expert economic consulting firms in total factor productivity studies presented as evidence in matters before the OEB. There is no Canadian equivalent of the Handy-Whitman index suitable for escalating transmission project costs."

Generally, this method results in the figures provided in Figure 14. Please confirm Hydro One's understanding of the CRA evidence. The Handy-Whitman Index illustrates that in the Plateau region, the "materials" index in USD illustrates a 10-year average CAGR of 1.5% and a 5-year average CAGR of 1.4%. However, when converted to CAD, the "materials" index CAGR increases to 3.4% on a 10-year average outlook, or about 5 times more when compared on a 5-year CAGR at a compound annual growth rate of 6.9%. Please explain why the 5-year average CAGR for the Plateau region would be 6.9% in CAD dollars and 1.4% in USD?

- f) CRA provides that the Handy-Whitman index has been used by expert economic consulting firms in total factor productivity studies presented as evidence in matters before the OEB. Please provide examples where the Handy-Whitman index has been converted into CAD, as done by CRA, and utilized as a price-escalating tool. In providing these examples, please state whether the Total Factor Productivity Studies have been escalated using exchange rates, as done by CRA in the Benchmarking Study used in this Application, or whether some other escalation method is used in the example, e.g., purchasing power parity. If required, please update the results of the Benchmarking Study provided in Reference 1 if the Handy-Whitman Index was converted to CAD using

purchasing power parity data in lieu of foreign exchange rates.

- g) Please correct the cost of the line work for the Bruce-to-Milton Project that has been incorrectly presented in the report. The line costs of the Project were actually \$641,686. Total project costs were \$710,173. Both values are documented in the post-construction and financial monitoring report that was submitted to the OEB on November 25, 2015, and is publicly available at the following web address:
<http://www.rds.oeb.ca/HPECMWebDrawer/Record/506872/File/document>.
- h) In section 2.2.5 of the Benchmarking Study, CRA introduces terrain multipliers and land cost/acre multipliers for the WECC Study. Given that right-of-way costs can dominate a cost analysis, it is striking that there are no localized factors applied to isolate for realty costs in the differing parts of the province. Why? As identified in the Bruce-to-Milton post-construction report, over \$95M of the \$641M line works are real estate costs for the 180 km 500kV Bruce-to-Milton line. Conversely, only \$23.8M is attributed to the 450 km 230kV EWT line. Please opine on the impact of local realty costs on a transmission line project and how the EWT line real estate acquisition costs (non-Indigenous and Indigenous) compare to the comparables selected by NextBridge, given the difference in land acquisition cost on a per acre basis.
- i) In section 2.2.3, CRA compares the EWT to the BC Northwest Transmission Line. How comparable is this project given that there is no granular data?
- j) In Section 2.2.3, why does CRA believe it is reasonable to assume that the cost split between stations and lines work for the BC Northwest Transmission Line would be analogous to the Bruce-to-Milton Project split? In responding to this question, please articulate how the projects were similar enough to reach that conclusion, given that the Bruce-to-Milton Project is a 500 kV double circuit transmission line and the BC Northwest Transmission Line Project was a 287 kV single circuit guyed lattice tower transmission line with station work that included, but was not limited to, the build of a completely new substation.
- k) In Section 2.2.4 CRA discusses Alberta projects. The Alberta projects are the most expensive of any of the alternatives considered by a significant margin (over \$1M/km greater than the next escalated comparable and about \$2M/km more expensive than the EWT costs utilized). Did CRA investigate why these costs were so much more expensive? Is it reasonable to include these projects as comparables? If so, why?
- l) Under Section 2.2.6, in Note 13, CRA write that “the Niagara region has different, and more difficult, terrain than that of Northwestern Ontario, which may lead to lower construction costs compared to Northwestern Ontario.” Please explain this footnote and what is intended to be conveyed.

- m) With respect to OM&A, at Exhibit F, Tab 4, Schedule 1 NextBridge's evidence is that overall, NextBridge's OM&A *spending on a per asset basis* is low in comparison to other transmitters in Ontario, as detailed in the CRA benchmarking study attached as Exhibit B, Tab 1, Schedule 7 Attachment 1. Please provide any reference in the CRA report that investigated *OM&A spending on a per asset basis* and the values of that assessment.
- n) Under Section 2.3, it is unclear how the B2M LP total OM&A was calculated. The total OM&A for 2020 for B2M LP per the Settlement Agreement filed under EB-2019-0178 is \$1.2M. Please update the values in Figure 10 accordingly or explain how the \$1.6M total OM&A was calculated.
- o) Under Section 2.3, for the development of Figure 10, CRA includes costs for NRLP and B2M LP's managing director office. Please confirm that similar costs are included for the new EWT in Figure 10. If not, please remove these costs from the comparison.
- p) Under section 2.3, for the development of Figure 10, CRA excludes approximately \$2M of annual OM&A costs attributed to Indigenous Participation and Indigenous Compliance costs. Please elaborate on Note 16 that suggests that these types of costs are *unique to the EWT*. In so doing, please keep in mind that both NRLP and B2M LP also encompass Indigenous partnership agreements.
- q) Please include the aforementioned Indigenous Participation and Indigenous Compliance costs and update the results in Figure 10.
- r) Please provide the 5- and 10-year CAGR for the Handy Whitman indices for the same time period as those provided in Figure 15, i.e., 2005-2014 and 2010 to 2014.

RESPONSE

- a) In Reference 1, Figure 3, the total cost shown is \$773,713, whereas Figure 4 total cost is \$740,521. The difference is because Figure 4 is adjusted to be shown in 2022 dollars. This allows for CRA to compare all benchmark results in consistent 2022 dollars. Refer to OEB-49 (a).

The CRA report is intended to compare total East-West Tie line project costs. The NextBridge Statement of Rate Base is intended to show test year average rate base, to be utilized in calculating the revenue requirement. The Statement of Rate Base also includes the costs of NextBridge's spare strategy, test-year in-service additions along with depreciation. Therefore, this is not comparable to the CRA report (Figure 4) which intends to compare the total gross cost to put the East-West Tie line into service.

- b) The values in Figure 3 include a portion of forecasted costs. The forecasted costs are the best data available for the East-West Tie line and are therefore appropriate

to compare against actual costs for other projects for the purposes of benchmarking. Additionally, the other projects were not constructed during a global pandemic. The CCVA will include COVID-19 related costs, which did not impact the other projects in the benchmarking analysis.

- c) The data regarding the proportion of construction costs to overall costs is shown throughout the CRA report. There were projects with lower proportion of construction costs, however the categorization of costs was unique to each project. For instance, some projects could have included what might be considered construction costs in “other” costs. With regards to comparability, the question implies that the only projects with identical characteristics are suitable for comparison in a benchmark study. This is impractical, as the exercise was to compare the widest available set of similar projects.
- d) As page 4 of the report indicates, materials costs were escalated at different rates because the costs of materials and construction vary according to different factors. As the report notes, construction costs are not as freely traded between Canada and the US, and so are less affected by exchange rates.
- e) To clarify, the exchange rate should be labeled as “CAD/USD” instead of “USD/CAD.” This does not affect the results of the calculations or the conclusion. An important clarifying item is that between 2012 to 2017, the period over which the 5-year CAGR is calculated, the Canadian dollar weakened significantly (by 30%), thus increasing the costs of materials when expressed in Canadian dollars. Because there are materials traded between Canada and the US, this affects the costs.
- f) Handy-Whitman has been used in numerous proceedings before the OEB, and many other regulatory agencies for cost estimation and inflation. It is burdensome for CRA or NextBridge to conduct an exhaustive search of the many other filings before the OEB, as requested by HONI. As the text states, there is no Canadian equivalent for the Handy-Whitman guide. A constant exchange rate is used throughout the CRA report, meaning that the conversions are fully proportional. The use of a constant exchange rate represents a reasonable and sufficiently accurate approach to employing the Handy-Whitman guide for a Canadian application.
- g) The East-West Tie line cost, excluding substations, used in the report was \$651,480,000. The final actual cost, excluding substations, was \$641,686,000. This has very minimal impact on the results as the \$/km only changes from \$2.39/km to \$2.35/km. NextBridge will not be updating the report since B2M cost remains significantly more than the East-West Tie line in \$/km.
- h) There may be projects with lower proportion of real estate to total construction costs, however the categorization of costs is unique to each project. For instance, the East-

West Tie line crossed a significant portion of First Nations land which resulted in increased Indigenous costs whereas other projects acquire more real estate and therefore have increased real estate costs. With regards to comparability, the question implies that the only projects with identical characteristics are suitable for comparison in a benchmark study. This is impractical, as the exercise was to compare the widest available set of similar projects.

- i) As section 1.2 indicates, CRA selected Canadian projects of similar voltage levels, with relatively long line-lengths, criteria which the BC line meets. Differing levels of detail were available for each project, though the available data on the BC was sufficient to permit informative comparisons to the East-West Tie line.
- j) Like the Bruce-to-Milton project, the BC line is a long-distance, high voltage line of similar overall cost magnitude. There is no project identical to the BC line from which similar cost split data could be taken. In the absence of an identical project from which to draw split data, CRA applied cost split data from the B2M project in order to include the BC line as one of several benchmarking comparison points.
- k) The purpose of benchmarking is to consider a spectrum of different comparable projects. In any set of comparable projects, one project will always be the most expensive. Choosing to eliminate one of these projects from the data set because it is too far from the mean would bias the results and defeat the purpose of a benchmarking exercise.
- l) The point being articulated is that the geography of the Niagara region is different from that of Northwestern Ontario. Because CRA used a single regional (i.e., the Plateau) multiplier for the study, this multiplier may not account for the more difficult and expensive construction that NextBridge has factored into their costs but the comparable projects did not experience.
- m) This specific question was not investigated, nor was it necessary to do so to reach the conclusion regarding benchmark of transmission costs. CRA is only aware of one asset that NextBridge will operate in Ontario, the East-West Tie line.
- n) The difference is immaterial and NextBridge does not plan to update the study for this difference. Additionally, the 2020 OM&A per the B2M settlement agreement referenced by HONI, is not as comparable since the line has already been operating for several years.
- o) NextBridge has costs included in OM&A in Figure 10 for a managing director office. This is described in Exhibit F, Tab 4, Schedule 2, Page 3.

- p) The excluded costs are not related to the Indigenous partnerships making up the East-West Tie line ownership. The excluded costs are Indigenous agreements with Indigenous communities outside of the East-West Tie line ownership structure and are further explained in Exhibit F, Tab 4, Schedule 2, Page 7 and 8.
- q) These costs are not comparable which is why they were excluded. NextBridge does not plan to update the report.
- r) The data that HONI requests is not possible to calculate. The Statistics Canada are provided for illustration only. Handy-Whitman uses different categories for its costs. As section 2.1 of the report indicates, CRA used the Towers & Fixtures, and Overhead Conductors and Devices indices from the Handy-Whitman guide.

HONI INTERROGATORY #7

INTERROGATORY

Issue List Item:

#5 Operations, Maintenance and Administrative Costs

#6 Rate Base and Cost of Capital

Topic:

Asset Management Plan and Capital Expenditure Plan

References:

Reference 1 – Exhibit B, Tab 1, Schedule 4 – Asset Management Plan

Reference 2 – Exhibit B, Tab 1, Schedule 6 – Capital Expenditure Plan

Reference 3 – Exhibit F, Tab 3, Schedule 1 – Anticipated Sources of Efficiencies

Questions:

- a) In the years immediately following in-servicing of an asset, inspection and maintenance activities are expected to be minimal. The in-service date for the EWT is March 2022. When are the maintenance activities indicated in Reference 1 expected to start?
- b) Please explain why the bird excrement deterrent is considered capital.
- c) Please quantify the reliability benefits, on this brand new transmission line, of the ROW cameras and bird excrement deterrents.
 - i. NextBridge denotes costs anticipated for vehicle replacements, bird deterrents, and ROW cameras. Hydro One notes that there will be aerial patrols of the line, and Hydro One will perform a number of activities to assist in the inspection and maintenance of the lines. Therefore, considering the frequency of line inspections that will be performed on an annual basis, please provide additional clarity around the need for replacement of vehicles (point #6 in Reference 2) “every few years” and Utility Terrain Vehicles (point #8 in reference 2) “every five years”.
 - ii. Considering that frequent inspections will be occurring (annually as per Table 1 in Exhibit B, Tab 1, Schedule 4), please provide additional clarity around the need for installation of bird deterrent devices. Additionally, please provide additional supporting information on the effectiveness of bird deterrent devices and if/how doing

so would help to reduce OM&A costs.

- iii. Please provide additional clarity around the need to install ROW cameras when the application states it would be “beneficial” to restoring power for interruptions. Without the installation of ROW cameras, would restoration time of the line(s) be adequate and still comply with IESO Market Rules? If yes, why are ROW cameras being installed?
- iv. Can the inspections be reduced, given that ROW cameras will be installed? Does this help [?]
- v. At Reference 3, NextBridge writes “The majority of NextBridge’s OM&A services (accounting for approximately 75% of the 2022 forecast) will be provided by HONI through the HONI SLA, with the remaining to be provided by the partner companies under the NEET Agreement.” In making this statement, NextBridge footnotes that “...the annual payments to First Nations for easements to locate the East-West Tie line while an annual expense, was not included in calculation of the percentage of the customary transmission OM&A that HONI will conduct.” If the *annual payments to First Nations for easements to locate the East-West Tie line* are included in total OM&A, how much of the annual OM&A budget is accounted for by the Hydro One SLA?

RESPONSE

- a) The Asset Management Plan starts immediately after the in-service date. Once the line is in-service, NextBridge is responsible for the line and anything that can affect the safe and reliable operation of that line. To ensure this, NextBridge will need to inspect the line and assess its current condition. See Staff #22 for more information on the need for immediate vegetation management.
- b) Bird excrement deterrent is considered capital because bird deterrents are physical barriers that last for multiple years and are installed on transmission towers as units of property that can be added or replaced without impacting the poles. See Staff #37 for more information on bird deterrents.
- c)
 - i. While HONI/Supercom will be performing inspections, the NEET field personnel will be managing and validating those inspections and will be a constant presence along the route with the benefit of the right-of-way cameras. This is a prudent way to further ensure the safe and reliable operation of the lines, and to quickly assess via the camera critical sections for any reliability and safety issues. The 450km length and the rugged terrain will affect the life of these vehicles and UTVs with significant wear

and tear. To ensure the safety of NEET field personnel and to give them the ability to reliably respond as needed, the vehicles and UTVs will need to be replaced in the intervals shown on NextBridge's Capital Plan.

- ii. The bird deterrent plan will be triggered by the maintenance inspection activities. If evidence of large birds is found during an inspection, the roosting area on the structure will be considered for installation of bird deterrents. Excrement or streamers from large birds may bridge the air gap between the structure and a live conductor. This pro-active countermeasure aims to prevent the possible outages and all of the outage costs of restoration associated with them. See OEB Staff #37 for more information on bird deterrents.
- iii. The right-of-way cameras will provide an increased level of situational awareness of the actual conditions at major crossings along the right-of-way, which has a beneficial impact on the reliable operation of the East-West Tie line. This awareness will produce tangible benefits by increasing the preparedness of the field operations personnel and support personnel for environmental events, such as icing and fire, that may impact the reliability of the line. While NextBridge believes the restoration times required will be met, there is always room for improvement, and believe these right-of-way cameras will give NextBridge an edge. See OEB Staff #37 for more information on right-of-way cameras.
- iv. The right-of-way cameras are not intended to reduce inspections as stated above, they are intended to increase situational awareness and help reduce response time by being better prepared for possible events.
- v. The above reference to 75% was an approximation of the 2022 OM&A services forecast. The Hydro One SLA has not been executed but is expected to be executed no later than the end of the first quarter of 2021. After the SLA is executed, it will be filed, and the percentage approximation will be updated.

HONI INTERROGATORY #8

INTERROGATORY

Issue List Item:

#7 – Deferral/Variance Accounts

Topic:

Proposed Revenue Differential Account

References:

EB-2020-0150 – Exhibit H, Tab 1, Schedule 1 – Deferral and Variance Accounts

EB-2019-0082 – Exhibit H - Deferral and Variance Accounts – Hydro One Network Inc. Revenue Requirement Application (2020 through 2022),

Questions:

- a) Please confirm that this account will calculate only the difference in timing (i.e. the forecast in-service date) and that no other revenue requirement inputs will change (i.e. all other inputs to the revenue requirement calculation will not be adjusted – such as rate base, long-term debt rate, working capital rate etc.)?
- b) If a delay in the planned in-service date was avoidable or could have been mitigated by NextBridge, does NextBridge agree that only entries to the benefit of ratepayers should be recorded in the account?

RESPONSE

- a) Yes, confirming the Revenue Differential Variance Account will only be used to track the revenue impact if there is a difference in the timing of the currently planned in-service date of March 31, 2022.
- b) NextBridge objects to the question as calling for it to speculate regarding unknown delay and events that have not yet occurred and may never occur. NextBridge is managing the East-West Tie line to avoid changes to the in-service date and strives to mitigate any changes that could impact the in-service date as has been explained in detail in its quarterly reports filed in EB-2017-0182.

HONI INTERROGATORY #9

INTERROGATORY

Issue List Item:

#7 – Deferral/Variance Accounts

Topic:

Transmission Asymmetrical Capital Account

References:

Exhibit H, Tab 1, Schedule 1 – Deferral and Variance Accounts

Preface:

Many Utilities in Ontario, including Hydro One, have an OEB-approved asymmetrical capital variance account. The account protects ratepayers from any in-service forecast variance, such that ratepayers are not paying for an asset that was not placed in-service. The asymmetrical nature of the account ensures that if a utility cannot execute the full extent of its capital in-service plan, as forecast in its rebasing rate application, the associated revenue requirement of the assets not in-serviced are returned to ratepayers.

Questions:

- a) Please provide the rationale for why NextBridge believes that a similar asymmetrical variance account should not apply to NextBridge during the duration of its rate filing period for its newly constructed single line asset facility?
- b) If NextBridge does believe that this account should apply, please provide an example calculation assuming that NextBridge under-in-services in 2021 and over-in-services in 2022.

RESPONSE

- a) The NextBridge East-West Tie line is a large infrastructure project, most like Bruce to Milton and the Niagara Reinforcement projects, which recovered their full construction costs and were not subjected to an asymmetrical construction account. Symmetrical accounts are more appropriate for single-asset projects, versus asymmetrical accounts which are reasonable for groups of projects and infrastructure.
- b) NextBridge disagrees with the premise of the question. Under-in-services and over-in-services do not apply to the NextBridge East-West Tie line as there is only one in-service date, not multiple projects with multiple in-service dates.

HONI INTERROGATORY #10

INTERROGATORY

Issue List Item:

#7 – Deferral/Variance Accounts

Topic:

Transmission Asymmetrical Capital Account

References:

Exhibit H, Tab 1, Schedule 1 – Deferral and Variance Accounts

“NextBridge will potentially apply for Z-factor treatment if material costs are incurred for unforeseen events for reasons beyond the company’s control that occur during the IR Term. NextBridge will apply for an accounting order for use of this account should such an event occur and will notify the OEB prior to including any amounts in this account.”

Preface:

Like all transmitters in Ontario, NextBridge will have access to standard regulatory mechanisms, such as the Z-Factor (which NextBridge is specifically seeking OEB confirmation to utilize if appropriate circumstances prevail), off-ramps, and the Incremental Capital Module (ICM) or Advance Capital Module (ACM), if it encounters circumstances beyond management’s control that impact the profitability/ sustainability of operations during the Application’s proposed rate file period.

Questions:

a) Please explain the rationale behind why NextBridge believes it requires additional forms of regulatory protection from the new accounts it has requested the OEB to approve in this Application.

RESPONSE

a) NextBridge disagrees with the assertion that it is requiring additional forms of regulatory protection. NextBridge’s Application brings forward the potential use of a Z-factor, similar to other transmitters such as Bruce to Milton’s approach filed in EB-2019-0178 at Exhibit A, Tab 4, Schedule 1, Page 6 (see below). As a new transmitter, NextBridge has requested new accounts to establish proper accounting vehicles for anticipated needs once in-service.

Filed: 2019-07-31
EB-2019-0178
Exhibit A
Tab 4
Schedule 1
Page 6 of 7

1 be credited to a new deferral account for clearance at the time of B2M LP's next
2 rebasing. The calculation of the actual ROE for a Test year will use the OEB-approved
3 mid-year rate base for that period.

4 5 **1.4.2 Z-FACTOR**

6 B2M LP is proposing, consistent with the Handbook, that the OEB's Z-factor mechanism
7 be available over the term of this Revenue Cap IR Application. This is consistent with
8 the principles of the RRF. The criteria that would apply to the use of the Z-factor
9 mechanism are those outlined by the OEB in Chapter 2 of the Filing Requirements for
10 Electricity Transmission Applications and the guidelines provided in section 2.6 of the
11 OEB's Report on 3rd Generation Incentive Regulation for Ontario's Electricity
12 Distributors (July 14, 2008).

13
14 Events that may necessitate the use of the Z-factor mechanism include:

- 15 • Extreme weather events, such as storms;
- 16 • Investments that are government-mandated or otherwise outside of management's
17 control;
- 18 • Changes to IESO market rules;
- 19 • Changes to OEB codes, policies or other directions;
- 20 • Changes to accounting frameworks or technical standards;
- 21 • Changes to government policy, legislation, or regulation, such as environmental
22 laws; and
- 23 • Any other one-time or ongoing events that meet the Z-factor criteria.

24

HONI INTERROGATORY #11

INTERROGATORY

Issue List Item:

#5 – Operations, Maintenance & Administration Costs

Topic:

Tax

References:

Reference 1 – Exhibit A, Tab 3, Schedule 1, page 3 of 22

Reference 2 – Exhibit F-12-01-01 – Calculation of Utility Income Taxes for Test Year

Reference 3 – Exhibit F, Tab 13, Schedule 1, page 1 of 4

Reference 4 – Exhibit H, Tab 1, Schedule 1, page 1 of 5

Questions:

- a) OMERS is a pension plan registered in Canada, holding 20% interest in NextBridge through Borealis NB Holdings Inc. Since Canadian pension plans are generally tax-exempt pursuant to the Income Tax Act, and it is generally understood that wholly-owned subsidiaries of pension plans are also tax-exempt, please clarify why Bamkushwada LP is stated to be the only non-taxable entity whereas Borealis NB Holdings Inc. is also a non-taxable entity. If Borealis NB Holdings Inc. is a non-taxable entity, why does it appears to be taxable in Reference 2, even though it is held by OMERS? Please explain.
- b) In Reference 2, assuming that “NEE” represents NextEra Energy NextBridge Holding, ULC, “ENB” represents Enbridge Inc., “OMERS” represents Borealis NB Holdings, Inc., and “BLP” represents Bamkushwada, LP, please confirm the tax status of each partner and specifically whether each partner is taxable or tax-exempt for Canadian federal and provincial income tax purposes.
- c) With respect to Reference 4, in the event that the tax-exempt statuses of the partners are challenged and revoked, will taxes associated with such changes in tax-exemption status be included in account 1592?
- d) Will the tax associated with all changes in ownership between tax-exempt and taxable ownership be recorded in account 1592?

- e) Notwithstanding changes in ownership or tax statuses, will any tax impacts arising from tax assessments/reassessments on filing positions be recorded in account 1592?

RESPONSE

- a) Borealis EWT Inc. holds a 25% interest in Upper Canada Transmission, Inc. (UCT), the general partner of NextBridge Infrastructure LP (NextBridge) and Borealis NB Holdings Inc. has a 25% limited partnership interest in NextBridge. The limited partnership interest of Borealis NB Holdings, Inc. will not decrease to 20% until Bamkushwada LP enters the partnership and takes an interest in NextBridge. Borealis NB Holdings Inc. and Borealis EWT Inc. are both taxable entities
- b) The current limited partners of NextBridge Infrastructure, LP, namely NextEra Energy NextBridge Holding, ULC, Enbridge Inc., and Borealis NB Holdings, Inc., are all taxable Canadian corporations within the meaning of the Income Tax Act (Canada) (the ITA). Bamkushwada L.P. is an Ontario limited partnership, each of the members of which is exempt from tax pursuant to section 149 of the ITA.
- c) Bamkushwada LP is the only tax-exempt partner. In the event their tax-exempt status is challenged and revoked, the tax impact will be recorded in Account 1592, as stated in Exhibit H, Tab 1, Schedule 1, Page 1.
- d) If there are changes in ownership percentages between tax-exempt and taxable partners over the IR term, the difference in revenue requirement would be recorded in Account 1592. This could result in either a debit or credit balance, depending on the ownership percentage change.
- e) The tax impacts noted in the question are unclear, however NextBridge will use Account 1592 as described in Exhibit H, Tab 1, Schedule 1, Page 1, and in accordance with the OEB Accounting Procedures Handbook.

HONI INTERROGATORY #12

INTERROGATORY

Issue List Item:

#5 – Operations, Maintenance & Administration Costs

#6 – Rate base and Cost of Capital

Topic:

Indigenous Economic Participation and Indigenous Consultation

References:

Reference 1 – Exhibit C, Tab 2, Schedule 4

Reference 2 – Exhibit F, Tab 4, Schedule 2

Questions:

- a) How will the \$9.7 million of Indigenous Economic Participation be spent? Please categorize this spend based on the activities identified in paragraphs 83, 84 and 85 of Reference 1 above.
- b) At Reference 2, please clarify why no costs have been incurred to acquire a Section 28(2) permit for Pic Mobert First Nation. What is [sic] the estimated costs of any outstanding permits?
- c) Please elaborate on paragraph 20 of Reference 2. More specifically, please elaborate on how exactly the \$0.89M would be utilized as an OM&A program delivery cost.

RESPONSE

- a) The \$9.7 million of Indigenous Economic Participation in the construction budget is broken down as follows:

Item and Paragraph Reference	Cost
Indigenous benefits (para. 83)	\$6,116,033
Federal Section 28.2 Permits (para. 84)	\$2,114,420
Indigenous financing support (para. 85)	\$1,500,000
TOTAL	\$9,730,453

- b) The Federal Section 28.2 permit for Pic Mobert was only required for the duration of the construction period to allow for temporary access to the East-West Tie line right

of way on Pic Mobert lands. As no long-term use of Pic Mobert lands is required, the costs for the temporary access are limited to the East-West Tie line construction budget.

There are no outstanding costs related to the Federal Section 28.2 permit for Pic Mobert.

c) Please see the response to Staff #31 a.

SEC INTERROGATORY #1

INTERROGATORY

Question:

[A-2-1, p.2] Please confirm that the Applicant's proposal is to have a fiscal year for rate-setting purposes beginning April 1st, but with the exception of 2022, a rate year beginning January 1st.

RESPONSE

The rate period for 2022 begins on April 1, 2022. To align with the UTR time period, the remaining years of the IR term begin on January 1 of that year. Please see Exhibit E, Tab 1, Schedule 1, Page 2, Table 3 of the Application for the revenue requirement over the IR term.

SEC INTERROGATORY #2

INTERROGATORY

Question:

[A-3-1, p.6; <https://www.oeb.ca/sites/default/files/OEB-ltr-2021-inflation-updates-20201109.pdf>]

Please explain why the Applicant is not proposing to use the OEB's inflation factor weighting for transmission Revenue Cap Plans of 86%/14%, as opposed to its proposed 70%/30% weighting.

RESPONSE

Please see response to Staff #3 c.

SEC INTERROGATORY #3

INTERROGATORY

Question:

[A-3-1, p.6;] The Applicant notes that one of the reasons it is not proposing a productivity factor is that its “only controllable costs are OM&A where productivity is normally realized”. If the Board were to determine that a specific productivity factor should be applied to only the OM&A portion of the test year revenue requirement, what productivity factor would the Applicant believe would be appropriate and on what basis?

RESPONSE

NextBridge would not propose a productivity factor on the OM&A portion of the test year revenue requirement, as most of the OM&A is contractual and essentially fixed – not allowing for productivity gains. This is further described in Exhibit E, Tab 1, Schedule 1, Page 3 of the Application.

SEC INTERROGATORY #4

INTERROGATORY

Question:

[A] Please place on the record in this proceeding a copy of all the Applicant's evidence (pre-filed evidence, interrogatory responses, oral hearing transcripts, undertaking responses etc.) in EB-2017-0182 regarding construction costs. (Note: It is sufficient for the Applicant to simply agree to deem its evidence in that proceeding on the record for this proceeding and provide a link to the OEB's WebDrawer, as opposed to re-filing all the material.)

RESPONSE

Applicant agrees that all of NextBridge's evidence in EB-2017-0182 on its construction costs (including pre-filed evidence, interrogatory responses, oral hearing transcripts, undertaking responses) is deemed to be placed on the record in this proceeding. Here is a link to EB-2017-0182:

<https://www.rds.oeb.ca/CMWebDrawer/Record?q=casenum:EB-2017-0182&sortBy=recRegisteredOn-&pageSize=400#form1>

SEC INTERROGATORY #5

INTERROGATORY

Question:

[A-3-1, p.16] The Applicant notes that maintenance services will be provided by Hydro One and their partner, Supercom Industries:

- a. Please explain the relationship between Hydro One and Supercom.
- b. Has the Applicant entered into any preliminary agreement, memorandum of understanding of any other agreements (binding or otherwise) that outlines the relationship between the Applicant, and Hydro One and/or Supercom, with respect to operations and maintenance activities? If so, please provide a copy.
- c. When does the Applicant expect to enter into a Service Level Agreement with Hydro One and/or Supercom?
- d. Since the Applicant has not entered into a Service Level Agreement with Hydro One and/or Supercom, how has the Applicant forecasted the costs of its Operations & Maintenance budget?

RESPONSE

- a) Supercom Industries LP (Supercom) is a partnership of six First Nations who seek maximum employment and economic benefits for Indigenous communities along the East-West Tie line area. Their focus includes facilitating training programs and the procurement of materials, services, and labour from Indigenous communities. HONI and Supercom will be a Limited Partnership that links the focus areas of Supercom mentioned above with the long-established capacities and resources of HONI.
- b) No.
- c) NextBridge expects to enter into a service level agreement at the end of Q1 2021.
- d) The costs have been set as part of a competitive procurement and just the commercial terms of the agreement are being finalized. Please see the response to Staff #16 and Staff #29.

SEC INTERROGATORY #6

INTERROGATORY

Question:

[A-3-1, p.16] The Applicant notes that it will have a Service Level Agreement with its affiliate NextEra Energy Transmission, LLC ("NEET"):

- a. Has the Applicant entered into any preliminary agreement, memorandum of understanding, or any other agreements (binding or otherwise) that outlines the relationship between the Applicant and NEET? If so, please provide a copy.
- b. When does the Applicant expect to enter into a Service Level Agreement with NEET?
- c. Does the Applicant expect to receive any services from any other affiliates? If so, please provide details and what type of agreement will govern those relationships?
- d. What will the basis of the pricing be between the Applicant and any of its affiliates, including NEET?
- e. Since the Applicant has not entered into an SLA with NEET? How has the Applicant forecasted the costs for services it will receive from them?

RESPONSE

- a) The Applicant has not entered into preliminary agreement, memorandum of understanding, or any other agreements (binding or otherwise) that outlines the relationship between the Applicant and NEET.
- b) The Service Level Agreement will be finalized by the end of Q1 2021.
- c) While the Applicant will have access to affiliates of NEET if the need arises, the Applicant only expects to receive services from NEET directly.
- d) The Applicant will be using the same pricing that it currently uses as part of its partnership agreements for the construction of the East-West Tie line.
- e) The costs have been set as part of a competitive procurement and just the commercial terms of the agreement are being finalized. Please see the response to Staff #16 and Staff #29.

SEC INTERROGATORY #7

INTERROGATORY

Question:

[Ex. A-3-1] SEC seeks to understand the implications of the Applicant's Revenue Cap Index proposal. Using an assumed 2% inflation factor, please provide a table that shows for each year of the 2022-2031 rate plan term:

- a. The amount of revenue expected to be collected based on the Applicant's Revenue Cap Index proposal.
- b. The amount of revenue expected to be collected if the Applicant was using a cost of service methodology. For the purposes of this calculation, assume OM&A increases annually at the assumed rate of inflation.

In your response, please detail all assumptions and provide the underlying calculations (including any live spreadsheets used for the purposes of responding to this interrogatory).

RESPONSE

- a) Please see Exhibit E, Tab 1, Schedule 1 Page 2 of the Application for the revenue requirement by year for the IR term.
- b) NextBridge is unable to forecast the future OEB cost of capital parameters needed to answer this question.

SEC INTERROGATORY #8

INTERROGATORY

Question:

[A-3-1, p.17] Is the Applicant seeking to use the 2020 OEB Cost of Capital parameters for the purpose of setting the test year budget or does it plan to update the parameters for the updated now released 2021 parameters? If not, please explain why not.

RESPONSE

NextBridge's Application is based on the 2020 OEB Cost of Capital parameters and NextBridge does not plan to update to the 2021 parameters. Please refer to Staff #67 a.

SEC INTERROGATORY #9

INTERROGATORY

Question:

[C-2-4] Please provide a copy of the most recent project construction status report or similar document provided to the Applicant's Board of Directors.

RESPONSE

The most recent construction status report to the Applicant's Board of Directors is attached to this response.

East-West Tie Monthly Report: December, 2020



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COVID-19

Weekly management calls are held to review and discuss any new project risks as construction continues. NextBridge continues to comply with all provincial health requirements and follow all recommendations put forth by federal, provincial, and municipal governments. Below are additional safety procedures that have been introduced to mitigate COVID-19 risks.

- Screening new workers and workers who have recently travelled
- Testing workers on site
- Reducing the contact between employees, including how they travel to and from site each day
- Modified accommodations
- Additional cleaning and sanitizing procedures
- Providing additional PPE to employees including masks and hand sanitizer

December 2020 Update-

Following the Christmas break, all workers will be sent to Thunder Bay for testing and quarantine prior to returning to site. Rapid COVID-19 testing will be conducted at the Valhalla Inn and once the worker has been cleared, they will be sent to their respective work camps. Due to the limits in daily testing capabilities, workers will be brought in over the first few weeks of January. After all workers have returned from the break, the testing equipment will be moved to the Marathon camp where a quarantine zone will be setup in the dormitory. Workers will then be tested at the camp and can immediately return to work once cleared.

Safety Summary

There were 9 incidents on site during the month of December. There were 3 medical aids, 4 first aids, 1 property damage, and 1 vehicle damage. All workers on site continue to be monitored closely for COVID-19 symptoms. There have been no reported cases or infections of any project staff.

Valard is working closely with their subcontractors to reduce incidents and help improve safety culture.

A description of some incidents that occurred during the month of December are as follows:

- A subcontractor was walking an excavator on the ROW when the unit slid off the road and the subcontractor struck their hand against the window resulting in a laceration to the hand. Subcontractor received sutures and returned to duty
- A subcontractor exiting a Timberjack slipped on ice and felt discomfort in their new. Worker was taken for assessment and placed on light duties.
- While a worker was setting up a ladder on uneven ground, the ladder shifted and struck the workers hard hat and safety glasses resulting in debris from the ladder falling into the worker's eye. Worker was taken for medical assessment and placed on light duties.

- A subcontractor was grinding welds down when a foreign object flew into the subcontractor's right eye resulting in discomfort. Worker received first aid treatment on site and placed on light duties. Worker was wearing proper PPE.
- A truck travelling downhill collided with a third-party vehicle that was travelling in the opposite direction. Downhill vehicle attempted to stop, but due to icy road conditions, was unsuccessful. No injuries occurred.
- Worker was exiting the dormitories and slipped and fell on ice striking their head on the stairs. Worker was assessed and cleared for full duties.

Incidents

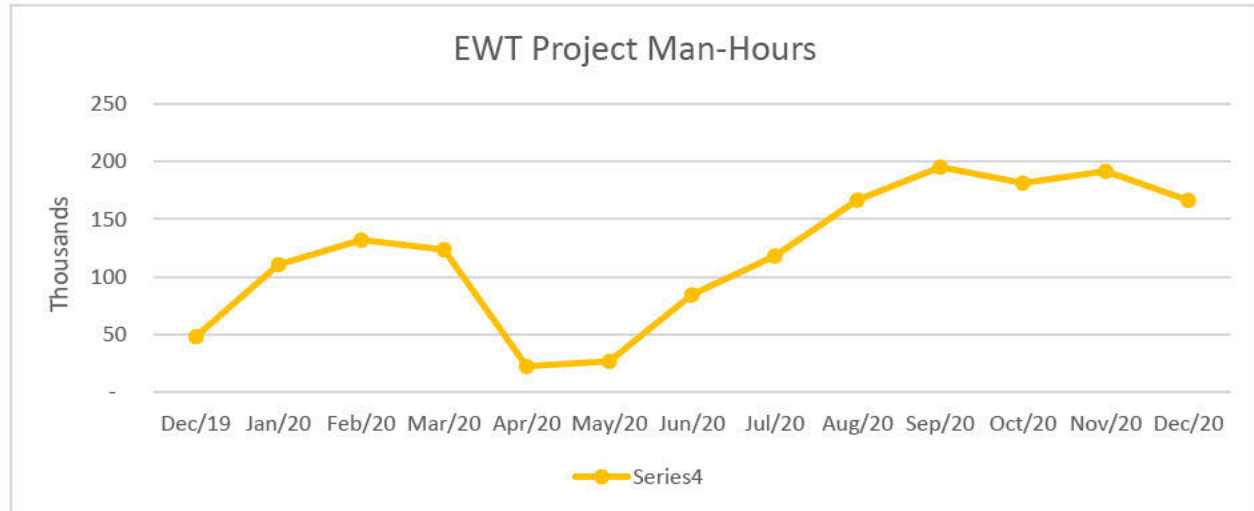
Month	Jul/20	Aug/20	Sep/20	Oct/20	Nov/20	Dec/20	Total
Near Misses	0	1	0	3	0	0	8
Medical Aid	0	0	0	4	2	3	11
Med Aid w/ Mod	1	2	3	0	0	0	8
First Aids	1	3	8	2	3	4	45
Theft/Security	0	0	0	0	0	0	2
LTI	0	0	0	1	1	0	2
Property Damage	1	1	2	6	2	1	26
Vehicle Damage	0	0	0	2	2	1	14
Other	1	0	0	0	0	0	5

Contractor & Subcontractor Weekly Man-Hour Reporting

Week Ending	12/5/20	12/12/20	12/19/20	12/26/20	1/2/21	Month	Project Total
Valard	32,388	32,632	15,952	1,880	1,800	84,651	1,065,150
E. Corbiere	5,794	5,712	4,774	521	529	17,330	228,939
Doublestar	1,866	2,043	1,268	108	32	5,316	56,646
LEG	1,833	2,155	1,592	89	0	5,669	73,569
Sodexo	2,177	2,451	1,680	300	180	6,788	70,847
Kabi Lake	4,968	3,780	5,892	684	912	16,236	133,176
TBT	207	223	240	32	3	705	30,584
Norpro	774	699	756	756	849	3,833	22,133
Crux	558	845	710	0	0	2,113	5,795

Project Monthly Man-Hours

Month	Jun/20	Jul/20	Aug/20	Sep/20	Oct/20	Nov/20	Dec/20	Total
Total	84,708	118,278	166,603	195,176	181,408	191,699	166,527	1,771,539



Engineering

The Burns & McDonnell team continues to proceed with partial IFC releases as Valard conducts field reviews.

During December, Burns & McDonnell worked on the following tasks:

- Material submittal review and coordination with the contractor
- Prepared and issued work fronts 2, 3, and 9 IFC documentation
- Coordinated with Transdesign to start the process of getting the SSW tower models incorporated into PLS models
- Support design of vibration damper and detuning pendulum placement
- Supported NextBridge review of foundation design efforts
- Designed and approved new White Lakes Narrows crossing
- Supported NextBridge with W2C temporary reroute
- Supported NextBridge in Hydro One substation land acquisition efforts
- Supported NextBridge in review of potential options for alternative spotting of structure B063 due to site accessibility issues

Logistics

The following tower types have been delivered to the project. All standard towers have finished production. Manufacturing of new leg and body extensions following site specific structure spotting is ongoing. Prototyping of new SSW towers for the White Lake Narrows crossing is underway.

- GTF-49
- GTH-46
- GTL-654
- SDX30-11

- SDX90-23
- SSX-94
- SRF-46
- STF-38
- STH-39
- STL-191

Total = 1191 towers received

There were no reel deliveries during the month of December. All deliveries to the Thunder Bay laydown yard have been completed.

- OPGW- 0 reels delivered- 57 total
- OHGW- 0 reels delivered- 112 total
- Conductor- 0 reels delivered- 592 total

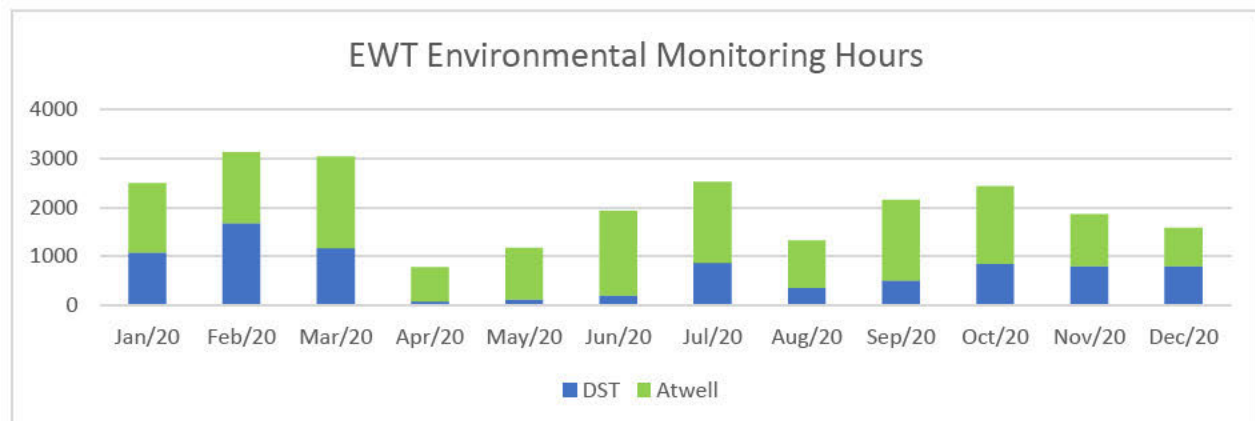
Environmental

The following environmental activities were completed during the month of December.

- Up to 3 Atwell environmental monitors onsite
 - Conducting ESC inspections
 - Environmental construction oversight
 - Identifying and reporting of ESC deficiencies and maintenance requirements prior to spring freshet

Environmental Man Hours

Environmental Monitors	May/20	Jun/20	Jul/20	Aug/20	Sep/20	Oct/20	Nov/20	Total
DST	120	200	871	361	500	840	800	11,125
Atwell	1,057	1,726	1,649	961	1,656	1,590	1,060	17,463



Camp, Laydown, & Office Construction

The Nipigon, Marathon, and White River camps are active with COVID-19 protocols in place. Permitting for the Wawa camp is completed and facilities will open up in January.

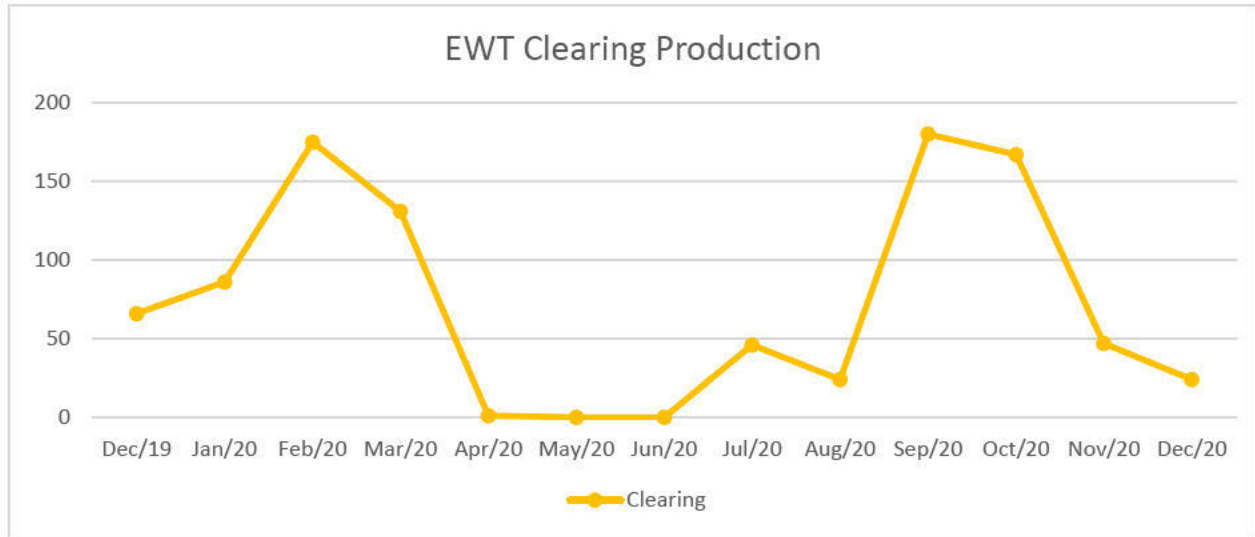
Camp	Status	Decommission
Nipigon	Active with COVID-19 Protocols in place	December 31 st , 2021
Marathon	Active with COVID-19 Protocols in place	December 31 st , 2021
White River	Active with COVID-19 Protocols in place	December 31 st , 2021
Wawa	Permitting Complete- Move in Jan.	December 31 st , 2021

ROW Clearing

Activity (Hectares)	Week 14 (11/29-12/5)	Week 15 (12/6-12/12)	Total
Clearing	9.81	23.86	767.17
Hand-Falling	15.49	16.48	289.06

Due to above seasonal temperatures on site, clearing activities were delayed in multiple areas which required frozen conditions in order to proceed. The majority of clearing activities were completed in Work front's 5, 8 and 9. The remainder of clearing work in the Caribou Zone was also completed. Starting in the new year, crews will be focusing on completing clearing work on the Michipicoten reserve which features very challenging terrain and will require a significant portion of hand falling. Clearing activities continued over the Christmas break.

WF	1	2	3	4	5	6	7	8	9	10	11
Structure Count	147	64	117	52	100	149	149	89	135	107	118
Completed	147	64	117	52	100	140	148	81	134	18	53
% Complete	100%	100%	100%	100%	100%	94%	99%	91%	99%	17%	45%

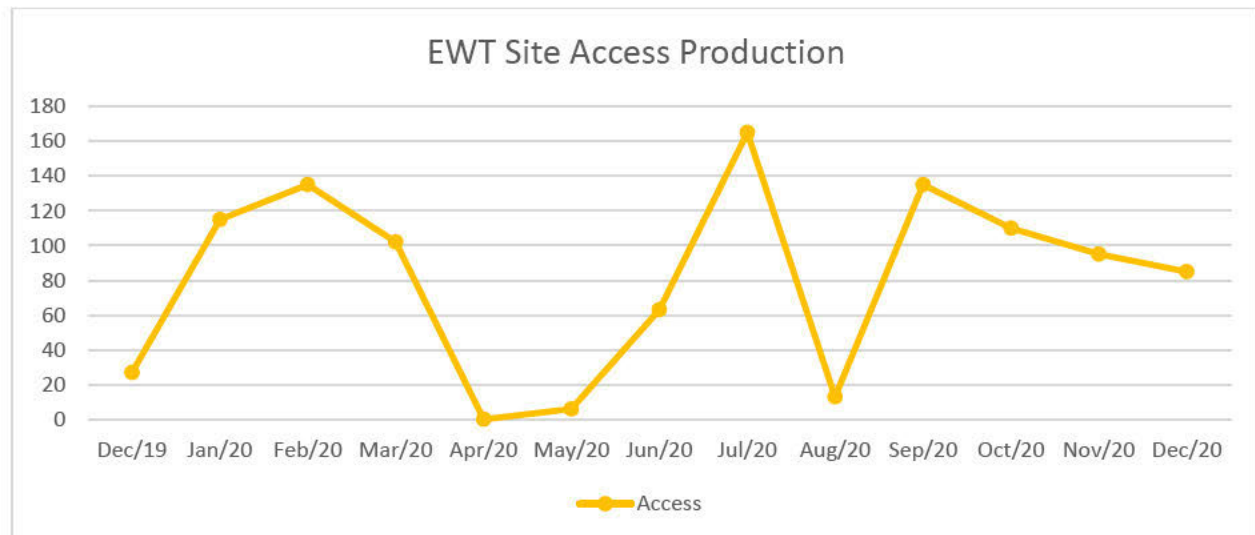


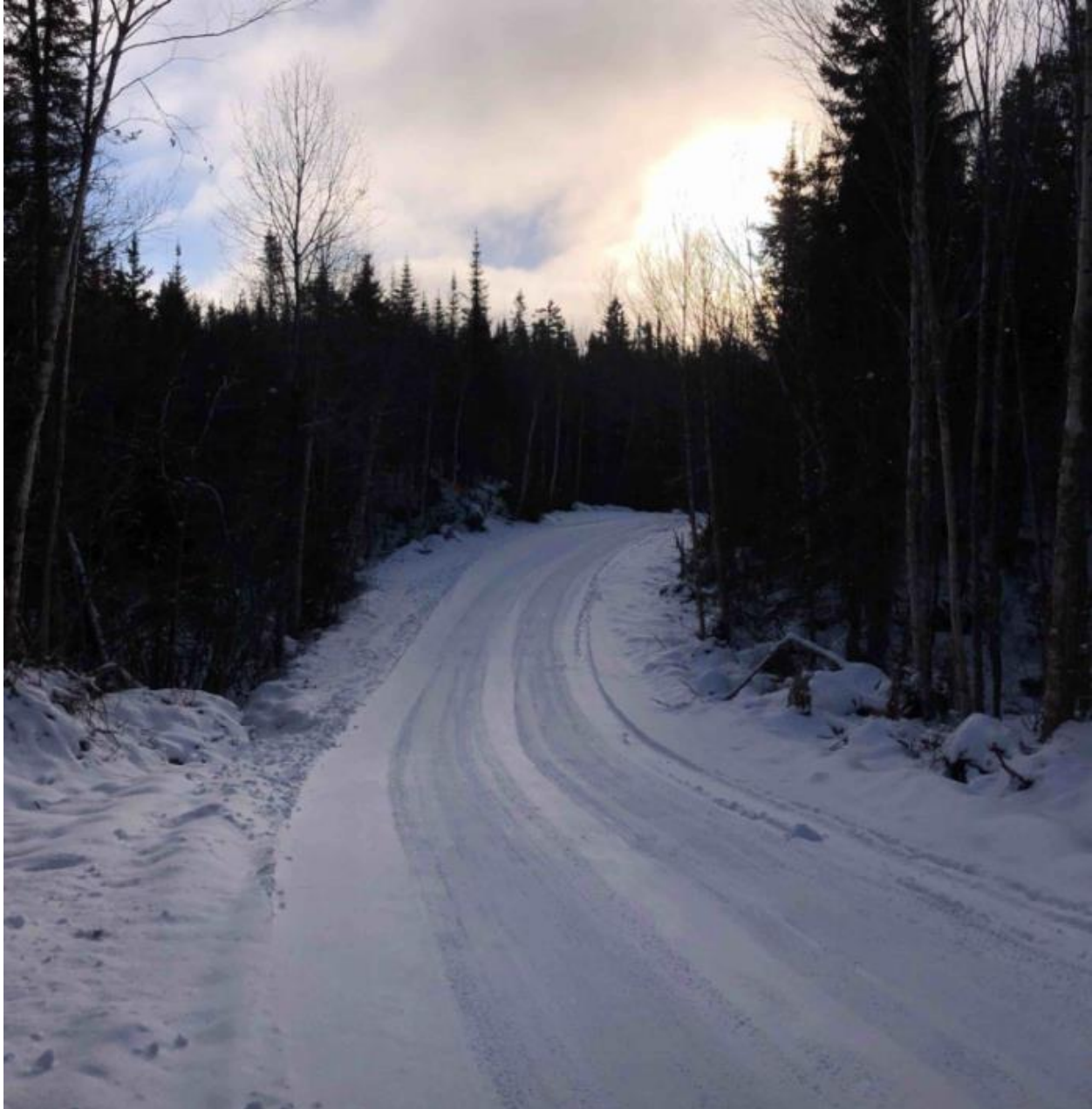
Site Access

Activity (km)	Week 14 (11/29-12/5)	Week 15 (12/6-12/12)	Total
Road Building	5.24	11.65	240.79

Site access construction faced similar challenges to clearing during the month. Crews had to wait on frozen ground to begin constructing winter roads. Access is being prioritized in the Caribou Zone and continued over the Christmas break. Sufficient winter access in the Caribou Zone has been restored which will allow for the immediate execution of the remaining activities once crews return to site in the new year. Crews will continue to install new access on the east end of the project following the completion of clearing activities.

WF	1	2	3	4	5	6	7	8	9	10	11
Structure Count	147	64	117	52	100	149	149	89	135	107	118
Completed	147	64	117	52	96	136	144	80	135	19	52
% Complete	100%	100%	100%	100%	96%	91%	97%	90%	100%	18%	44%

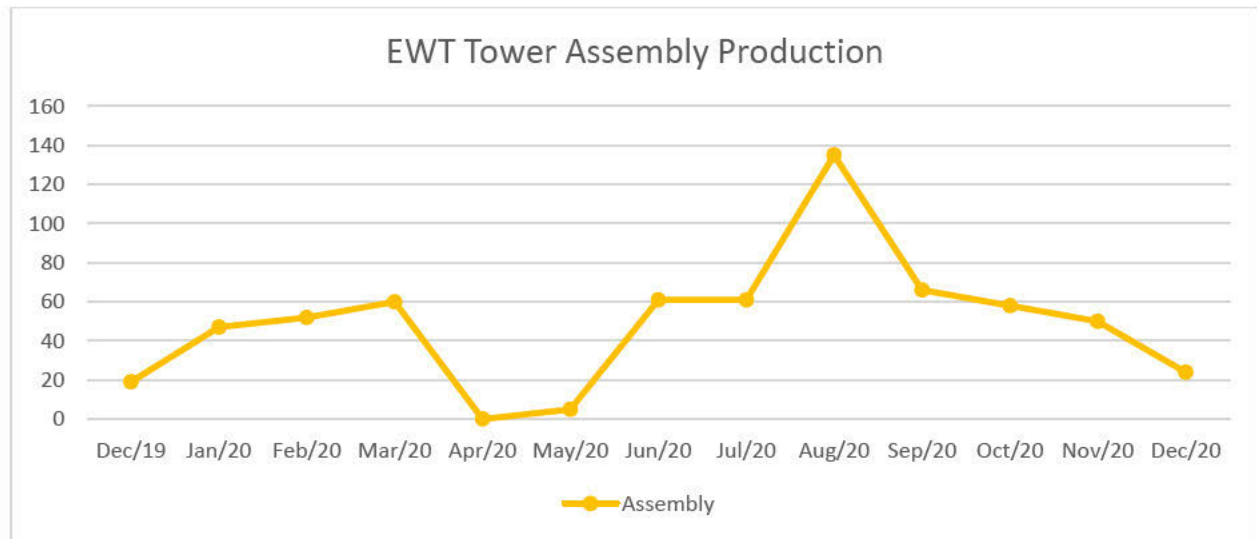




Tower Assembly

Tower assembly continued successfully in December. Due to crews de-mobilizing early for the holiday break, monthly production was low, however this is expected to return to normal in January and will not affect schedule. Additional assembly crews are being brought to site in the new year with plans to complete the assembly of all towers in the Caribou Zone this winter season.

WF	1	2	3	4	5	6	7	8	9	10	11
Structure Count	147	64	117	52	100	149	149	89	135	107	118
Completed	145	63	101	1	0	47	117	65	116	0	0
% Complete	99%	98%	86%	2%	0%	32%	79%	73%	86%	0%	0%

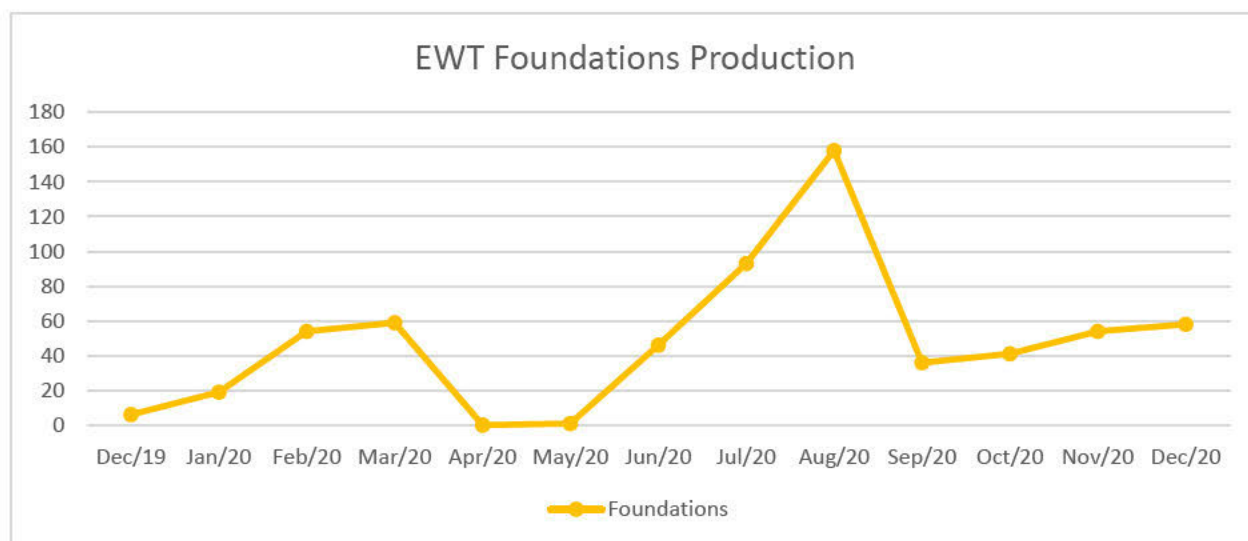


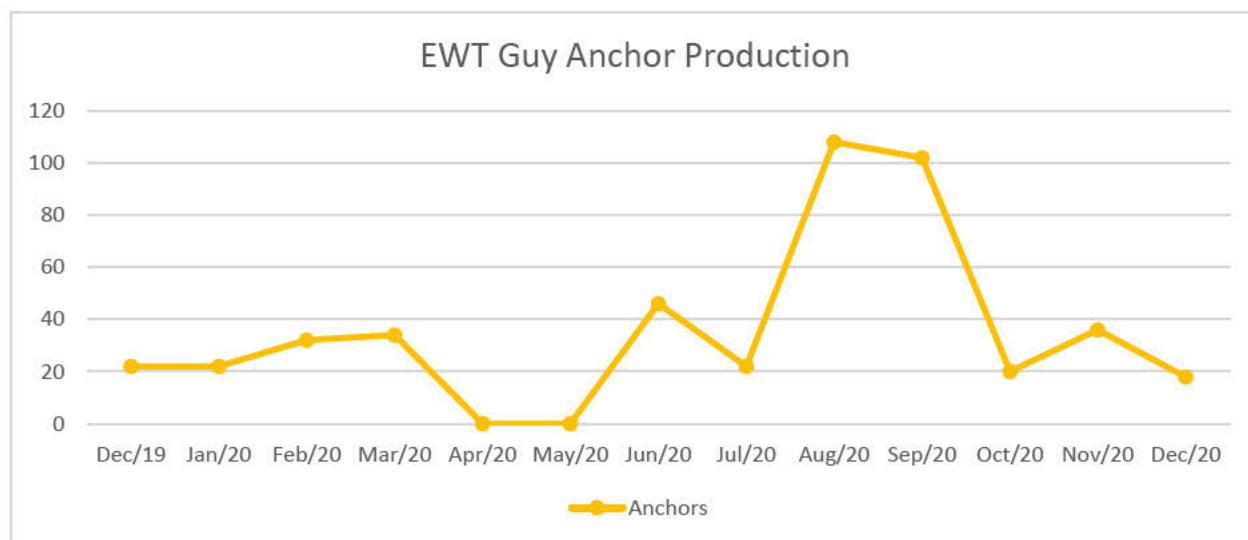
Foundations & Anchor Installation

The foundation program was very successful during the month of December. Crews were able to exceed production from the previous 3 months while also experiencing a shortened month due to the holiday break. Similar to assembly, foundation and anchor crews will be immediately dispatched to the Caribou Zone in the new year and it is expected that all foundation activities in the Caribou Zone will be completed this season. Crews will also be mobilized to work front 11 to complete the foundations in the Michipicoten reserve this year.

WF	1	2	3	4	5	6	7	8	9	10	11
Structure Count (FDN)	147	64	117	52	100	149	149	89	135	107	118
Completed	145	64	109	27	10	57	82	49	119	2	0
% Complete	99%	100%	93%	52%	10%	38%	55%	55%	88%	2%	0%

WF	1	2	3	4	5	6	7	8	9	10	11
Structure Count (ANC)	124	46	72	30	39	66	121	50	101	69	54
Completed	124	46	72	3	0	16	66	32	93	2	0
% Complete	100%	100%	100%	10%	0%	24%	55%	64%	92%	3%	0%

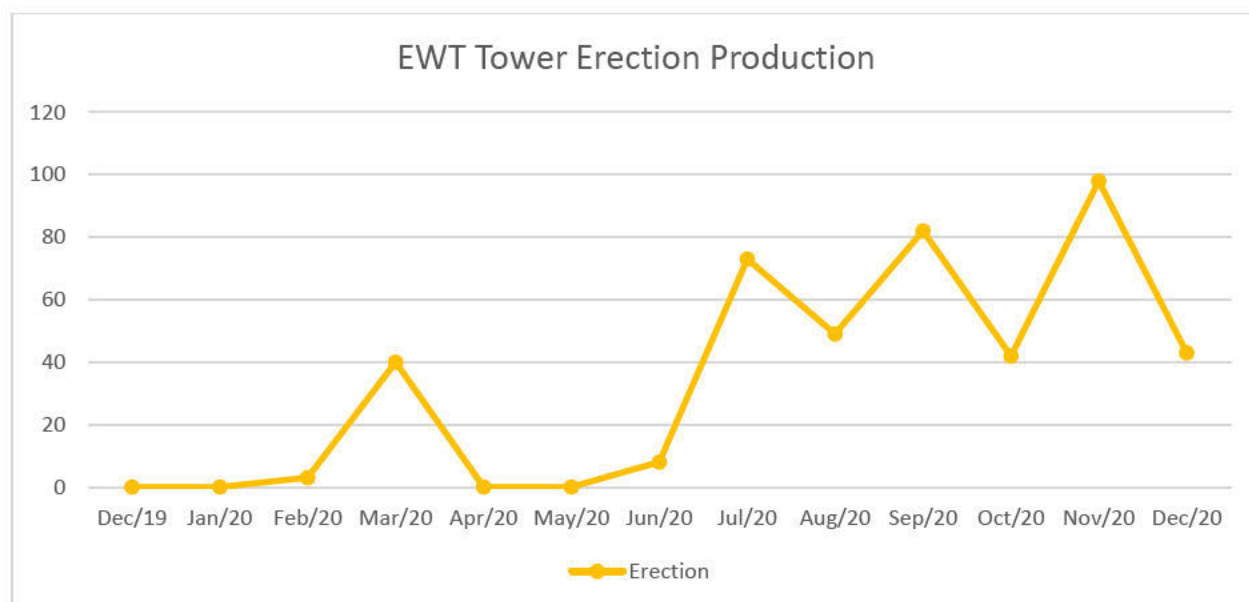




Tower Erection

Tower erection faced a shortened month as crews left site early to travel home. Erection crews will be mobilizing to the Caribou Zone and work front 11 in the new year. Crews will push to erect as many structures in the Caribou Zone as possible this winter with the goal of de-risking the stringing activities which are to be completed the following year.

WF	1	2	3	4	5	6	7	8	9	10	11
Structure Count	147	64	117	52	100	149	149	89	135	107	118
Completed	145	59	79	0	0	0	60	20	79	0	0
% Complete	99%	92%	68%	0%	0%	0%	40%	22%	59%	0%	0%

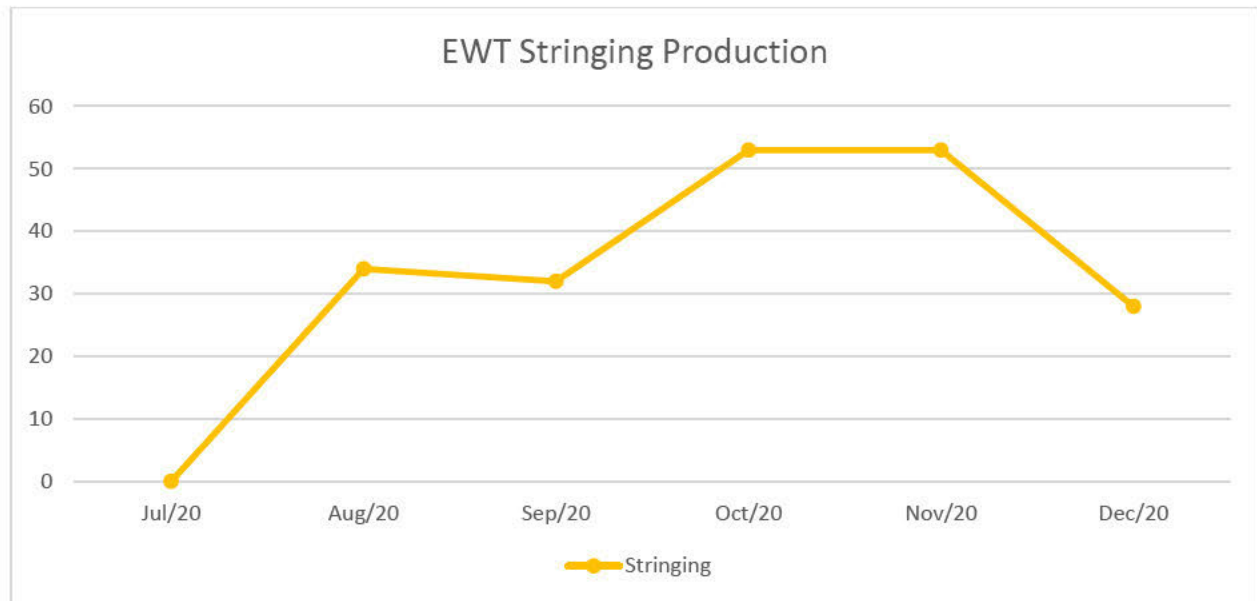




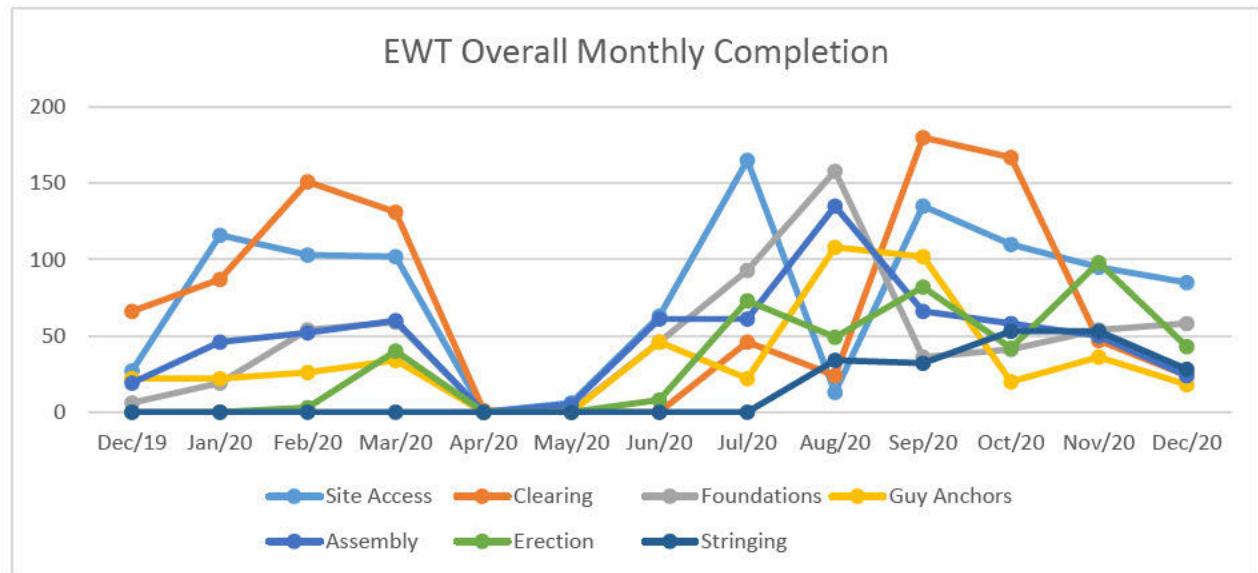
Stringing

Stringing continues to progress well with no major concerns. Production will continue in work front 3 in the new year. There is no stringing work anticipated in the Caribou Zone this season. NextBridge has been participating in outage/coordination calls with Hydro One which are planned for the new year. Crews will continue stringing from west to east.

WF	1	2	3	4	5	6	7	8	9	10	11
Structure Count	147	64	117	52	100	149	149	89	135	107	118
Completed	145	46	28	0	0	0	0	0	0	0	0
% Complete	99%	72%	24%	0%	0%	0%	0%	0%	0%	0%	0%



Overall Monthly Completion Progress



SEC INTERROGATORY #10

INTERROGATORY

Question:

[C-2-4] With respect to construction costs:

a. Please complete the following table:

<u>Category</u>	<u>EB-2017-0182</u> <u>Forecast (1)</u>	<u>Costs For Purposes</u> <u>of 2022 Rates (2)</u>	<u>Final Cost Forecast</u> <u>(3)</u>
Construction	356,548		
Site Clearing Costs	107,463		
Site Remediation Costs	13,899		
Materials & Equipment	89,408		
Project Management	4,901		
Construction Management, Engineering, Design & Procurement	19,342		
Real Estate & Property Acquisition costs	23,831		
First Nations & Métis Consultations	13,211		
First Nations & Métis Participation	7,000		
Other Consultations	2,530		
Environmental Approval	13,031		
Regulatory Costs	5,405		
Contingency	49,399		
Interest During Construction("IDC")	31,003		
Total Construction Cost	736,971		
(1) EB-2017-0182, Exhibit I.NextBridgeVECC.2			
(2) Costs that the Applicant is seeking to include in opening 2022 rate base			
(3) Most recent forecast of final forecast costs including impacts of COVID-19 and any other costs that it would otherwise include in Construction Cost Variance Account.			

- b. Please explain all material variances by category between, a) the cost forecast included in EB-2017-0182, and b) the forecast costs sought for approval for rate purposes in this application.
- c. Please explain all material variances by category between, a) the cost forecast included in this application, and b) its final cost forecast which includes all costs including those caused by COVID-19 and that would be included in the proposed Construction Cost Variance Account.

RESPONSE

Please see Exhibit C, Tab 2, Schedule 4, page 1 of the Application for the forecast construction costs used for rate base. NextBridge has provided OEB with quarterly reports

that describe variances to LTC budget during the construction process. Those reports with detailed variance explanations were provided in Q2 2019 and Q4 2019, and are attached as Exhibit C, Tab 1, Schedule 1, Attachment 1 and 2 to the Application. Also, to bookend the reports as of the date of this filing, the Q4 2020 report was filed with the Board on January 22, 2021. The forecasted construction is consistent with that report. Additionally, at the request of OEB staff, NextBridge also filed a response to detailed questions associated with costs reported in its January 22, 2020 quarterly report (attached as Exhibit C, Tab 1, Schedule 1, Attachment 4 to the Application).

SEC INTERROGATORY #11

INTERROGATORY

Question:

[F-4-1, p.12] In EB-2017-0182 the Applicant's OM&A forecast was \$3.9M a year as compared to the \$4.94 that it now forecasts. Please explain the variance and why it is reasonable.

RESPONSE

The primary driver between the OM&A forecast in EB-2017-0182 and the Application is Indigenous costs. While Indigenous costs were included in EB-2017-0182, it was an estimate as agreements had not been executed. Additionally, the requirements for caribou mitigation were unknown at the time since the Species at Risk permit had not yet been issued. The application now reflects an OM&A forecast for executed Indigenous agreements, permit compliance, and species-at-risk mitigation.

SEC INTERROGATORY #12

INTERROGATORY

Question:

[F-12-1] Does the Applicant (directly or through its limited partners) expect to pay any income tax during the term of the rate plan other than the Ontario Corporate Minimum Tax? If so, please explain when and on what basis.

RESPONSE

Yes, NextBridge expects to annually pay Ontario Corporate Minimum Tax as its only form of income tax through the IR Term. For additional information on NextBridge's taxable income please see Exhibit F, Tab 13, Schedule 1, Page 4 of 4 of the Application and the Excel Attachment to the Application Exhibit F-12-01-01.

SEC INTERROGATORY #13

INTERROGATORY

Question:

[F-13-1, p.2] Please explain how the 2022 forecast Accounting Income was derived.

RESPONSE

Accounting income of \$21.47 million is derived as follows: Regulatory Net Income of \$26.84 million multiplied by 80%, which represents the taxable partner's share.

Please see Exhibit F, Tab 13, Schedule 1, Page 4 of 4 of the Application and the Excel Attachment to the Application Exhibit F-12-01-01 for more detail.

Regulatory Net Income is calculated as follows:

Rates Revenue Requirement	55.7
OM&A	(4.9)
Depreciation	(9.3)
Cost of Debt	(14.7)
Accounting Income Before Taxes	26.8

SEC INTERROGATORY #14

INTERROGATORY

Question:

[F-13-1, p.3] The Applicant states that it will use the OCMT expense incurred in the test year to reduce the income tax expenses in the future years during the IR term, when there is a sufficient level of taxable income. When does the Applicant expect there to be a sufficient level of taxable income to allow for the OCMT to be deducted?

RESPONSE

At this time, NextBridge estimates that OCMT will be used to reduce income tax expense beginning in the year 2038, after the IR term of nine years and nine months. This assumes there are no tax rate or law changes.

SEC INTERROGATORY #15

INTERROGATORY

Question:

[G-2-2, p.1] What is the forecasted length of the long-term debt financing it expects to obtain?

RESPONSE

NextBridge intends to maintain the OEB debt-equity ratio of 56% long term debt and 4% short term debt. NextBridge expects the debt profile to closely align with the amortization of the regulated rate base to maintain the authorized capital structure.

SEC INTERROGATORY #16

INTERROGATORY

Question:

[H-1-1, Attach 3] SEC seeks to understand how the Applicant envisions the Construction Cost Variance Account to operate:

- a. What exactly is the Applicant recording in the account? Is it the variance in construction costs, the revenue requirement impact of the variance in construction costs, the revenue that would be collected through the Revenue Cap Index if the final construction costs had been approved into rates, or some other amount?

When the balance of the account is approved for disposition, please explain how the Applicant expects to recover the additional amounts. Does it expect the balance to be recovered by way of a rate rider, adjustment to the revenue requirement used for the purposes of the annual Revenue Cap Index, or some other method?

RESPONSE

- a) The Construction Cost Variance Account (CCVA) will be for the difference in revenue requirement from forecasted construction costs and actual final construction costs. NextBridge expects to file for initial disposition in 2023, and the amount be included in 2024 UTR rates. The difference in recovery for rate years 2022 and 2023 will be recovered in a rate rider in 2024, as the years have already passed. The 2024 – 2031 revenue requirement would be adjusted to include the annual impact of the difference in revenue requirement from forecasted construction costs and actual final construction cost (original revenue requirement + incremental revenue requirement.) If the CCVA accumulates a balance after initial disposition, it will be disposed at the end of the IR term of nine years and nine months as a rate rider during rebasing.

SEC INTERROGATORY #17

INTERROGATORY

Question:

[H-1-1, Attach 3] Please explain why the Applicant proposes to record COVID-19 related construction costs in the proposed Construction Cost Variance Account and not in the OEB's Account 1509, COVID-19 Emergency, Sub-account Other Costs.

RESPONSE

NextBridge will track and record COVID-19 costs through the in-service date in Account 2055 (CWIP) as these costs are part of construction of the line. Once in-service and the COVID-19 costs for the duration of construction are known, NextBridge will record the revenue requirement associated with these capital COVID-19 costs in the proposed Construction Cost Variance Account as these capital costs were not part of the revenue requirement proposed in this application. NextBridge is not using Account 1509 as all costs incurred at this time, through the in-service date, are capital construction costs; it is understood that the deferral Account 1509 is for differences in earnings for transmitters with rates in place.

SEC INTERROGATORY #18

INTERROGATORY

Question:

[H-1-1, Attach 5] Has the Applicant recorded any amounts in the OEB COVID-19 Account 1509? If so, please provide a detailed breakdown.

RESPONSE

No. NextBridge has not recorded any amounts in OEB COVID-19 Account 1509. Please see response to SEC#17 for details on COVID-19 cost treatment.

STAFF INTERROGATORY #1

INTERROGATORY

Reference: (1) Letters of Comment
(2) Filing Requirements, pp. 11 & 13, sections 2.3.2 & 2.3.4

Preamble:

OEB staff notes that NextBridge has not received any letters of comment to date regarding this rate proceeding. However, sections 2.3.2 and 2.3.4 of the Filing Requirements³ indicate that transmitters are expected to file with the OEB their response to the matters raised in any letters of comment sent to the OEB related to the transmitter's application.

Question(s):

- a) Please ensure that any responses to letters of comment or other applicable correspondence that may be received are filed with the OEB. Such correspondence should be filed before the argument (submission) phase of this proceeding.

RESPONSE

- a) NextBridge will file any responses to letters of comment or other applicable correspondence with the OEB before the argument (submission) phase of this proceeding.

³ Filing Requirements For Electricity Transmission Applications Chapter 2 Revenue Requirement Applications, February 11, 2016

STAFF INTERROGATORY #2

INTERROGATORY

Reference: (1) Exhibit A / Tab 2 / Schedule 3 / p. 3
(2) Exhibit A / Tab 3 / Schedule 1 / p. 4

Preamble:

Reference 2 states that “this Application requests approval of a revenue requirement and the establishment of an RCI for the period starting on, April 1, 2022 through December 31, 2031 determined by using a forward test-year approach and an annual revenue adjustment based on the Board’s incentive regulation approach.”

NextBridge has proposed this RCI period instead of the minimum 5-year term because the East-West Tie line is a single asset and its rates will not be changing significantly during this term. Implementing a longer IR term will result in fewer proceedings before the Board and in turn greater savings to ratepayers. The IR term is 9 years-and-9 months.

Question(s):

- a) Please provide the amount of expected savings to ratepayers. Please detail the assumptions used to determine the amount of expected savings.
- b) Please specify the type and amount of savings to NextBridge and ratepayers in a 9 years-and-9 months IR term compared to a 5-year IR-term.
- c) Explain if and how these savings will be provided to ratepayers.

RESPONSE

- a) Expected savings to ratepayers from having a 9 year 9 month IR term instead of 2 5 year terms will be realized in various ways. As discussed in the reference above, avoiding the cost of an additional rate proceeding during the proposed IR term is one avenue of savings. Through similar type cases, NextBridge believes the savings would be between \$1 million to \$2 million. This was informed by two recent cases of Hydro Ottawa (EB-2019-0261) costs of \$2.3 million and ENWIN Utilities (EB2019-0032) costs of \$1.1 million. ENWIN Utilities had a similar revenue requirement as NextBridge while Hydro Ottawa’s revenue requirement was larger than NextBridge’s. An additional proceeding would be amortized into rates for the 2nd IR term under the 5 year IR structure as opposed to the 9 year and 9 month structure NextBridge has proposed. The current revenue requirement for NextBridge’s IR term of 9 years and 9 months does not contain amortized rate case expenses.

As explained in detail in Staff #70, the second way NextBridge’s proposal provides savings to ratepayers is through locking in the ROE for the extended IR term of 9

years and 9 months. Current cost of capital parameters are at historic lows and the historic analysis performed on cost of capital in Staff #70 indicate that ratepayers could expect to save in the order of \$80 million.

- b) The savings to ratepayers of a 9 year and 9 month IR term compared to a 5 year IR term is the following:
 - a. Fewer rate proceedings (intervenor costs, consultants, legal expenses, OEB staff and facilitator costs, hearing costs) as explained in (a) above.
 - b. As outlined in Staff #70 in detail and mentioned above in (a), locking in the ROE for the extended IR term provides customers an estimated \$80 million in savings due to the historically low interest rates.
 - c. Ratepayers are protected from large escalations in costs due to NextBridge's use of the Revenue Cap framework which requires a utility to manage costs within the approved funding envelope.
 - d. Avoidance of incremental NextBridge partners' staff required to support more frequent regulatory proceedings. NextBridge's proposal contains minimal personnel to operate the East-West Tie line.
- c) The savings identified in (b) above are passed on to customers by:
 - a. Rate case savings - the Application currently does not have rate case expenses amortized over the IR term. Additional costs would need to be added and amortized over the following term.
 - b. Locking in the ROE – the current revenue requirement included in the application is 8.52% over the 9 year and 9 month term. Adding a 2nd IR term would allow use of an updated ROE for the 2nd IR term, which would likely be higher and increase the revenue requirement.
 - c. Avoiding cost escalation – costs identified in the Application would need to be managed for the 9 year and 9 month IR term by NextBridge. Adding a 2nd IR term in 5 years would provide an opportunity to update costs to actual inflation rates experienced.
 - d. Avoiding incremental staff – NextBridge current application has included minimal employees and NEET support costs to manage the ongoing operations but has not staffed or included staff to handle additional regulatory proceedings.

STAFF INTERROGATORY #3

INTERROGATORY

Reference: (1) Exhibit A / Tab 2 / Schedule 3 / p. 3

(2) Exhibit A / Tab 3 / Schedule 1 / pp. 5-7

(3) Exhibit E / Tab 1 / Schedule 1

Preamble:

The proposed RCI uses the OEB-approved inflation factor and a 0% productivity factor as outlined in Reference 3. NextBridge's proposed Inflation Factor is an external measurement of industry labour/non-labour weights with a weighted sum of 70% of the annual percentage change in Canada's GDP-IPI and 30% weight of the annual percentage change in the Average Weekly Earnings for workers in Ontario.

Question(s):

- a) Please clarify the calculation of the industry-specific inflation factor in the application and the CRA report. Please be certain to detail any assumptions used for the calculation.
- b) In some sections of the application, a 2% inflation factor is used for the annual adjustment. Please confirm that the OEB proposed inflation factor for transmitters is being proposed by NextBridge for all years of the application. If not, please explain why.
- c) The OEB inflation factor for transmitters has a weighting of 86% of the annual percentage change in Canada's GDP-IPI and a weighting of 14% of the annual percentage change in the Average Weekly Earnings for workers in Ontario. Is NextBridge proposing to use an annual inflation factor with a weighting of 70%/ 30%? Please confirm which weight factor NextBridge is proposing, and if there are any differences from the pre-filed evidence, please update accordingly.

RESPONSE

- a) The inflation factors used for the CRA report have different purposes than the inflation factors used by the OEB in rate setting. See the summary below of the factors prescribed by the OEB for rate applications versus the CRA inflation factors. Specifically, the CRA report used the Handy Whitman index which is tied to construction materials. The appropriate factors to use to determine construction cost inflation in the CRA study were determined by the experts performing the studies.

	Weighting/ Application	Factors	Description
Inflation in application	70%	Non-labour Canada's GDP-IPI (FDD) - National	Canada index for value of goods and services produced during a period.
	30%	Labour – AWE – All employees - Ontario	Ontario labour income index indicating the amount of earnings of all employees
Inflation used by CRA	Applied to materials (weighting varied based on project cost split)	Handy Whitman Plateau Index	Cost trends for utility construction, specific to the types of assets used to construct transmission projects
	Applied to construction cost and other costs (weighting varied based on project cost split)	Canadian CPI	Represents changes in prices as experienced by Canadian consumers. Measures price change by comparing, through time, the cost of a fixed basket of goods and services

- b) Yes, the OEB proposed inflation factor of 2% is being proposed by NextBridge for all years of the IR term. NextBridge utilized the 2020 inflation factor of 2% released October 31, 2019, set out in the OEB Report on Rate Setting Parameters and Benchmarking under the RRFE (EB-2010-0379) issued November 21, 2013, and updated December 4, 2013. At the time the application was filed, the 2021 inflation parameters had not yet been released.
- c) The inflation factor in the application was based off 2020 parameters for distributors as the 2020 parameters did not provide a transmitter specific split therefore the weighting of 70%/30% was used by NextBridge. The 2021 inflation parameters did indicate a transmitter specific split and were released on November 9, 2020, after the NextBridge application was filed. If NextBridge were to update to the 2021 inflation parameters that have since been released, the weighting of 86%/14% would be utilized and the calculation would still result in same inflation factor of 2% as used in NextBridge's application.

STAFF INTERROGATORY #4

INTERROGATORY

Reference: (1) Exhibit A / Tab 3 / Schedule 1 / pp. 5-7

Preamble:

At the above reference, NextBridge provides an overview of its proposed RCI mechanism.

NextBridge's proposal for the revenue cap would apply the 1 – 0% adjustment to the whole revenue cap, even though it is only actually OM&A expenses, mostly incurred per the service agreement, which are subject to inflation during the period. Further, with limited capital expenditures, the rate base decreases each year, and the capital-related revenue requirement would also decrease. The actual increase on the capital-related revenue requirement, relative to what it would be under cost of service, is greater than inflation.

Question(s):

- a) Please provide NextBridge's views on why its revenue cap proposal is reasonable considering its circumstances of limited projected capital expenditure during the nine-year nine-month period and given that OM&A is a smaller proportion of its overall revenue requirement.
- b) Please explain whether, given a declining rate base, limited capital expenditures, and operating expenses being a small percentage of the total revenue requirement, a rate freeze (or declining revenue requirement) for the plan period of 2022-2031 would be sufficient to allow NextBridge to recover its allowed costs, including having an opportunity to earn its allowed return on capital, and to recover costs from Hydro One and SuperCom and NEET for operating services under the service agreements.

RESPONSE

- a) The revenue cap proposal is reasonable for NextBridge, because it is consistent with the OEB revenue cap proposal framework. Under the framework, the utility manages its costs within the approved funding envelope. NextBridge expects to still face cost pressures as detailed in part (b) below that could overcome the benefit of a declining rate base. Additionally, NextBridge expects that locking in the ROE for the extended IR term of nine years and nine months to provide large amounts of customer savings as described in Staff #70. Historical analysis shows that savings could be \$80 million over the IR term.
- b) No, freezing the rates revenue requirement will not allow NextBridge to recover its costs and earn its allowed return on capital. NextBridge forecasts that the incremental cost pressures offset the lower capital costs due to a falling rate base over the rate period. Additionally, the HONI SLA and NEET services are not fixed price contracts;

rather, they are a budgeted estimate of services based off the currently understood required maintenance. The HONI SLA is an activity-based contract, as additional maintenance is needed NextBridge will pay additional fees. The HONI SLA also requires renegotiation and renewal after three years (or five years if the two-year extension is exercised), which is during the IR Term and could reset the rates that HONI/Supercom will charge. As mentioned in Exhibit A, Tab 3, Schedule 1, Page 2 of the Application, and reproduced below, NextBridge will face a number of internal and external challenges over the IR Term including:

- Rising income tax expense as NextBridge's capital cost allowance declines;
- Managing NextBridge's right-of-way vegetation maintenance program, taking into consideration the six-year vegetation cycle and expected increase in forestry expenses during certain test years with greater work volumes;
- Potential maintenance and labour cost increases;
- Bird nest removal and bird excrement-associated damages;
- Localized extreme weather event(s) (e.g., icing, lightning and fire related damage) and associated remediation;
- Fixed Consumer Price Index for First Nations Federal Section 28.2 reserve crossing permits may not align with inflation;
- New First Nations Reserve Land that could be added to the land base of the East-West Tie line requiring new Federal agreements and payments;
- Unexpected damage from right-of-way users or wildlife (e.g., vandalism, bears eating plastic guy-wire markers or snowmobilers accidentally damaging a tower or guywire); and
- Potential compliance changes through the North American Electric Reliability Corporation which will flow through the Northeast Power Coordinating Council and IESO.

STAFF INTERROGATORY #5

INTERROGATORY

Reference: (1) Exhibit A / Tab 3 / Schedule 1 / p. 2
(2) Exhibit A / Tab 3 / Schedule 1 / p. 18

Preamble:

Reference 1 states that "the implementation of a new transmission project that was not previously included in transmission rates results in an increase to the average transmission rates in Ontario" and Reference 2 states that "the addition of the East-West Tie line in transmission rates results in an increase of 3.31% in transmission costs since it is a new project that was not previously included in the UTR."

Question(s):

- a) Please explain the impact of the project on 2022 and 2023 UTRs.
- b) Please explain the impact of the project on ratepayers in 2022 and 2023.
- c) UTRs are not normally adjusted during the year as capital projects go into-service. Please explain the impact to NextBridge of not implementing the rates revenue requirement until the year after the East-West Tie is in service?

RESPONSE

- a) NextBridge expects to enter the UTR in 2022, as that is the year the East-West Tie line goes in-service. Since the East-West Tie line is expected to be in-service for nine of twelve months in 2022, NextBridge has prorated its 2022 revenue requirement accordingly. NextBridge would collect a full year's revenue requirement in 2023.

Impacts of the inclusion of the East-West Tie line in UTR for 2022 and 2023 are set forth in Exhibit J, Tab 1, Schedule 1, Page 2, table 3 of the Application. Because the East-West Tie line is new in 2022, the increase in UTR is 3.31%. The increase from 2022 to 2023 is 0.07% because the East-West Tie line was included in the 2022 UTR.

- b) Please see Exhibit A, Tab 3, Schedule 1, Page 20, table 9 of the Application for the customer bill impact over the IR term. The impact of on a distribution connected customer is 0.21% in 2022. The increase in bills from 2022 to 2023 due to the East-West Tie line is 0% as the East-West Tie line was included in 2022.
- c) NextBridge has proposed a forecasted revenue requirement to be part of the 2022 UTR when it is normally set in Q4 of 2021 to avoid updating the UTR during the year

in 2022. Then the forecasted revenue would be trued-up using the RDVA (revenue deferral variance account).

If the question is proposing that NextBridge not collect revenue in 2022 but enter the UTR in 2023 and have a true-up for 2022 revenues, this will create a revenue shortage for the East-West Tie line which would significantly impact the Indigenous partner, Bamkushwada, LP (BLP). BLP will buy into 20% of the East-West Tie line, which is expected to occur near in-service. BLP needs project revenues timed with the East-West Tie line in-service date in order to 1) secure funding for their portion of the East-West Tie line, or 2) make payments under the financing they secure. If BLP is not able to buy into the East-West Tie line, customers will be negatively affected by an increased revenue requirement. The Application, as submitted, included a reduced revenue requirement for BLP's non-taxable portion of the East-West Tie line to reflect BLP's buy-in.

STAFF INTERROGATORY #6

INTERROGATORY

Reference: (1) Exhibit A / Tab 3 / Schedule 1 / p. 17

Preamble:

NextBridge anticipates that the initial financing of the East-West Tie line will occur after the OEB issues its decision and order in this proceeding, since the initial financing will occur in close proximity to the in-service date and NextBridge is requesting either interim or final rates prior to the in-service date. Therefore, NextBridge proposes to use a DRVA [debt rate variance account] to track and conduct a one-time update to the revenue requirements at the first annual update for rates in 2023 to reflect NextBridge's actual long-term cost of debt.

Question(s):

- a) Please explain whether NextBridge could update its revenue requirement to reflect actual financing rates for the entire IR Term if the OEB establishes interim rates.
- b) Please provide a proposed schedule for maturing and reissuing debt during the IR term.

RESPONSE

- a) Seeking rates during an interim period introduces risk that would negatively impact financing rates and credit ratings. When securing financing, investors value certainty and financing rates will be more favorable if NextBridge has rate certainty for a longer time period. Investors would seek a higher return, and, therefore, increase NextBridge's financing rate, due to the lack of certainty in NextBridge's revenues with interim rates.
- b) NextBridge is beginning its engagement with banks for funding and does not have a schedule for maturing and reissuing debt as it depends on the rates available for various maturities. However, NextBridge expects the debt profile to closely align with the amortization of the regulated rate base to maintain the authorized capital structure.

STAFF INTERROGATORY #7

INTERROGATORY

Reference: (1) Exhibit A / Tab 3 / Schedule 1 / p. 21
(2) Exhibit A / Tab 8 / Schedule 3 / p. 3 / Table 4
(3) Exhibit J / Tab 1 / Schedule 1 / p. 3 / Table 4

Preamble:

Table 4 indicates a total bill impact of \$0.00 for a typical energy-billed General Service (GS < 50 kW) customer consuming 2,000 kWh per month. In Ref (2) it is stated the inclusion of the East-West Tie line in transmission rates results in an increase in a typical residential customer of 0.32% and an amount, that rounds to zero, in a typical general services energy customer.

Question(s):

- a) Tables 4 and 10 indicate an increase of \$0.75 per month which is calculated as a 0.22% increase for a typical energy-billed General Service (GS < 50 kW) customer consuming 2,000 kWh per month. Please explain the discrepancy between the \$0.00 shown in Tables 4 and 10 and confirm the percentage increase.

RESPONSE

NextBridge confirms that the percentage increase for a typical energy-billed General Service (GS<50 kW) customer consuming 2,000 kWh per month is 0.22%

The "\$0.00" 2022 increase as a % of total bill for Typical General Service Energy less than 50 kW shown in Table 10 in Exhibit A, Tab 3 Schedule 1, page 21, Table 4 in Exhibit A, Tab 8, Schedule 3, page 3 and Table 4 in Exhibit J, Tab 1, Schedule1, page 3 is a cell formatting error. The cell is shown in dollars, which rounds to zero; it should be in percentage which would be 0.22%. A redlined table is shown below for illustration.

Table 10. Typical Customer Monthly Bill Impacts

Typical Medium Density (R1) Residential Customer Bill Impacts	Typical Medium Density (HONI R1) Residential Customer 750 kWh	Typical General Service Energy less than 50 kW (HONI GSe < 50kW) Customer 2,000 kWh
Total Bill as of May 13, 2020	\$108.85	\$338.82
RTSR included in R1 Customer's Bill (based on 2019 Interim UTR)	\$12.27	\$25.87
<i>Estimated 2022 Monthly RTSR</i>	\$12.62	\$26.61
2022 increase in Monthly Bill	\$0.35	\$0.75
<i>2022 increase as a % of total bill</i>	0.32%	\$0.00 0.22%

STAFF INTERROGATORY #8

INTERROGATORY

Reference: (1) Exhibit A / Tab 5 / Schedule 1 / p. 1

Preamble:

The permanent financing for NextBridge is planned as a private placement which will require NextBridge to obtain a credit rating on a standalone basis. NextBridge will file the credit rating with the OEB upon receipt. The expected timing of the receipt of the credit rating is near the expected in-service date of March 31, 2022 for the East-West Tie line. Accordingly, there are no prospectuses or information circulars related to debt financing, as the materials will be developed closer to the financing.

Question(s):

- a) What credit rating is NextBridge expecting to receive?
- b) What is the expected impact of the credit rating, if any, on the OEB approved Cost of Capital?

RESPONSE

- a) NextBridge expects to receive an investment grade credit rating that is in the “A” or “BBB” category. This expectation is supported by a preliminary credit ratings assessment from TD Securities who will be the lead financial advisor for the placement of the long-term debt. The ultimate credit rating will be set by the selected credit rating agency and will be based on numerous quantitative and qualitative factors. TD Securities has advised that final rating is largely dependent on the outcome of this rate proceeding.
- b) The credit rating determines the cost of borrowing for debt. The higher credit rating provides a lower the cost of debt which is passed on to rate payers in the revenue requirement. NextBridge has requested a debt rate variance account (DRVA) to update the OEB approved Cost of Capital to the actual debt rates received during NextBridge’s private placement. The impact could be higher or lower interest rates as credit ratings, various maturities and timing of financing could introduce variations between the OEB’s Cost of Capital used in the rate application and the private placement.

STAFF INTERROGATORY #9

INTERROGATORY

Reference: (1) Exhibit A / Tab 6 / Schedule 1 / p. 4

Preamble:

UCT holds the designation and the transmission license for the benefit of NextBridge and its limited partners. In connection with the anticipated economic participation by BLP in the East-West Tie line after commercial operation date, NextBridge expects to request the OEB's permission to transfer the transmission license from UCT to a newly established special purpose vehicle such that the transmission license and all or substantially all of the East-West Tie line assets are held by a single entity.

Question(s):

- a) Could NextBridge clearly detail the licence transfer process. For instance, who is the entity that the existing licence will be moving to and who will the new licence be applicable to?
- b) Please confirm the date that NextBridge anticipates filing its application for the licence transfer.

RESPONSE

- a) Shortly prior to the in-service date in March of 2022, the general partner of NextBridge, Upper Canada Transmission, Inc. (UCT 1) who currently is the existing licence holder, will cause to be incorporated an entity named "Upper Canada Transmission 2, Inc." (UCT 2) for the purpose of becoming the general partner of NextBridge. Once Bamkushwada L.P. becomes a limited partner of NextBridge (the Closing), UCT 1 shall be removed as the general partner of NextBridge and UCT 2 shall become the sole general partner of NextBridge. At closing or shortly prior to closing, UCT 1 will transfer the transmission license to NextBridge or UCT 2 to ensure that such license is held by NextBridge or the general partner (i.e., UCT 2) of NextBridge. The transmission license at all times will be applicable to NextBridge and the East-West Tie line.
- b) NextBridge intends to file the application to transfer the transmission license from UCT 1 to NextBridge or UCT 2 at least 90 days before financial closing to provide the OEB time to review and approve the transfer.

STAFF INTERROGATORY #10

INTERROGATORY

Reference: (1) Exhibit A / Tab 8 / Schedule 2 / p. 1

Preamble:

NextBridge requests that the OEB's final rate order be made effective April 1, 2022, the day after the anticipated March 31, 2022 in-service date of the East-West Tie line. To address the possibility that the requested rate order cannot be made effective by that time, NextBridge requests an interim order making its proposed transmission revenue requirement effective on an interim basis as of April 1, 2022, and also allowing NextBridge to use the Revenue Differential Variance Account to record any differences in the revenue requirement between an interim order and the final approved decision and order and/or an interim order and the final approved decision and order and the in-service date. Any differences will be tracked and submitted for review and disposition at a future proceeding.

Question(s):

- a) Is NextBridge proposing that if the East-West Tie-Line is in service prior to March 31, 2022 that it would receive transmission revenue starting from the earlier date? If yes, is NextBridge requesting use of the RDVA prior to April 1, 2022?
- b) Why is NextBridge proposing receiving transmission revenue and recording it to a variance account if it does not meet the March 31, 2022 in-service date?
- c) What does NextBridge consider appropriate if the line is not in service by March 31, 2022? Does NextBridge believe that it should start receiving transmission revenue if the line is not in service?

RESPONSE

- a) Yes, if the in-service date is earlier than March 31, 2022, NextBridge proposes to receive revenue as of that date using the RDVA. The revenue included in the UTR for 2022 would have NextBridge receiving revenue as of April 1, 2022. The RDVA would be used to track the difference between the revenue NextBridge should have received (as of a pre-March 31, 2022 in-service date) and the revenue that was included in the UTR (based on April 1, 2022 in- service date).
- b) NextBridge is not proposing to receive revenues for the time period when the East-West Tie line is not in-service. In the case where the East-West Tie line does not meet the March 31, 2022 in-service date, NextBridge is proposing utilizing the RDVA to record the difference in revenue NextBridge received through the 2022 UTR and what should have been received, reflecting the March 31, 2022 in-service date.

Where the East-West Tie line is in-service later than April 1, 2022, the RDVA would contain a refund due to customers. NextBridge proposes this structure to allow the OEB to set the 2022 UTR as part of the normal timeframe and avoid updating the UTR partially through 2022.

The account would accrue carrying charges using the prescribed interest rates established by the OEB for regulatory deferral and variance accounts until disposition.

- c) See response to part b.

STAFF INTERROGATORY #11

INTERROGATORY

Reference: (1) Exhibit A /Tab 2 / Schedule 3 / p. 3

Preamble:

Reference 1 states that:

OM&A will either be provided under a service level agreement with Hydro One Networks (“HONI” or “Hydro One”) or provided by its partners NextEra Energy Transmission, LLC (“NEET”) through its partner affiliate agreement (“NEET Agreement”) as explained in Exhibit B, Tab 1, Schedule 4. Both agreements are being finalized and will be filed as an update to the Application when available.

Question(s):

- a) When does NextBridge anticipate both service agreements will be finalized?
- b) Please provide a copy of both service agreements when they are finalized.
- c) What will be the duration of each of the agreements?
- d) How is NextBridge able to ask for fixed OM&A costs if these two agreements have not yet been completed?
- e) If the costs associated with services included in these agreements end up being less than forecast will there be a true-up?

RESPONSE

- a) NextBridge anticipates that both service agreements will be finalized by the end of Q1 2021.
- b) NextBridge will provide copies of these service agreements when they are finalized.
- c) The duration for the HONI/Supercom service level agreement is three years, with an option to extend the agreement for up to two additional years at NextBridge’s discretion. The duration of the NEET Agreement has not yet been set.
- d) The financial terms of both these agreements have already been set and it is only the terms and conditions of the legal agreement that are still being finalized. For the HONI/Supercom service level agreement the financial terms were set during a competitive procurement, and for the NEET Agreement the financial terms will use the same as rates in the current partnership arrangement.
- e) The financial terms of both of these agreements have already been set and will not be less than forecasted.

STAFF INTERROGATORY #12

INTERROGATORY

Reference: (1) Exhibit A / Tab 3 / Schedule 1 / p. 2

Preamble:

Reference 1 states:

A number of internal and external challenges will have to be managed over the IR Term. They include:

- Rising income tax expense as NextBridge's capital cost allowance ('CCA') declines;
- Managing NextBridge's Right-of-Way ("ROW") vegetation maintenance program, taking into consideration the six-year vegetation cycle and an expected increase in forestry expenses during certain test years with greater work volumes;
- Potential maintenance and labour cost increases;
- Bird nest removal and bird excrement-associated damages;
- Localized extreme weather event(s) (e.g., icing, lightning and fire related damage) and associated remediation;
- Fixed Consumer Price Index ("CPI") for First Nations Reserve crossing permits may not align with inflation;
- New First Nations Reserve Land that could be added to the land base of the East-West Tie line requiring new Federal agreements and payments;
- Unexpected damage from ROW users or wildlife (e.g., vandalism, bears eating plastic guy-wire markers or snowmobilers accidentally damaging a tower or guywire); and
- Potential compliance changes through the North American Electric Reliability Corporation ("NERC") which will flow through the Northeast Power Coordinating Council ("NPCC") and IESO.

Question(s):

- a) NextBridge states its incentive rate application, as proposed, will mitigate these challenges, maintain financial performance and ensure that NextBridge's assets are managed efficiently and effectively to foster minimal bill impacts. Please explain and provide a table including the amount that is budgeted annually to meet each of these challenges.
- b) Could you please 'explain why there could be New First Nations Reserve Land added to the land base of the project requiring new Federal agreements and payments? Please also provide the amount of these potential costs.

RESPONSE

- a) The internal and external challenges that will be managed over the IR Term are expected to be in excess of the test year revenue requirement. However, there will be minimal bill impacts, because NextBridge intends to manage costs and absorb increases that are in excess of the RCI as long as the costs are not associated with an extraordinary event and eligible for Z-factor treatment. NextBridge does not have a budget identified for cost challenges in excess of the test year revenue requirement, as these items are not known and measurable at this time.
- b) As Indigenous communities pursue and settle land claims in the East-West Tie line area there is potential that communities may increase their Reserve lands through these settlements with the Federal Government. Through this land claim process, if a parcel of land is added to a community's current Reserve that is on NextBridge's right of way, NextBridge would need to replace its existing rights to that land parcel with a Federal permit under Section 28.2 of the Indian Act. In the event a parcel of land is added to a community's current Reserve that is on NextBridge's right of way, NextBridge, the Federal Government, and the Indigenous community would need to negotiate the terms and conditions of the Federal Section 28.2 permit, which may include capacity funding to cover the cost of negotiations and compensation for any potential impact for the use of the land added to Reserves. Given there is no way to predict which lands, if any, may be subject to future land claim settlements with the Federal Government, it is also not possible to provide an estimate of the potential future costs associated with having to obtain a Federal Section 28.2 permit.

STAFF INTERROGATORY #13

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 4 / p. 2
(2) Exhibit B / Tab 1 / Schedule 4 / p. 13, Paragraph 22
(3) Exhibit B / Tab 1 / Schedule 6 / pp. 2-5
(4) Exhibit F / Tab 2 / Schedule 1 / p. 2
(5) Exhibit F / Tab 4 / Schedule 2 / p. 3
(6) Exhibit F / Tab 5 / Schedule 1

Preamble:

Reference 1 states that “in order to reduce employment and overhead costs, the individuals will be employees of NEET.”

Reference 2 states that “For clarity, two NextBridge field personnel will be employed by NEET to manage and oversee the OM&A of the East-West Tie line.” Throughout the application these employees are referred to consistently as “NextBridge field personnel”.

Reference 1 also states:

The East-West Tie project has an extensive geographic area, not only from the 450 km of ROW, but also from the access roads that are used to reach the ROW through remote and rugged terrain. The two individuals must be available to reach these areas quickly and will be based in separate areas of the line.

Reference 6 states that “[...] NextBridge has no employees (all personnel used to support NextBridge work for the affiliate partners or through a service agreement with HONI).”

Question(s):

- a) Please confirm that when the evidence refers to NextBridge field personnel it is referring to the two NEET employees.
- b) Which entity will be accountable for operating and maintaining the transmission assets owned by NextBridge in accordance with all applicable regulatory standards? Which individual(s) will be accountable for these functions? What entity will employ this individual(s)?
- c) Please explain how NEET employment of the field personnel reduces employment and overhead costs compared to NextBridge employment.
- d) Will the two NextBridge field personnel have the identical job description? If not, please explain the difference between the two employees' roles and responsibilities.
- e) When will the two NextBridge field personnel begin employment?
- f) How many hours per week will be the regular schedule of the two NextBridge field personnel?

- g) Please explain where the two employees will be located relative to the location of the office and storage yard described in Reference 3. Do the office and storage yard costs described in Table 1 of Reference 3 include all the office and storage location costs, or will additional facilities be required due to the individual base locations of the two NextBridge field personnel?
- h) Please describe the major activities of the two NextBridge field personnel. Please indicate the anticipated percentage of time the two NextBridge field personnel will spend on each specific major activity on an annual basis.
- i) Please provide the organizational structure of NEET including the reporting relationships of the two NextBridge field personnel and the NextBridge Project Director.
- j) What will be the chain of command when responding to an unplanned outage?

RESPONSE

- a) Confirmed.
- b) NEET personnel will be responsible for operating and maintaining the transmission assets owned by NextBridge in accordance with all applicable regulatory standards. The local field Operations Lead, who will be one of the two NEET field personnel, will be responsible for the operating and maintenance functions.
- c) NextBridge, not having any direct employees, will not be charged a flat or already determined corporate cost allocation from any parent or partner entities. Charges where appropriate, will come from the two NEET field personnel directly supporting NextBridge. Personnel will track the amount of time spent on NextBridge work in a time recording system. Additionally, NextBridge avoids the administrative costs of having NextBridge as a payroll providing entity; for example, NextBridge does not have to prepare and file payroll tax returns. More information can be found at Exhibit F, Tab 6, Schedule 1 of the Application.
- d) No. The NEET field personnel will not have the identical job description, but they may be called upon to support each other at certain times. The two field personnel will include an Operations Lead and a High Voltage Lead. The NEET Operations Lead will manage the work necessary for the operation and maintenance of the transmission lines. The NEET Operations Lead is the local operations point of contact and performs site leader duties, as necessary. The High Voltage Lead will coordinate the Maintenance services contract work with HONI/Supercom for the operation and maintenance of the transmission lines. The High Voltage Lead is also expected to assume backup local operations point of contact and site leader duties, as necessary. The NEET Operations Lead will also be qualified to conduct the work of the High

Voltage Lead. In addition, for more information on roles and responsibilities, please see Exhibit B, Tab 1 Schedule 4 Page 3 of 14 - Table 1

- e) The two field personnel will be hired prior to the East-West Tie line in-service date during the Summer of 2021.
- f) The normal work schedule for the two NEET field personnel will include 8 hours per day, 40 hours per week, with availability for after-hours call out coverage 24/7/365.
- g) The NEET field personnel will be based in the East-West Tie line's area. The Operations Lead will have an office in the Thunder Bay area, while the High Voltage Lead will be a remote employee in the East-West Tie line area and is expected to be working on the right-of-way the majority of the time. The office and storage yard costs described in Exhibit B, Tab 1, Schedule 6, Page 2, Table 1, include all the office and storage yard operating costs and no additional facilities costs will be required at this time. These office and storage yard operating costs are separate from the Maintenance services contract with HONI/Supercom.
- h) See Exhibit B, Tab 1 Schedule 4 Pages 2-4 of 14:

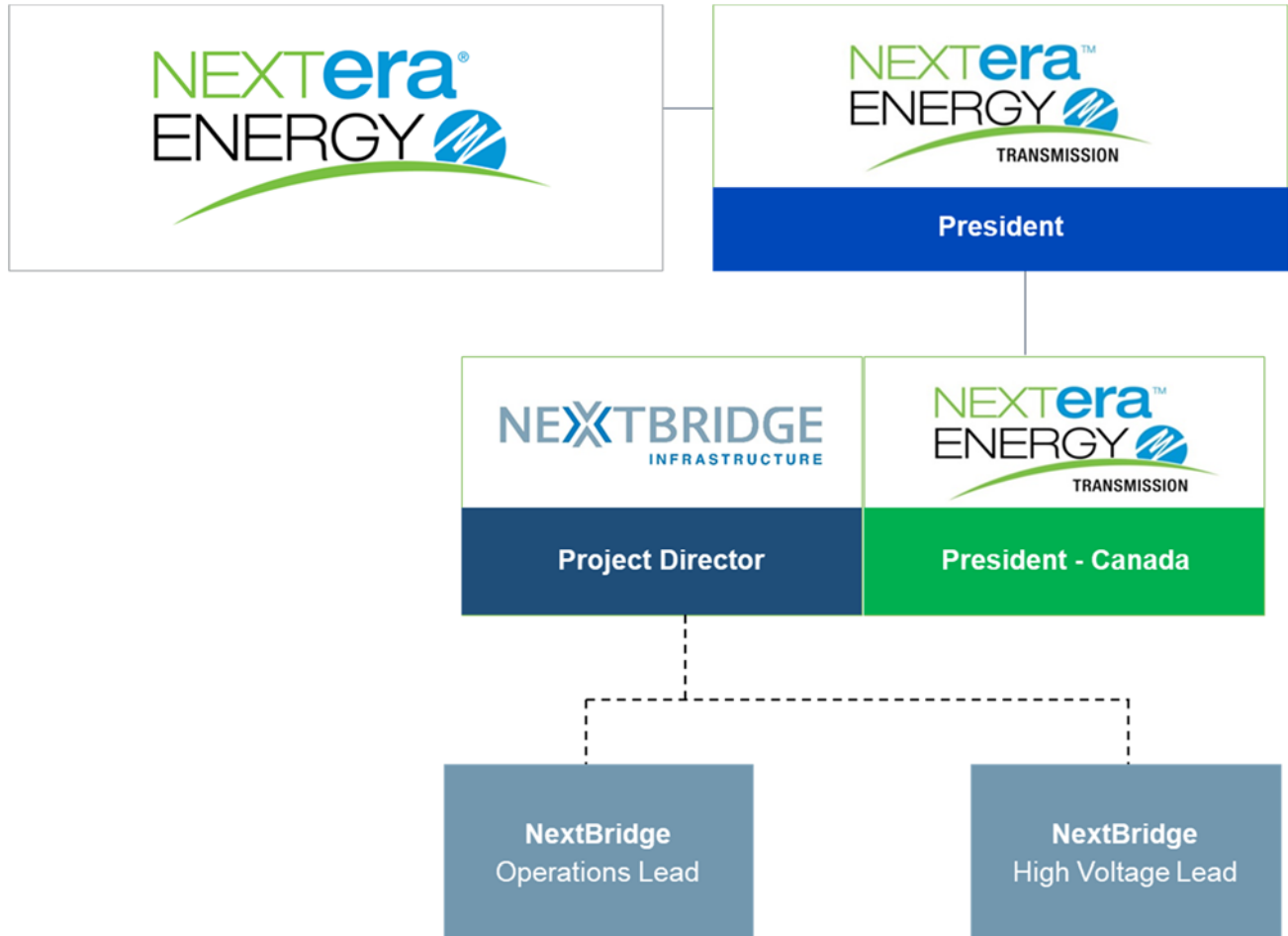
Operations Lead (percent allocations are estimates)

- Promote activities for protecting the safety of employees, equipment, and the general public. 10%
- Supervise support personnel to achieve the safe and reliable operation and maintenance of transmission lines. 35%
- Manage the performance of condition assessment and preventative maintenance and repair activities. 50%
- Manage event response and troubleshooting of unplanned outages, and support restoration in coordination with the Maintenance services provider and technical support personnel. 5%

High Voltage Lead (percent allocations are estimates)

- Actively participate in protecting the safety of employees, equipment, and the general public. 10%
- Coordinate support personnel to achieve the safe and reliable operation and maintenance of transmission lines. 35%
- Validate or witness the performance of condition assessment and preventative maintenance and repair activities. 50%
- Support event response and troubleshooting of unplanned outages, and restoration in coordination with the Maintenance services provider and technical support personnel. 5%

- i) Below is the organizational structure of NEET including the reporting relationships of the two NEET field personnel working for NextBridge and the NextBridge Project Director.



- j) The Operations Lead will be responsible for coordinating the response to unplanned outages. The Operations Lead will engage the Maintenance services provider, HONI/Supercom, to respond on the contracted 24x7x365 basis who will then take immediate action to dispatch qualified personnel to assess the event and develop a response plan. The Operations Lead will communicate progress on outages to the Project Director and the IESO.

STAFF INTERROGATORY #14

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 4 / p.10

Question(s):

- a) Please confirm that the services described in Reference 1 will be provided by NEET.
- b) Are these operating services required to be provided 24/7?
- c) Which personnel will be providing these services? Where will these personnel be located?
- d) How will the personnel identified in part c), if different from the NextBridge field personnel, coordinate with the two NextBridge field personnel?
- e) Please explain what crew is being referred to by "crew dispatching".
- f) Please confirm that the cost for all services described in Reference 1 will be included in the cost of the NEET Agreement.

RESPONSE

- a) Confirmed.
- b) Yes.
- c) The NEET personnel will be providing the following services:
 - Alarm/asset monitoring and physical control at dead-end structures at the dispatch center located in Austin, Texas;
 - Emergency response to system events impacting East-West Tie line are identified by NEET dispatch monitors in Austin, Texas, who in turn engage NEET field personnel based in the East-West Tie line project area;
 - Outage processing will initially take place in in Austin, Texas and then physically by the NEET field personnel based in the East-West Tie line project area;
 - Crew dispatching will initiate from the control center in Austin, Texas, who in turn trigger NEET field personnel based in the East-West Tie line project area
 - The NEET field personnel then engage a maintenance services provider located across the East-West Tie line project area;
 - Record maintenance will be managed by NEET field personnel based in the East-West Tie line project area.
- d) The NEET monitoring and dispatch personnel in Austin, Texas will be in contact with the NEET local field operations personnel by phone, text, and e-mail notification. The local NEET field personnel will interact with HONI/Supercom

partnership through the same means, as well as face-to-face meetings. See Staff #17 for details on interactions during emergency situations.

- e) The crews being dispatched are the two local NEET field personnel and crews from the HONI/Supercom partnership.
- f) Confirmed. The cost for all services described in Reference 1 will be included in the cost of the NEET Service Level Agreement, which is expected to be finalized in Q1 of 2021 and filed in this docket.

STAFF INTERROGATORY #15

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 4 / p.10-11

Preamble:

Reference 1 states “Maintenance services (majority provided by HONI/Supercom)”.

Reference 1 also states:

When contracted by NextBridge under the HONI SLA, HONI will routinely inspect the overhead transmission lines by ground and aerial-based patrols to identify safety and reliability deficiencies. At NextBridge’s direction, HONI will also undertake emergency repairs and responses to restore power or minor corrective work to resolve reliability and safety problems with transmission line assets when necessary.

Question(s):

- a) Please describe what maintenance services are not expected to be provided by HONI/Supercom.
- b) What is NextBridge’s plan to procure services described in response to a)?
- c) Please confirm that costs for all services provide by HONI/Supercom will be included in the cost of the HONI SLA.
- d) Please explain how NextBridge has satisfied itself that the arrangement with HONI/Supercom was the most cost-effective approach?
- e) Which NextBridge representative(s) will be authorized to direct HONI to undertake emergency repairs and responses as described in Reference 1?

RESPONSE

- a) The following maintenance activities are expected to be provided by NEET personnel;
 - Coordination and monitoring of the maintenance services provider to support the safety and reliability of the East-West Tie line.
 - Direction of planning, budgeting, and execution of work.
 - Follow-up review of service provider’s detailed inspection findings and recommendations by subject matter experts from NEET or NEET affiliates.
 - Storage for small maintenance spare parts (such as lighting components) will be provided at the Operations office.
 - Management of maintenance files, spot audits for adequacy of performed services and complaint investigations.

- Ensure the compliance of maintenance operating and reliability standards, specifications, and procedures.
- b) NEET personnel will self-perform the services listed in part a. under the NEET service level agreement.
- c) Confirmed.
- d) A competitive procurement process was undertaken to award a maintenance services agreement to a qualified, cost-competitive service provider to supply maintenance, operations, and emergency services on the East-West Tie line. As the Application explains, a partnership between HONI and Supercom was selected to provide these services. While the selected HONI/Supercom partnership bid was not the lowest priced option of the three bids received, based on NEET's experience, it was still cost effective and prudent particularly because HONI has infrastructure that parallels the majority of the East-West Tie line, which provides HONI with a complete and historical understanding of the area and conditions under which maintenance activities will be conducted. HONI's proximity to the East-West Tie line also allows them to quickly respond to potential unplanned outages. In this regard, the maintenance agreement with HONI/Supercom also involves emergency response services, which again HONI/Supercom will be able to provide a superior response given HONI's familiarity with and proximity to the East-West Tie line. Finally, while the bidders were competitive through most selection criteria, HONI's Indigenous Economic Benefits program through their partnership with Supercom, was far superior
- e) The field Operations Lead in conjunction with the NextBridge Project Director will be authorized to direct HONI/Supercom to undertake emergency repairs and responses.

STAFF INTERROGATORY #16

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 4 / p. 9
(2) Exhibit F / Tab 2 / Schedule 1 / p. 2

Preamble:

Reference 1 states that “NextBridge will competitively award certain OM&A aspects of the East-West Tie line for routine operation and maintenance to a partnership between HONI and Supercom to be provided under a the [sic] HONI SLA.”

Reference 2 states that “NextBridge has competitively sourced HONI who will conduct the operations and maintenance services on the East-West Tie line pursuant to the HONI SLA [...]”

Question(s):

- a) Please explain what was meant by “will competitively award”?
- b) Has a competitive procurement process for routine operations and maintenance been completed?
- c) If the answer to part b) is yes, please provide the scope documentation from the procurement.
- d) If the answer to part b) is yes, how many bids were received?
- e) If the answer to part b) is yes, was the lowest cost option selected? If not, why not?
- f) If the answer to part b) is yes, what firm was successful?

RESPONSE

- a) A competitive procurement process was undertaken to award a maintenance services agreement to a qualified, cost-competitive service provider, HONI/Supercom, to supply maintenance, operations, and emergency services on the East-West Tie line. As the Application explains, a partnership between HONI and Supercom was selected to provide these services. A finalized contract with HONI/Supercom is expected to be executed by the end of Q1 2021. Also, please see response to Staff #15 d.
- b) The competitive procurement process for routine operations and maintenance is complete with the understanding that the contract for services with HONI/Supercom remains to be executed as explained in part a.

- c) The scope documentation is provided as an attachment to this response.
- d) NextBridge sent the RFP to five entities and ultimately three bids were received.
- e) See response to Staff #15 d.
- f) The successful bidder was a partnership of HONI and Supercom; however, as explained in part a) above the contract is being finalized and will be executed by the end of Q1 2021.

Background

NextBridge Infrastructure (NextBridge) is issuing this request for proposal (RFP) for purposes to secure a contractor to perform the following maintenance services on the East-West Tie Line, a 230kV double circuit transmission line that runs approximately 450 km, located in Northern Ontario, generally between Thunder Bay and Wawa.

NextBridge is a partnership between affiliates of NextEra Energy Canada, Enbridge and OMERS Infrastructure. Together the NextBridge partners are well-positioned to deliver transmission projects on-time and on-budget, bring additional resources and innovative ideas to transmission project development, construction and operations in Ontario and support competition in transmission to drive economic efficiency in Ontario's transmission sector for the benefit of the Ontario electricity ratepayer.

NextBridge is a regulated transmitter by the Ontario Energy Board, and as such this RFP is issued in NextBridge's continuing process of providing the ratepayers of Ontario cost-effective transmission service. Respondents to this RFP are placed on notice that any offer of services must provide for reliable and cost effective transmission service to ratepayers.

Sustainable Indigenous Benefits

NextBridge considers the participation of Indigenous communities to be an essential component of successful transmission projects in Northwestern Ontario. We are committed to working with Indigenous communities along the Project Right of Way (ROW) to provide sustainable benefits to those communities. As we move towards the Operations phase of the Project, NextBridge is committed to maintaining established relationships and continuing to provide sustainable benefits to the Indigenous communities of Northwestern Ontario throughout the life of the transmission line. NextBridge expects that our future maintenance services provider is equally committed to Indigenous sustainable benefits.

Contact and Response Information

The procurement officer is the point of contact for this RFP. Please submit responses to the procurement officer by the deadline specified in the RFP Schedule below. Please reference RFP MTG01172020 NextBridge Trans. Maintenance and Inspections. You may submit your response in person, by mail, or by email to the procurement officer at:

Address: 700 Universe Blvd, Juno Beach, FL 33408

Email: Michael.Greeley@nexteraenergy.com

RFP Schedule

EVENT	DATE
RFP issued by NextBridge to prospective contractors	01/17/2020
Deadline for Submission of Questions and Requests for Clarification from prospective contractors to NextBridge by 5:00 PM EST/EDT	02/07/2020
Deadline for Responses to Questions and Requests for Clarification issued by NextBridge to prospective contractors	02/14/2020

Deadline for Submission of RFP Responses from prospective contractors by 5:00 PM EST/EDT	02/21/2020
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Questions and Requests for Clarification

Please direct any questions or requests for clarification to the procurement officer by the deadline for submission of responses identified in the RFP Schedule

Respondents Responsible for All Preparation Costs

Respondents are responsible for all costs associated with the preparation, submittal, and presentation of their response to this RFP.

Statement of Need (goals and objectives)

NextBridge is in the process of soliciting bidders for maintenance services on the East-West Tie Line. A Maintenance Services contract is expected to be issued for bid during the first quarter of 2020, with an expected start date during the fourth quarter of 2021. The term of service for the Maintenance Services contract will be three years with the possibility of extension for up to two additional years.

Maintenance services will include a detailed visual aerial (alternatives will be considered) inspection of one third of the transmission line on an annual basis, with the remaining two thirds of the line being aerially (alternatives will be considered) inspected for obvious and critical issues only. For the visual inspection, high resolution photos of each structure will be taken and reviewed further by the bidder's transmission line subject matter experts. The detailed visual inspection will be submitted to NextBridge within 2 weeks and include the following transmission line, ROW and access inspection points;

- Steel structures
- Hardware
- Loose/damaged guys and missing/damaged guards
- Conductors, shield wire and OPGW (broken strands, sag, clearance issues, etc.)
- Insulator assemblies
- Arrestors
- Vibration dampeners
- Backfill problems
- Erosion issues
- Washouts
- Rock-fall
- Tree growth that may have encroached on limits of approach
- Public improvements/interference
- Hazard trees

Additionally, an optional on-the-ground assessment of the ROW and access to the ROW will be considered.

The maintenance services scope of work does not include maintenance or management of the Construction Contractor's warranty items immediately following the construction phase of the Project,

nor does it include post-construction monitoring activities which are deemed the responsibility of the NextBridge Project Construction department.

As part of the Maintenance Services contract, major defects that can threaten the reliability of the line will need to be reported to NextBridge immediately and a corrective action plan, including proposed schedule and cost will be submitted by the bidder. A list of minor maintenance defects found during the inspections will need to be produced with recommendations for correction. The recommendations will include a proposed repair schedule and cost estimate.

The Maintenance Services will also include response to unplanned outages and emergencies. Response will be needed on a 24x7x365 basis and will require immediate action due to the serious effects of line outages and potential public safety impacts. Qualified personnel will need to be immediately dispatched from reasonably-distanced locations to assess the event and develop a response plan.

At a minimum the response plan will require the following items.

- Details outlining all of the required activities, timing and sequence
- Responsibility structure
- Material list
- Safe work plan
- Preliminary cost estimate based on T&M rates
- Applicable engineering resources and drawings
- Estimated restoration time
- Equipment list (i.e., cranes, trucking, helicopters, etc.)
- Access plan

The Supplier will, upon notification of an emergency, in light of the circumstances of the emergency, endeavor to arrive in the area of the emergency within 24 hours to perform an initial assessment of the infrastructure, and prepare a work plan within 24 hours of the initial site visit for approval of the Purchaser. Depending on the works proposed to be performed under the work plan, pricing may take longer than the 24 hour period taken to develop the work plan, if such pricing is not presently contained within the present services agreement. Furthermore, in respect of such emergency, the Supplier shall, in good faith, with reasonable and expeditious effort, deploy all labor, equipment and materials in accordance with the work plan approved by the Purchaser, to perform the required restoration.

A Time and Materials (T&M) rate sheet to support unplanned outages and emergencies will also be required as part of your response to this RFP. The rate sheet must include, but is not limited to;

- Man hour rates (including field staff, foremen, engineers, etc.)
- Mobilization/Demobilization rates
- Meal rates and/or lodging rates and/or per diem rates
- Fuel rates
- Ground/Aerial equipment list and rates (i.e., cranes, trucking, helicopters, etc.)
- Material rates

Similar T&M rate sheets should be provided for anticipated (typical) maintenance services activities and vegetation management services.

T&M rates for all of the above mentioned work scopes will need to be populated into the supplied updated Excel Spreadsheet titled, "RFP MTG01172020 Bid Form Rev. 1-30-2020". Tables have been provided for each work scope and are available through selecting the tabs at the bottom of the Excel Spreadsheet. The upper section of each table has been pre-populated with expected job role/pieces of equipment and rates will need to be populated by the prospective contractor. The lower section of each table is provided for the prospective contractor to propose additional job roles/equipment for each scope of work identified.

Maintenance Services will include identification and storage of spare material. While NextBridge will have some spare material for the transmission line, a complete list of expected spare material will need to be developed, including costs and storage type and location(s).

Vegetation maintenance services during the Operational phase of the transmission line will also be required. The vegetation maintenance scope of work does not include maintenance or management of the Construction Contractor's warranty items immediately following the construction phase of the Project, nor does it include post-construction monitoring activities which are deemed the responsibility of the Project Construction department. The inspection schedule will be expected to mirror the schedule laid out in the Maintenance Services section above.

No aerial application of herbicides is expected in the ROW. If herbicide use is necessary, it will be applied on the ground as spot application. Use of herbicides within the 30 m water body buffer will be prohibited unless the herbicide application is conducted by ground application equipment or otherwise approved by the relevant regulatory agency. If other methods cannot be used within the 30 m water body buffer, only approved herbicides would be used. The herbicide will be applied on the ground as an Individual Plant Treatment (ITP), via a backpack pumper-spray or a squirt bottle. The window of potential application will be subject to the applicable legislation. Under no circumstances will aerial application of herbicides will be used. Additionally, no herbicide will be used near rare plants or rare ecological communities, within 100m of identified wells, in sensitive areas, including First Nation Reserve lands, provincial parks, within 30 m of water bodies and certain other edible and medicinal plant harvesting areas the Indigenous communities have identified as a priority.

Further details can be found in NextBridge's MECP-approved Amended Environmental Assessment (EA). This document includes many important reference documents pertinent to this RFP, including, but not limited to, the Aboriginal Consultation Plan and Operational Environmental Management Plan. The approved Amended EA can be found in the below link.

<http://www.nextbridge.ca/regulatory-approvals>

Prospective bidders will be expected to comply with the vegetation clearing regulations, policies and restrictions contained within the approved amended EA.

Please provide the following information:

Staff Qualifications, Equipment and Experience

Number of available staff

Qualifications of the subject matter experts used

Qualifications of linemen/electrical workers

Qualifications of vegetation management personnel

Qualifications of Environmental staff

Experience working under Ontario regulatory agencies (i.e. Environment, etc.)

Vegetation clearing fleet

Vehicle fleet

Aerial fleet

Tower repair/erection equipment

Drone fleet and operator(s) experience (Optional)

Office location(s)

Availability and location(s) storage yard(s) and/or facilities

List of Maintenance Services being performed elsewhere, including points of contact

Company background and experience

Information Requested

- Contact name, phone number, and email
- Business name, address, and phone number
- An Indigenous Economic Benefit Plan must be included as part of your proposal as the ROW crosses numerous areas of traditional territories and two First Nation Reserves.
 - In relation to the areas where the transmission line crosses two First Nation Reserves, the successful proponent will be required to hire support from these communities while performing activities within them
- Location(s) of facilities from which services and emergency response will originate
- Spare materials list
- Location(s) of facilities where spare parts and material will reside
- Describe your commitment the environment and detail how your work will be conducted in order to align with this commitment and with NextBridge's Operational Environmental Management Plan
- T&M rates for transmission line maintenance work (i.e. replacing insulators and arrestors)
- T&M rates for outage and emergency response
- T&M rates for vegetation clearing and maintenance
- Material transportation costs

STAFF INTERROGATORY #17

INTERROGATORY

Reference: (1) Market Rules for the Ontario Electricity Market, Issue 76.0, Effective Date June 3, 2020 / Chapter 2 / Appendix 2.2 / Section 1.1.4
(2) Market Rules for the Ontario Electricity Market, Issue 76.0, Effective Date June 3, 2020 / Chapter 11
(3) Market Rules for the Ontario Electricity Market, Issue 76.0, Effective Date June 3, 2020 / Chapter 4 / Section 3.3 / Sub-section 3.3.1

Preamble:

Reference 1 states:

Each transmitter whose transmission system or part thereof forms part of or is connected to the IESO-controlled grid shall, subject to section 1.1.11, provide and maintain the following voice communication facilities for purposes of communicating with the IESO:

1.1.4.1 one high priority path facility and one normal priority path facility at the dispatch or control center for each such transmission system;

1.1.4.2 one high priority path facility and one normal priority path facility at the authority center for each such transmission system; [...]

Reference 2 includes the following definitions:

Authority center means, in respect of a facility, an attended location at which indirect operational control of the facility is affected;

Attended means regularly staffed on a twenty-four hours a day, seven days a week basis;

Reference 3 states:

Each transmitter shall:

[...]

3.3.1.9A follow good utility practice to promptly return transmission facilities and equipment to service after an interruption;

Question(s):

- a) Where will the dispatch or control center for the NextBridge transmission system be located?
- b) Where will the authority center for the NextBridge transmission system be located?
- c) Please describe how NextBridge will return transmission facilities and equipment to service after an interruption, including the chain of events, the time duration of each event, and the personnel involved.
- d) What operating agreement(s) does NextBridge expect to have in place prior to the in-service date? What is the schedule to complete such agreement(s)?

RESPONSE

- a) The dispatch center is located in Austin, Texas.
- b) The NEET Operations Lead will be in charge of managing the Maintenance services contractor, HONI/Supercom, who will be supplying emergency response services and will be located in Thunder Bay. The Project Director will be based in Toronto.
- c) When a service interruption is encountered by the dispatch center in Austin, Texas via the SCADA data interface with the East-West Tie line the NEET dispatch monitors will immediately contact the NEET Operations Lead in Thunder Bay and provide analysis of the available outage information. The NEET Operations Lead will then immediately contact the HONI Transformer Station operators and Maintenance services provider (HONI/Supercom) to provide them with the necessary information. Simultaneously, depending on the location of the emergency and the proximity to the NEET field personnel, the Operations Lead or the High Voltage Lead may be dispatched to the site to investigate the incident and determine whether the Maintenance services provider will need to be dispatched. Additionally, if the outage is in close proximity to the right-of-way cameras, the Operations Lead and/or High Voltage Lead may be able to ascertain the nature of the incident to provide critical information to the Maintenance services provider to shorten the time to assess the interruption. The Maintenance services provider will, upon notification of an emergency, endeavor to arrive in the area of the emergency within 24 hours to perform an initial assessment of the infrastructure and prepare a work plan within 24 hours of the initial site visit for approval of the NEET Operations Lead. In respect of such emergency, the Maintenance services provider (HONI/Supercom) shall, in good faith, with reasonable and expeditious effort, deploy all labor, equipment and materials in accordance with the work plan approved by the NEET Operations Lead,

to perform the required restoration. Once repairs have been completed and approved by the NEET Operations Lead, the line segment outage will be coordinated with HONI Transformer Station operators for re-energizing. HONI Transformer Station personnel will then switch the transmission line in, using HONI personnel at the respective HONI Transformer Stations. The length of repairs will vary based on the outage cause and amount of damage.

- d) The Maintenance services contract with HONI/Supercom is expected to be finalized Q1 2021 and will be filed at that time. Additionally, there is a Connection Facilities Agreement with HONI that will be completed in close approximation to Q1 2021.

STAFF INTERROGATORY #18

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 4 / Table 1
(2) Exhibit F / Tab 4 / Schedule 2 / p. 1-2

Question(s):

- a) Please provide a revised version of Table 1 from Reference 1.
 - a. Please provide a more detailed description of the roles, responsibilities, and interactions between entities and personnel.
 - b. Please clarify references to “maintenance services provider”, “HONI crews and other support personnel”, “subject matter experts”, “NEET affiliates”, “system control center”, and “technical staff”.
 - c. Please clarify and explain the following two responsibilities:
 - Perform compliance related maintenance according to operating standards, specifications, and procedures to NERC and NPCC
 - Ensure the compliance of maintenance, operating standards, specifications, and procedures to NERC and NPCC.
- b) Please demonstrate that the services included in the HONI SLA are consistent with the responsibilities allocated to HONI in the revised Table.
- c) Please demonstrate that services included in the NEET Agreement are consistent with the responsibilities allocated to NextBridge field personnel in the revised Table.
- d) For the responsibilities allocated to NextBridge field personnel, how will these responsibilities be divided between the two employees?

RESPONSE

a)

a. Below is the updated table.

Role/Responsibility	NEET Field Personnel	HONI SLA	Interactions Between Entities and Personnel
Coordinate and monitor the maintenance services provider to support the safe and reliable operation of the East-West Tie line	x		The NEET Operations Lead will act as the coordinator for all of the activities of the maintenance services provider, HONI/Supercom.
Coordinate and supervise HONI crews and other support personnel to support the safety and reliability of the transmission lines		x	HONI/Supercom will supervise their personnel and other support personnel and ensure they are appropriately trained and working safely while conducting their scope of services.
Directs planning, budgeting, and execution of work	x		The NEET Operations Lead will work directly with HONI/Supercom to plan for annual activities, emergency services (when required), and execution of works. The NEET Operations Lead will also be responsible for annual budgets and verification of services rendered by the maintenance services provider.
Perform detailed visual inspection of one third of the transmission line on an annual basis		x	HONI/Supercom will perform a detailed visual inspection of one third of the transmission line on an annual basis. Their findings will be submitted to NEET's subject matter experts for review and assessment of necessary maintenance activities, where required. More information on this scope of work can be found as an attachment to Staff #16.
Perform inspection of obvious and critical issues on remaining two thirds of the transmission line on an annual basis		x	HONI/Supercom will perform an inspection for obvious and critical issues on the remaining two thirds of the transmission line on an annual basis. Their findings will be submitted to NEET's subject matter experts for

Role/Responsibility	NEET Field Personnel	HONI SLA	Interactions Between Entities and Personnel
			review and assessment of necessary maintenance activities, where required. More information on this scope of work can be found as an attachment Staff #16.
Initial review of detailed inspection by subject matter experts ⁴		x	HONI/Supercom's subject matter experts will perform a review on the detailed inspection results. Their findings and recommendations will be submitted to NextBridge within 2 weeks More information on this scope of work can be found as an attachment to Staff #16.
Follow-up review of service provider's detailed inspection findings and recommendations by subject matter experts from NEET or NEET affiliates	x		Upon receipt of the HONI/Supercom's findings and recommendations, NEET subject matter experts will review the report and recommendations.
Provide 24/7 event response and troubleshooting of unplanned outages, and support restoration in coordination with the system control center and technical personnel	x	x	Please refer to Staff Interrogatory #17, Response c) for more information on the interactions related to this item.
Initial material storage yard supplier for large items such as structures		x	More information on this scope of work can be found as an attachment to Staff #16.
Storage for small maintenance spare parts (such as lighting components) will be provided at the NextBridge Operations office	x		NextBridge expects to purchase an office which will include a small indoor storage area/shop for smaller spare equipment.
Management of maintenance files, spot audits for adequacy of performed services and complaint investigations	x		NEET field personnel will perform spot audits on the maintenance services provider's works from time to time to ensure adequacy of performed services. NEET field personnel will manage project files, investigate and resolve complaints.

⁴ Major defects that could threaten the reliability of the line will need to be reported to NextBridge immediately and a corrective action plan, including proposed schedule and cost will be submitted by HONI SLA.

Role/Responsibility	NEET Field Personnel	HONI SLA	Interactions Between Entities and Personnel
Ensuring opportunities for Indigenous economic benefits (such as employment and contracting)	x	x	NEET field personnel and HONI/Supercom have both committed to providing sustainable Indigenous economic benefits during their involvement in the East-West Tie line. Each party will be responsible for adhering to these commitments.
Ensure appropriate tools, equipment, materials, and vehicles necessary to efficiently and economically perform work are available	x	x	NEET field personnel and HONI/Supercom will have tools, equipment, materials and vehicles to support their respective roles on the East-West Tie line. Each entity will be responsible for their respective inventory, maintenance, and personnel training.
Perform compliance related maintenance according to operating standards, specifications, and procedures to NERC and NPCC		x	HONI/Supercom will conduct their responsibilities in accordance with operating standards, specifications, and procedures to NERC and NPCC. NEET field personnel will ensure that HONI/Supercom conducts their responsibilities in accordance with operating standards, specifications, and procedures to NERC and NPCC. NEET field personnel will ensure their subject matter experts conduct their reviews in accordance with operating standards, specifications, and procedures to NERC and NPCC.
Ensure the compliance of maintenance operating standards, specifications, and procedures to NERC and NPCC	x		HONI/Supercom will conduct their responsibilities in accordance with operating standards, specifications, and procedures to NERC and NPCC. NEET field personnel will ensure that HONI/Supercom conducts their responsibilities in accordance with operating standards, specifications, and procedures to NERC and NPCC. NEET field personnel will ensure their subject matter experts conduct their reviews in accordance with

Role/Responsibility	NEET Field Personnel	HONI SLA	Interactions Between Entities and Personnel
			operating standards, specifications, and procedures to NERC and regional standards.
Promote activities for protecting the safety of employees, equipment, and the general public in compliance with internal safety policies and OHSA safety standards	x	x	NEET field personnel and HONI/Supercom will promote activities for protecting the safety of employees, equipment, and the general public in compliance with internal safety policies and OHSA safety standards.

- b. Maintenance services provider” refers to the organization responsible for performing the work included in the HONI SLA. Upon execution of the HONI SLA, this organization will be a partnership between HONI and Supercom.

“HONI crews and other support personnel” refers to the crews executing work under the HONI SLA. This may include subcontractors to the maintenance services provider (HONI/Supercom).

“Subject matter experts” refers to NEET or NEET affiliate subject matter experts in the fields of maintenance, operations, engineering, and vegetation management.

“NEET affiliates” refers to NEET affiliate companies, such as Florida Power and Light Company, Lone Star Transmission, LLC, and NextEra Energy Resources, LLC.

“System control center” refers to the Lone Star Control and Dispatch Center located in Austin, Texas, which includes a back-up control and dispatch center.

“Technical staff” refers to the two NEET field personnel and other NEET or NEET affiliate personnel as needed from time-to-time for technical assistance.

- c. HONI/Supercom will be performing the compliance related maintenance according to operating standards, specifications, and procedures to NERC and NPCC standards under the HONI SLA.

NEET field personnel will be managing and ensuring the compliance of maintenance, operating standards, specifications, and procedures to NERC and NPCC standards that HONI/Supercom is performing under the HONI SLA.

- b) The responsibilities of HONI/Supercom can be found in the scope of work provided as an attachment to Staff #16.
- c) The “NextBridge Field Personnel” column has been revised to “NEET Field Personnel” in the table above. The responsibilities of NEET field personnel will be consistent with the responsibilities in the NEET Service Agreement when it is completed at the end of Q1 2021 and subsequently filed.
- d) The NEET Operations Lead will have overall responsibility for the safe and reliable operation of the line. As part of that responsibility, the NEET Operations Lead will manage and coordinate the maintenance services contract and supervise the NEET High Voltage Lead. The NEET High Voltage Lead’s primary responsibility will be to perform ground inspections and validate the work performed by the maintenance services provider. The remaining tasks will be worked together between the NEET Operations Lead and the NEET High Voltage Lead, as appropriate.

STAFF INTERROGATORY #19

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 4 / Table 1

Preamble:

The responsibility “Provide 24/7 event response and troubleshooting of unplanned outages, and support restoration in coordination with the system control center and technical staff” has been allocated to both NextBridge Field Personnel and HONI.

Question(s):

- a) Please explain how this responsibility will be divided efficiently and effectively between NextBridge field personnel and HONI.
- b) Which personnel will be responsible for identifying an unplanned outage and initiating response?

RESPONSE

- a) In order to ensure that an unplanned outage is coordinated efficiently and effectively, NextBridge, HONI, and HONI/Supercom will jointly develop a protocol of detailed steps that will be undertaken. Each party will know exactly which role they are responsible for so as not to duplicate efforts or leave lags in response time. This protocol will be updated on an annual basis and will ensure that the contact information for all parties is up to date.
- b) NEET dispatch monitors in Austin, Texas will be responsible for identifying unplanned outages via the SCADA data interface with the East-West Tie line. Once an unplanned outage has been identified the monitors will contact the Operations Lead will initiate a response (See OEB Staff #17 c).

STAFF INTERROGATORY #20

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 4 / Table 1
(2) Exhibit F / Tab 3 / Schedule 1 / p. 1

Preamble:

In Reference 1, the responsibility “Directs planning, budgeting, and execution of work” has been allocated to NextBridge Field Personnel.

Reference 2 states that “given the proximity of the East-West Tie line to HONI’s existing East-West transmission and station assets, there are meaningful efficiencies inherent in having HONI plan and perform the work on both lines simultaneously.”

Question(s):

- a) Please explain how HONI will be able to plan and perform the work on both lines simultaneously in order to realize efficiencies if NextBridge field personnel will be responsible for directing planning, budgeting, and execution of work on the EWT.

RESPONSE

- a) NEET field personnel will be responsible for the direct planning, budgeting, and execution of work for the NextBridge East-West Tie line. Per the service level agreement with HONI/Supercom, NEET field personnel and HONI/Supercom will meet annually, at a minimum, and more times as needed to schedule maintenance activities for the East-West Tie line that coincide with HONI’s schedule maintenance activities to ensure both lines can be inspected and maintained safely and efficiently. The ability for NextBridge, through the NEET field personnel, and HONI/Supercom to collaborate efficiently is due to the proximity of HONI lines and right-of-ways running parallel for the majority of the East-West Tie line.

As HONI falls under the same operational maintenance review requirements as NextBridge, (e.g., Reliability Standard FAC-003-4) the HONI/Supercom partnership will be able to combine, in many cases, annual aerial and ground-based inspections, on the majority of the East-West Tie line in parallel with their own reviews.

STAFF INTERROGATORY #21

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 4 / Table 1
(2) Exhibit B / Tab 1 / Schedule 4 / p. 6

Question(s):

- a) In addition to being Bulk Electricity System (BES) elements, as defined by NERC standards, are the circuits that make up the EWT Bulk Power System (BPS) elements, as defined by NPCC criteria?

RESPONSE

- a) See EB-2017-0182, NextBridge's Leave to Construct Application, Exhibit F, Tab 1, Schedule 1, Attachment 1, page 1 (IESO System Impact Assessment Report):

"At the westward transfer levels of about 450 MW studied in this report, the project's equipment will not fall within the Northeast Power Coordinating Council (NPCC) definition of the Bulk Power System (BPS). As presented in the final SIA report for the transmitter's project (CAA_ID 2014-514), it is expected that once the new SVC is installed at Marathon TS and the East-West Tie transfer capability is increased to 650 MW westward, Marathon TS, together with all of the 230 kV circuits that terminate at that station (existing: M23L, M24L, W21M and W22M, and new: M37L, M38L, W35M and W36M) will fall within the NPCC's definition of the BPS."

STAFF INTERROGATORY #22

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 4 / p.11
(2) Exhibit B / Tab 1 / Schedule 4 / p. 12 / Table 4

Preamble:

Reference 1 states that “In Northwestern Ontario, vegetation maintenance is performed on clearing cycles of six years.”

The description of line clearing in Table 4 states that “NextBridge believes this to be a sound practice to perform all vegetation maintenance on an as needed basis, rather than on a prescriptive cycle.”

Question(s):

- a) Please state the total number of square kilometres that must be cleared and maintained as part of the right of way for the project.
- b) What is the source of the statement that “in Northwestern Ontario, vegetation maintenance is performed on clearing cycles of six years”?
- c) Will NextBridge be using a six-year cycle for vegetation maintenance? If yes, please provide a more detailed explanation of the six-year cycle, including what work is carried out in each of the six years. If no, what alternative cycle or plan will NextBridge be using and why is it more appropriate?
- d) If the answer to c) is yes, what year will be the first year of the six-year cycle?
- e) If the answer to c) is yes, how does the six-year cycle correspond to the annual line clearing, brush control, condition patrol, and vegetation control activities described in Reference 2, Table 4?
- f) What year will annual vegetation management activities, such as those described in Reference 2, Table 4, be initiated?
- g) What year(s) was the ROW cleared prior to construction?

RESPONSE

- a) The total number of square kilometres that must be cleared and maintained as part of the right of way for the East-West Tie line is approximately 26.50 square kilometers.
- b) NextBridge's source is Bruce to Milton's expectation for a six-year cycle for vegetation management which is common in transmission line vegetation maintenance. A reference to this six-year cycle can be found in the Bruce to Milton interrogatories, VECC Interrogatory #5 (EB-2019-0178, Exhibit I, Tab 2, Schedule 5, Page 1), quoted below:

“Managing B2M LP's Right-of-Way vegetation maintenance program, taking into consideration the six-year vegetation cycle and the expected increase in forestry expenses during certain test years with greater work volumes, similar to the historical trend.”

- c) No, NextBridge will be using annual inspections to determine remediation requirements on an as-needed basis on the right of way versus a prescriptive 6-year cycle. As areas are identified which require vegetation management, remediation activities will be strategically planned to ensure cost-effectiveness when determining the applicable remediation approach. Remediation activities will be triggered by review of aerial inspection data, physical site visits, and stakeholder reporting. These activities can vary from line clearing through trimming and removal of required trees along the edge of the right of way in order to maintain standing and falling clearances to the energized conductor and equipment, to manual and mechanical brush control to manage vegetation growth and ensure adequate standing clearance to overhead conductors. This approach will ensure an accessible right of way corridor for maintenance and restoration activities without incurring additional costs associated with prescriptive cycle approach as it ensures only required works are undertaken, versus works on a larger, pre-determined area where many areas may not require them.
- d) The answer to part c. was no, therefore d is not applicable.
- e) The answer to part c. was no, therefore e is not applicable.
- f) NextBridge will begin annual vegetation management activities in 2022.
- g) The right of way is cleared prior to construction at different intervals. Since the clearing work is seasonal, some of the 450 kilometer line was cleared in the winter of 2019/2020 when the ground was frozen, and some will be cleared in the winter of

2020/2021. For more detail on when clearing commenced in each work front please see the following table.

Work Front	Clearing Commenced	Clearing Completed
1	September 2019	November 2020
2	January 2020	September 2020
3	March 2020	November 2020
4	September 2020	November 2020
5	March 2020	December 2020
6	January 2020	Scheduled for Completion in February 2021
7	January 2020	Scheduled for Completion in January 2021
8	January 2020	Scheduled for Completion in January 2021
9	February 2020	December 2020
10	October 2020	Scheduled for Completion in March 2021
11	September 2020	Scheduled for Completion in March 2021

STAFF INTERROGATORY #23

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 4 / Table 4

Question(s):

- a) Please describe and differentiate between the annual helicopter patrol and the detailed aerial patrol maintenance activities described in Reference 1.
- b) Will the cost of all the services described in response to a) be included in the cost of the HONI SLA?
- c) If the answer to b) is yes, did NextBridge evaluate options for contracting separately for helicopter services? Is contracting with HONI the lowest cost option for helicopter services?
- d) If the answer to b) is no, please describe what services described in response to a) will not be included in the cost of the HONI SLA and the process for selecting a service provider.

RESPONSE

- a) The annual helicopter patrol is a combination of a general and detailed aerial patrol. The detailed aerial patrol will include close inspections of all transmission line components, whereas the general inspection will look for critical and obvious issues only, such as what is referred to as danger trees, which are trees that are leaning or otherwise could come into contact with the conductors if not remediated in a short period of time. The detailed inspection will be performed on a different third of the line every year, while the general inspection will be performed on the remaining two-thirds of the line.
- b) Yes.
- c) No, NextBridge did not evaluate options for contracting the helicopter services directly. During the competitive bid process, bidders presented proposals which included the costs for helicopter services for aerial patrol maintenance activities. Given the fact that the three bidders were established maintenance services providers in the area, this would have allowed them to utilize existing helicopter services relationships for competitive prices in their bids. Additionally, by having the maintenance services provider, who is required to use helicopters also work directly with the helicopter vendor(s) is more efficient than NEET's field personnel managing those services on behalf of the maintenance services provider.
- d) Not applicable.

STAFF INTERROGATORY #24

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 5 / p. 4

Question(s):

- a) Which NextBridge representative will coordinate with the IESO for transmission planning or connection assessment purposes, if required?

RESPONSE

- a) The NextEra Energy Transmission, LLC (NEET) field personnel who will be stationed in Thunder Bay will coordinate with the IESO for transmission planning and connection assessment purposes. These NEET field personnel will also have access to NEET and its affiliates that have extensive experience in transmission planning or connection assessments.

STAFF INTERROGATORY #25

INTERROGATORY

Reference: (1) Exhibit B / Schedule 1 / Tab 7 / Attachment 1 / p. 16 / Figure 10
(2) Exhibit F / Schedule 2 / Tab 1 / p. 1
(3) Exhibit F / Schedule 4 / Tab 1 / p. 2 / Table 1

Preamble:

Reference 1 states:

As part of the 2020 update, CRA was asked to review the Operation, Maintenance, & Administration (OM&A) benchmarking for Bruce to Milton and Niagara Reinforcement rate case filings. On page 233 of Hydro One's Niagara Reinforcement Revenue Cap IR Application they included Summary costs of OM&A for forecast year 2020 added to Figure 10. Bruce to Milton, Niagara & New EWT OM&A Benchmarking. In Hydro One's Bruce to Milton Cost of Service Application, OM&A costs were included for 2014 to 2019. The Bruce to Milton OM&A costs for 2019 can be found in Figure 10.

Footnotes 14, 15 and 16 of Reference 1 state:

14 The figure for the Niagara project includes costs associated with the Managing Director's office

15 Includes "Incremental expenses" of \$800k (CAD)

16 The new EWT also includes expenses for Indigenous Participation and Compliance costs. As these are not directly comparable to the other projects, and unique to the EWT, they have been excluded from this total.

Reference 2 states that "the CRA study concludes that OM&A costs per km for the East-West Tie line remain lower than the benchmarks even under forecasting sensitivity tests."

Question(s):

- a) Please confirm that the line described as Admin. & Corporate in Reference 1 represents the same costs for the EWT as those described as Compliance & Administration in Reference 3.
- b) Why are the costs described as O&M Expenses, Admin. & Corporate, and Regulatory for the EWT in Reference 1 different from the costs described as Operations and

Maintenance, Regulatory, and Compliance & Administration in Table 1 of Reference 3?

- c) What year are the costs in the New EWT column of Reference 1 based in (e.g. 2021 dollars or 2022 dollars)?
- d) Why are the costs in Figure 10 not compared on an equivalent year basis?
- e) Please confirm that the Admin. & Corporate costs for the EWT in Reference 1 include the cost of continuing the Project Director's Office.
- f) In Reference 1, why are there no Regulatory costs included for the Niagara or Bruce-Milton projects?
- g) What are the "incremental expenses" of \$800k described in Footnote 15? Why have these been included in the Bruce-Milton costs?
- h) Please describe the "forecasting sensitivity tests" mentioned in Reference 2. Please provide quantitative results of the forecasting sensitivity tests.

RESPONSE

- a) Yes. These are the same costs.
- b) O&M expenses, Regulatory and Admin & Corporate are the same amounts between Reference 1 and Reference 3, the naming convention slightly differed between the two in an effort to standardize in the CRA report for comparability amongst projects.
- c) The costs in Reference 1 are in 2022 dollars.
- d) The costs in Figure 10 are not escalated to equivalent year basis as the impact would be immaterial. Additionally, if escalated, would cause the East-West Tie line to be more cost competitive as it would increase Niagara and Bruce-Milton costs.
- e) Yes. The Admin & Corporate costs include the cost of a Project Director's Office.
- f) The Niagara Reinforcement and Bruce-Milton projects did not specifically detail costs associated with Regulatory expenditures. It was assumed that they were included in admin and corporate costs.
- g) In the updated Bruce to Milton application, on page 104, HONI identifies \$800k of "incremental" costs. The \$800k was identified in the OM&A table but was not further specified. Since the costs were included in the OM&A table, they were included in the summary.
- h) Sensitivity analysis results can be found in Exhibit B, Tab 1, Schedule 7, Attachment 1, Page 18.

STAFF INTERROGATORY #26

INTERROGATORY

Reference: (1) Exhibit E / Tab 1 / Schedule 1 / pp. 1-4

Preamble:

Reference 1 states that “NextBridge is proposing an RCI term for a 10-year period. Under the proposed methodology, the revenue requirement for the Test Year t+1 is equal to the revenue requirement in the Test Year t, inflated by the RCI....”

Reference 1 also states that “NextBridge proposes to adopt the OEB’s calculation of the RCI “I” parameter....”

Reference 1 also states:

NextBridge proposes a productivity factor of 0%. NextBridge does not expect to recognize OM&A efficiencies over the IR Term as it is a single new asset and most of the OM&A is contractual and essentially fixed.... Notably, there are Indigenous reserve crossing permits, within OM&A that are expected to inflate annually at the City of Toronto’s annual CPI....

Additionally, NextBridge plans to continue capital investments over the IR Term beginning in the Test Year, that have not been included in the revenue requirement and will not be added to rate base during the IR Term....

Question(s):

- a) Please explain why it is not possible to recognize OM&A efficiencies over the IR Term.
- b) Which OM&A items are not contractual or essentially fixed? Of these items, can cost efficiencies be recognized in NextBridge’s view? If so, how? If not, why not?
- c) NextBridge notes that OM&A costs are contractual and essentially fixed; does this mean that some contracts can be revised? If so, which contracts?
- d) Please explain why a proposed productivity factor of 0% is appropriate in NextBridge’s view.
- e) Please explain why a proposed inflation adjustment of 100% of the annual OEB approved Inflation factor is appropriate in NextBridge’s view when other transmitters have received less than this amount.
- f) Please explain why Indigenous reserve crossing permits are expected to inflate at the City of Toronto’s annual CPI?

- g) Please provide the historical 10 year and forecast 10-year difference for the City of Toronto CPI compared to the Ontario CPI.

RESPONSE

- a) NextBridge does not expect to recognize OM&A efficiencies over the IR term as it is a single new asset. Most of the OM&A is scoped and budgeted minimally which will lead to increases as materials and labour costs increase.
- b) All OM&A is contractual but not completely fixed. On the personnel side, NextBridge has already utilized partner employees to provide efficiencies in the budgeted costs. NextBridge does not expect to recognize efficiencies in this area as the East-West Tie line is already benefitting from the structure that allows for shared resources and minimally budgeted costs for this support. For example, NextBridge only bears a fraction of the cost of an accountant in the current structure versus having to employ/pay for a full-time accountant. On the O&M side, while there will be a HONI SLA contract, the contract is activity and time based, it is not a fixed price but can vary based on the amount of support needed. NextBridge has budgeted for the expected amount of services but incremental services will need to be funded with the funding envelope of the Revenue Cap rate structure. Additionally, the contract is for a 3 year term with a potential to extend for 2 years while the IR term is 9 years and 9 months, leaving NextBridge exposed to managing cost increases for the difference in terms. While the Federal Section 28.2 permits required for First Nation Reserve crossings are fixed, most have inflation factors which increase the cost through time.
- c) To ensure certainty for the IR Term, NextBridge negotiated contracts with longer terms. For example, the Federal Section 28.2 permits required for First Nation Reserve crossings have durations of 20 years. However, some of the contracts will require renewal during the IR period and the most financially material one is the maintenance service contract with HONI. The maintenance service contract with HONI and Supercom is for three years, with an option to renew for an additional two years. While NextBridge does have an agreement with NEET to supply labour, increases associated increasing labour costs will impact NextBridge since charges are based on actual labour costs.
- d) NextBridge's proposed productivity factor of 0% is appropriate because of the length of the IR term and NextBridge's challenge to manage costs over the extended term of 9 year and 9 month term within the funding allowed under the Revenue Cap framework.
- e) Other transmitters have had no capital expenditures during the IR Term, whereas East-West Tie line has planned capital expenditures that will increase reliability and decrease long term maintenance of the project. Additionally, NextBridge has offered

a longer IR Term which could expose NextBridge to higher inflation

- f) Some of the Indigenous Reserve crossing permits will inflate at the City of Toronto's CPI. This is based on the executed contractual agreement with the First Nation and the Federal government. For clarity, NextBridge makes payments to the Federal government in Toronto which is held in trust for the First Nation.
- g) Please see tables below for historical comparison. Forecast data was not available for comparison.

CPI Summary Table (Statistics Canada. Table 18-10-0005-01 Consumer Price Index, annual average, not seasonally adjusted)			
Year	Ontario	Toronto	Difference
2010	2.46%	2.55%	0.09%
2011	3.09%	3.00%	-0.09%
2012	1.42%	1.50%	0.08%
2013	0.99%	1.23%	0.25%
2014	2.36%	2.51%	0.16%
2015	1.19%	1.50%	0.31%
2016	1.81%	2.10%	0.30%
2017	1.70%	2.06%	0.36%
2018	2.35%	2.54%	0.19%
2019	1.85%	2.04%	0.19%

STAFF INTERROGATORY #27

INTERROGATORY

Reference: (1) Exhibit E / Tab 1 / Schedule 1 / p.3
(2) Exhibit F / Tab 2 / Schedule 1 / p.1

Preamble:

Reference 1 states that “NextBridge proposes a productivity factor of 0%. NextBridge does not expect to recognize OM&A efficiencies over the IR Term as it is a single new asset and most of the OM&A is contractual and essentially fixed.”

The OM&A cost that NextBridge is seeking annual cost recovery for is \$4.94 million versus \$3.005 million annually used for comparative analysis. With all costs in, OEB staff have calculated the average OM&A cost as \$10.98k per km (\$4.94 million divided by 450 km) instead of \$6.68k per km (\$3.005 million divided by 450 km) used for comparative analysis.

Question(s):

- a) Please confirm if you agree with the OEB staff calculation of annual OM&A costs of \$10.98k per km.
- b) Please provide a detailed analysis of the reasonableness of NextBridge’s \$10.98k per km OM&A costs versus the comparator group.
- c) Are there any reductions possible in NextBridge’s annual OM&A cost that do not impact the performance and reliability of the East-West Tie line? What steps has NextBridge taken to identify such possible reductions?

RESPONSE

- a) If all OM&A costs are included in the calculation, NextBridge agrees that test year OM&A of \$4.94 million equates to \$10.98k per km (for 450 km). However, the OM&A used in the benchmark study of \$3.005 million is what yields a comparable result to the comparator groups. The benchmark study normalizes the data for NextBridge’s unique Indigenous Participation and Compliance costs which provides a more meaningful comparison on the real cost of operating and maintaining a line. Arrangements with Indigenous communities are unique and can impact costs in various ways. For example, Bruce to Milton recovered \$7.7 million in formation costs due to the complex commercial arrangement which required significant effort on the part of SON FC and Hydro One Networks to structure (OEB-2015-0026).

- b) NextBridge does not consider the \$10.98k comparable to the comparator groups as it includes unique Indigenous Participation and Compliance costs that the comparator groups do not have in their revenue requirement, leading to incomparable data among projects.
- c) NextBridge will not have cost reductions in OM&A over the IR term. NextBridge expects to experience increasing O&M over the IR term, therefore any efficiencies experienced would be offset by these increases.

STAFF INTERROGATORY #28

INTERROGATORY

Reference: (1) Exhibit F / Tab 3 / Schedule 1 / Attachment 1

Preamble:

NextBridge's operations, maintenance, and common administrative and corporate services will be provided through agreements with HONI/Supercom and NEET.

Question(s):

- a) How is NextBridge ensuring that the OM&A services provided to it are appropriate and cost effective?
- b) Sections 2.3.2.1 and 2.3.2.2 of the Affiliate Relationship Code (ARC) state, respectively:

If a utility intends to enter into an Affiliate Contract for the receipt of a service, product, resource, or use of asset that it currently provides to itself, the utility shall first undertake a business case analysis, unless the Affiliate Contract would have an annual value of less than \$100,000 or 0.1% of the utility's utility revenue, whichever is greater.

-and-

For the purposes of section 2.3.2.1, the business case analysis shall contain (a) description of relevant utility needs on a per-service basis, (b) identification of the options available internally or externally from an affiliate or third party, (c) economic evaluation of all available options including the utility's current fully-allocated cost (which may include a return on the utility's invested capital equal to the approved weighted average cost of capital), (d) explanation of the selection criteria (including any non-price factors to be taken into account), (e) estimate of any benefits to the utility's Ontario ratepayers from outsourcing, and (f) justification of why any separate items were bundled together when considered for outsourcing.

Please provide a copy of the business case analyses developed by NextBridge that support the HONI/Supercom and NEET agreements.

- c) Sections 2.3.3.1 and 2.3.3.2 of the ARC state, respectively:

Where a reasonably competitive market exists for a service, product, resource or use of asset, a utility shall pay no more than the market price when acquiring that service, product, resource or use of asset from an affiliate.

-and-

A fair and open competitive bidding process shall be used to establish the market price before a utility enters into or renews an Affiliate Contract under which the utility is acquiring a service, product, resource or use of asset from an affiliate.

Please describe how the activities undertaken by NextBridge when establishing its agreements with HONI/Supercom and NEET comply with the above referenced sections of the ARC. If NextBridge believes that Sections 2.3.3.1 and 2.3.3.2 of the ARC do not apply to their circumstance, please discuss/provide the assessment(s) undertaken to arrive at this determination.

d) Section 2.3.4.1 of the ARC states:

Where it can be established that a reasonably competitive market does not exist for a service, product, resource or use of asset that a utility acquires from an affiliate, the utility shall pay no more than the affiliate's fully-allocated cost to provide that service, product, resource or use of asset. The fully-allocated cost may include a return on the affiliate's invested capital. The return on invested capital shall be no higher than the utility's approved weighted average cost of capital.

If NextBridge believes Section 2.3.4.1 applies to its circumstances, please discuss/provide the assessment(s) undertaken by NextBridge to establish that a competitive market for the services contemplated in the HONI/Supercom and NEET agreements does not exist.

e) Please detail how the HONI/Supercom agreement integrates Hydro One Networks' productivity improvements into NextBridge's maintenance operations, including how efficiencies gained by Hydro One Networks are passed through to NextBridge.

RESPONSE

a) NextBridge conducted a competitive bid to select HONI/Supercom as the maintenance services provider, which ensured the cost-effectiveness of the services HONI and its partner Supercom will provide in the context of the criteria used to evaluate the bids. Under the NEET agreement, NextBridge will be using the same

pricing that it currently uses as part of its partnership agreements for the construction of the East-West Tie line.

Additionally, NextBridge is ensuring that the OM&A services provided to it are appropriate and cost effective by utilizing and all the same cost-effective measures that were used during the construction phase. As outlined in Appendix A of the Q2 2019 quarterly report filed with the OEB on November 8, 2019, NextBridge has extensive cost management procedures. To date, NextBridge has used its procurement policy (see Exhibit C, Tab 2, Schedule 4, Attachment 1 of the rate case application) to procure the maintenance services provider with competitive pricing (the HONI SLA). NextBridge will also draw upon the extensive expertise and experience of NEET and its affiliates whose experience in procurement of OM&A services will ensure that costs are appropriate. NEET and its affiliates also have a large network of established vendor relationships that will allow for favourable pricing of goods and services.

- b) Affiliate Relationship Code (ARC) is not applicable to NextBridge, because no entity will have more than 50 percent of the voting rights of the entity. See Definition of Affiliate in the Ontario Energy Board Act, 1998. As explained in the Application at Exhibit A Tab 3 Schedule 1 Pages 3 and 4 of 22, NextBridge will be owned 40% by NextEra, 20% by Enbridge, 20% by OMERS, and 20% by Bamkushwada, LP, a corporation made up of six First Nations.

Although the ARC does not apply to NextBridge, and, therefore, a formal business case analysis was not formally prepared, NextBridge relied on the extensive experience of NEET and its affiliates to determine the OM&A services needed to safety, effectively, and reliably maintain and operate the East-West Tie line. The business case for these services is found in the Application at Exhibit B, Tab 1 Schedule 4, for example.

- c) Please refer to part b. of this response on why the ARC is inapplicable. Notwithstanding, NextBridge ran a competitive procurement process (following its procurement policy set forth in Exhibit C, Tab 2, Schedule, Attachment 1 of the Application) to procure operations and maintenance services which resulted in awarding the work to HONI/Supercom. Details of this procurement can also be found at Staff #16.
- d) Please refer to part b. of this response on why the ARC is inapplicable. As already stated, NextBridge used a market-based competitive bidding process to procure the maintenance services to be provided by HONI/Supercom.

- e) NextBridge is aware that HONI filed a document which listed productivity improvements as part of EB-2016-0160, Exhibit B2, Tab 1, Schedule 1. While NextBridge is contracting directly with a partnership between HONI and Supercom to supply maintenance services, it is not aware of the details of how HONI will integrate these productivity improvements and efficiencies into NextBridge's maintenance operations.

STAFF INTERROGATORY #29

INTERROGATORY

Reference: (1) Exhibit F / Tab 4 / Schedule 2 / p. 1

Preamble:

Of the \$4.94 million of OM&A costs, \$1.27 million are indicated as Operations and Maintenance expenses.

Reference 1 states:

These OM&A expenses relate to ensuring the safety and reliability of the East-West Tie line. Approximately half of the annual OM&A expenses will be used for routine and cyclical maintenance services and remediation of findings as a result of cyclical maintenance. The maintenance services will be provided by two field personnel from NEET and HONI under the HONI SLA.

Questions:

- a) Please provide, in table form, a breakdown of the \$1.27 million operations and maintenance expenses including:
- a. Expense for NEET Agreement;
 - b. Expense for HONI SLA;
 - c. Expense for maintenance services not included in the HONI SLA, including services identified in response to Staff-15a, and Staff-23d.
 - d. Expense for maintenance services contract described in response to Staff-35 if separate from contracts identified above;
 - e. Other expenses (please describe).

RESPONSE

a)

Breakdown of Operations and Maintenance Expenses	\$000's
a. Expense for NEET Agreement	268
b. Expense for HONI SLA	400
c. Expense for maintenance services not included in the HONI SLA, including services identified in response to Staff-15a, and Staff-23d	312
d. Expense for maintenance services contract described in response to Staff-35 if separate from contracts identified above	0

e. Other expenses including ICCP link, line monitoring and dispatch, vehicles and UTVs, office rent and expenses, equipment, tools and communications	295
Total	1,275

STAFF INTERROGATORY #30

INTERROGATORY

Reference: (1) Exhibit F / Tab 4 / Schedule 2 / p. 4

Preamble:

Of the \$4.94 million of OM&A costs, \$1.67 million are indicated as Compliance and Administration expenses.

Reference 1 states:

NextBridge has a Project Director, who is employed by NEET...
Included in these costs is only 75% of the expected cost for the Project Director's labour costs. NextBridge will not seek recovery of the remaining 25% as an efficiency mechanism, thus providing direct efficiency savings to ratepayers.

Question(s):

- a) Please breakdown the \$1.67 million Compliance and Administration expenses into:
 - i) Project Director's Office
 - ii) Property Owner Relations
 - iii) Non-Indigenous Stakeholder Relations
 - iv) Corporate Services
 - v) Insurance expenses.
- b) Could you please quantify the cost savings associated with not seeking recovery of 25% of the Project Director's labour costs?
- c) Please explain the rationale that was used to determine the 75% recovery of the Project Director's labour costs.
- d) Please confirm that this plan to recover 75% of the Project Director's labour costs meets the requirements of the Affiliate Relationship Code.

RESPONSE

- a) Compliance and Administration of \$1.67 million is broken down as follows:
 - i) Project Director's Office: \$627,000
 - ii) Property Owner Relations: \$169,000
 - iii) Non-Indigenous Stakeholder Relations: \$254,000
 - iv) Corporate Services: \$558,000
 - v) Insurance expenses: \$62,000

- b) The cost savings of 25% of the Project Director's labour, which includes the Project Director and the Project Director's analyst, is \$141,000 per year. This includes applicable labour overheads such as benefits, payroll tax, and employee incentive.
- c) The rationale for only seeking recovery of 75% of the Project Director's labour is to account for non-productive time. Non-productive time will include vacation, holiday, sick, training or other non-productive time so NextBridge has proposed absorbing this expense.
- d) Please refer to Staff #28 (b) on why the ARC is inapplicable.

STAFF INTERROGATORY #31

INTERROGATORY

Reference: (1) Exhibit F / Tab 4 / Schedule 2 / p. 7

Preamble:

Of the \$4.94 million of OM&A costs, \$0.89 million are described as Indigenous Participation expenses.

Reference 1 states:

Indigenous participation costs include annual costs from negotiated project agreements related to the East-West Tie line to support Indigenous participation and engagement that mitigate impacts on Indigenous rights and interests. Also included are management and labour costs to ensure that the provincial commitments made during the negotiation of various agreements are carried out through the operations phase of the project.

Question(s):

- a) Please provide a breakdown of the \$0.89 million Indigenous Participation expenses.
- b) These costs appear to be materially higher than the indigenous participation cost estimates provided in the LTC application, please explain the reason(s) for the increase.
- c) How did NextBridge determine these costs to be reasonable?
- d) The management and labour costs described in Reference 1 are associated with which staff? Please provide a detailed explanation of what these costs entail.

RESPONSE

- a) NextBridge negotiated agreements with Indigenous communities which were intended to support Indigenous participation and engagement that mitigate impacts on Indigenous rights and interests. The \$0.89 million in Indigenous Participation expenses are comprised entirely of the annual payments related to these agreements; therefore, there is no breakdown to be provided. The terms of the agreements are for 20 or 50 years. The reference to management and labour costs was made in error. NextBridge confirms that, other than the annual payments from the negotiated East-West Tie line project agreements, there are no other costs included within this category.

- b) In NextBridge's response to Staff #54 within the EB-2017-0182 LTC application, NextBridge forecasted that its OM&A costs would include \$1 million in "Indigenous costs (land, participation)" which NextBridge explained was comprised of costs based on already negotiated permits to cross Reserves. The costs forecasted in the LTC application were based on best estimates at that time. In light of the fact that there had not been any transmission infrastructure developed in the region in recent decades, it was not possible to provide a more accurate prediction of Indigenous costs until negotiations relating to East-West Tie line project agreements had concluded.

Additionally, unforeseen events that occurred after the LTC estimate was provided necessitated negotiating additional agreements which increased the original cost estimate. One of the impacted Indigenous groups pursued, and is in the process of settling, a land claim with the Federal Government. The land claim led to an increase in the size of the Indigenous group's Reserve land, resulting in the requirement to negotiate an amended agreement in respect of the increased land. Furthermore, as a result of the guidance provided by the Provincial Government in relation to the sufficiency of the Duty to Consult, NextBridge was required to negotiate additional mitigation agreements to discharge the Crown's obligation.

- c) These participation agreements were negotiated in the spirit of reconciliation in order to secure land rights, mitigate impacts to asserted and/or proven Indigenous rights and interests, address provincial Crown conditions of approval related to East-West Tie line permitting, and reduce overall project risks and costs. The agreements ensure prudence for the ratepayer while reducing risk by allowing for the construction of the East-West Tie line with the free, prior, and informed consent of Indigenous groups.

NextBridge took qualitative measures to determine the prudence of the Indigenous Participation expenses by reviewing the investment of community relationships for the East-West Tie line, partnership experience in the area, and evaluating routing.

As noted in this Application at Exhibit C, Tab 2, Schedule 4, there has not been transmission infrastructure built requiring a Federal Section 28.2 permit in Ontario in recent years. NextBridge used the expertise of partnership organization Enbridge having experience as a right of way owner and operator in the region in negotiating Federal Section 28.2 permits for linear infrastructure. Enbridge's expertise was factored into the budget creation for these costs.

Additionally, NextBridge invested significant time and effort in consultations and

negotiations with the Indigenous communities in which East-West Tie line will operate. Project agreements were required to understand and appreciate the historic, cultural, traditional uses, and other unique factors related to the Indigenous world view that needed to be considered, respected, and reflected ultimately in the negotiated agreements.

Finally, NextBridge also considered the potential costs of avoiding the crossing of Indigenous Reserve lands and determined that the costs associated with re-routes were higher and more environmentally impactful than the costs associated with securing the Federal Section 28.2 permits. It is important to note that without these agreements, the East-West Tie line could not have been built with the free, prior, and informed consent of the Indigenous communities engaged.

- d) The reference to management and labour costs was made in error. Please see response to part a. above.

STAFF INTERROGATORY #32

INTERROGATORY

Reference: (1) Exhibit F / Tab 4 / Schedule 2 / p. 7

Preamble:

Of the \$4.94 million of OM&A costs, \$0.44 million are described as Indigenous Compliance expenses.

Reference 1 states:

This cost category includes consultation and engagement with, and continued support to, Indigenous communities in the operations phase of the project, including participation in ongoing environmental mitigation strategies (i.e., conditions in the caribou species at risk permit), community support, Indigenous participation in post construction monitoring, management, and labour costs and capacity funding to enable ongoing consultation with NextBridge in order to meet the duty to consult obligations of the Crown.

Question(s):

- a) Please provide a breakdown of the \$0.44 million Indigenous Compliance expenses.
- b) How do the Indigenous Compliance expenses differ from Indigenous Participation expenses?
- c) Were these costs previously included in NextBridge's OM&A estimates provided in the LTC application? If not, why not? If yes, in what cost category were these costs included and how do the current costs compare to those estimated in the LTC application.
- d) How did NextBridge determine these costs to be reasonable?
- e) The management and labour costs described in Reference 1 are associated with which staff? Please provide a detailed explanation of what these costs entail.

RESPONSE

a) The \$0.44 million in Indigenous Compliance costs is comprised of the following:

Item	Annual Cost	Notes
Indigenous Cultural Mitigation Payments	\$208,829	Cultural mitigation payments related to MECP Species at Risk caribou permit conditions.
Community Support	\$32,000	Community support to meet Duty to Consult obligations.
NextBridge Labour	\$78,000	10 hours per week for ongoing Indigenous engagement by existing East-West Tie line partner personnel based in the region.
NextBridge Travel / Expenses	\$10,000	Annual expenses for travel by existing East-West Tie line partner personnel based in the region to remote northern communities.
Aboriginal Community Advisory Board (ACAB)	\$54,000	Fulfilment of EA condition requiring establishment and ongoing meetings of an ACAB as a forum for ongoing engagement during the operational life of the asset (1 meeting annually, with \$3,000 in capacity for each of the 18 Indigenous communities).
Post-Construction Monitoring	\$59,500	Fulfilment of EA condition requiring Indigenous involvement in post-construction environmental monitoring (\$8,500 per year for each of the 7 Indigenous communities involved in construction monitoring for the first two years, reduced by 50% in year 3).
Total	\$438,329	

b) Indigenous Compliance expenses are required to meet the ongoing regulatory and permitting requirements set by the Crown to fulfill the Duty to Consult and any commitments made in East-West Tie line project agreements with Indigenous communities throughout the operational phase of the asset. They include items such as NextBridge labour.

Indigenous Participation expenses are specifically required to cover East-West Tie line project agreement payments negotiated with Indigenous communities to either mitigate impacts on rights, secure land tenure or solidify support for the East-West Tie line that were required as part of the delegated Duty to Consult requirements of the Crown. These costs refer only to costs provided directly to communities.

c) Yes, some of these costs were included in NextBridge's response to Staff #54 as part of the EB-2017-0182 LTC application. NextBridge forecasted that its OM&A costs would include \$1 million in "Indigenous costs (land, participation)" which NextBridge explained was comprised of costs based on already negotiated permits to cross Reserves. As explained in NextBridge's response to Staff #31 in this Application, the

costs forecasted in the LTC application were based on best estimates at that time. The costs provided in this application are now finalized given the execution of agreements with communities, Crown permits and conditions and Species at Risk Permit mitigation, and the direction of the Federal government.

Therefore, since the LTC proceeding, NextBridge has added the following costs to this category as listed above in a):

- Indigenous Cultural Mitigation Payments: The requirements for caribou mitigation were unknown at the time of the LTC proceeding since the Species at Risk permit had not yet been issued.
 - Ongoing engagement costs: The requirements to meet additional Amended Environmental Assessment conditions of approval related to ongoing engagement for the Aboriginal Community Advisory Board (ACAB), ongoing environmental monitoring, as well as the commitments made in the various East-West Tie line project agreements signed with Indigenous communities. Furthermore, after conducting a review of the conditions and commitments, NextBridge is now able to accurately forecast personnel time requirements.
- d) NextBridge has been consulting with Indigenous communities on the East-West Tie line for over 7 years and has developed a deep understanding of the costs required to adequately consult and engage on the project. Enbridge also has extensive experience with consultation and engagement with Indigenous communities in Ontario and Enbridge's expertise was also considered in building a reasonable budget.

NextBridge carefully reviewed the Crown conditions, commitments made in East-West Tie line project agreements and any other engagement requirements to help develop the budget. In order to ensure value, NextBridge will be utilizing existing East-West Tie line partner personnel already located in the region to manage operational engagement. This approach will reduce travel costs, leverage existing relationships and existing knowledge of East-West Tie line project and utilize the unique skillset required to effectively engage with Indigenous communities.

- e) Please refer to the \$78,000 in labour and management costs captured in the table above in a) as "NextBridge Labour". As there are no employees of NextBridge, the activities will be performed on behalf of NextBridge under the NEET service level agreement by East-West Tie line partner personnel within the region. The activities to be performed include managing ongoing Crown consultation requirements, project conditions, implementation and ongoing management of East-West Tie line project agreements, and ongoing efforts to maintain and build on strong relationships with all 18 Indigenous communities engaged on the project. This work is estimated to take approximately 10 hours per week of project partner personnel time.

STAFF INTERROGATORY #33

INTERROGATORY

Reference: (1) Exhibit F / Tab 4 / Schedule 2 / p. 8-9

Preamble:

Of the \$4.94 million of OM&A costs, \$0.59 million are Land Rights Payments.

Question(s):

- a) How did NextBridge determine these costs to be reasonable?
- b) Please provide any analysis prepared by or for NextBridge to determine the appropriate quantum including, but not limited to, any analysis of land rights payments made to other First Nations.

RESPONSE

- a) NextBridge took qualitative measures to determine the prudence of the Land Rights payments by reviewing the investment of community relationships for the East-West Tie line, partnership experience in the area, and evaluating routing.

As discussed in this Application, Exhibit C, Tab 2, Schedule 4, there has not been a transmission line Federal Section 28.2 permit in Ontario in recent years to provide NextBridge with a direct comparison. NextBridge used the expertise of its partner organization Enbridge which has extensive experience as a right of way owner and operator in the region in negotiating Federal Section 28.2 permits for linear infrastructure. Enbridge's expertise was factored into the budget creation for these costs.

Additionally, NextBridge invested significant time and effort into consultations and negotiations with the Indigenous communities in which East-West Tie line project agreements were required to understand and appreciate the historic, cultural, traditional uses and other unique factors related to the Indigenous world view that needed to be considered, respected and reflected ultimately in the negotiated agreements.

Finally, NextBridge also considered the potential costs of avoiding the crossing of Indigenous Reserve lands and determined that the costs associated with re-routes were higher and more environmentally impactful than the costs associated with securing the Federal Section 28.2 permits. It is important to note that without these

agreements, the East-West Tie line could not have been built with the free, prior, and informed consent of the Indigenous communities engaged.

b) Please see the analysis detailed in the response to part a.

STAFF INTERROGATORY #34

INTERROGATORY

Reference: (1) Exhibit A / Tab 3 / Schedule 1 / p. 12 / Table 3
(2) Exhibit B / Tab 1 / Schedule 6 / pp. 1-2

Preamble:

NextBridge's proposed overall capital expenditure plan for 2022 to 2031 is \$4.28 million as shown in Table 3. NextBridge states it will continue to complete an annual capital investment planning process to continually refine a plan that appropriately reflects operational needs, while minimizing rate impacts by not requesting these annual capital expenditures be added to rate base over the IR Term.

NextBridge's proposal to mitigate the potential for overearning is to not include in the revenue requirement during the currently requested IR Term and not record in a deferral account:

- i. any additional OM&A costs above the rates set in this Application; nor
- ii. any increased financing costs as a result of maturing and reissuing debt throughout the IR Term.

During the IR Term, the capital expenditures will be depreciated, and that depreciation expense is not being sought for recovery in the current application.

Next Bridge also states:

This provides a benefit to ratepayers since the amount requested in the next rebasing will include a lower net plant balance for these capital expenditures due to depreciation, which will reduce the overall amount requested in the next rebasing after the IR Term expires.

Question(s):

- a) Please explain how NextBridge determined what capital expenditures were necessary and satisfied itself that these costs were an appropriate level for a nine year and nine-month IRM term.
- b) Please clarify if the Capital Expenditures of \$4.28 million less depreciation during the IR term will be included for rebasing in 2032. If yes, please provided the net capital expenditure to be included in 2032.
- c) Please detail anticipated OM&A costs above the rates set in the application.
- d) Please detail OM&A efficiencies during the term of the application.

RESPONSE

- a) NextBridge's capital expenditures planning process ultimately forms part of its overall asset management process, which is aimed at identifying and scoping the optimal timing of capital investments and asset maintenance throughout the life cycle of assets. NextBridge has used the extensive experience of affiliates of NEET to determine when it would be necessary and customary to incur a capital investment in the life cycle of the East-West Tie line.
- b) Capital expenditures, net of accumulated depreciation, incurred over the IR term would be added to rate base at the expected rebasing in 2032. The expected gross book value from 2023 to 2031 is \$4.05 million. \$4.28 million in the applications capital expenditure table includes test year spend in 2022, which is included in the test year and part of the test year closing rate base.

The expected net book value in 2031 is shown below, based upon estimated depreciation expense. The capital expenditures that cost \$4.05 million will be included in rate base at a discount of \$0.28 million for a total of \$3.77 million. (Note: totals may not foot due to rounding)

	2023	2024	2025	2026	2027	2028	2029	2030	2031
Gross Book Value	0.59	1.33	1.97	2.25	2.45	2.85	3.65	3.95	4.05
Accumulated Depreciation	0.01	0.02	0.05	0.07	0.10	0.14	0.18	0.23	0.28
Net Book Value	0.58	1.30	1.92	2.17	2.34	2.71	3.47	3.72	3.77

- c) There are no additional known OM&A costs above the test year OM&A used to set rates in the Application.
- d) NextBridge expects that OM&A costs will increase over the IR term of 9 years and 9 months, and will work to control the increases without seeking recovery of the increased OM&A. For example, OM&A costs will likely increase due to the annual inflation mechanism included in the Federal Section 28.2 permits. Therefore, any OM&A efficiencies achieved during the IR term will not reduce OM&A costs below the test year OM&A costs.

STAFF INTERROGATORY #35

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 6 / Table 1
(2) Exhibit B / Tab 1 / Schedule 6 / p. 5

Preamble:

Reference 2 states:

NextBridge expects its two dedicated NextBridge field personnel to require an office where they will conduct day-to-day business, which will also include a small indoor storage area/shop for the storage of UAVs, UTVs and smaller spare equipment. NextBridge expects to purchase an office and associated furniture and office equipment by 2025 in order to reduce, and in some cases eliminate, rent expenses over the course of the life of the East-West Tie line.

Question(s):

- a) What office and storage facilities will the two field personnel use prior to NextBridge purchasing an office?
- b) What amount of annual rent has NextBridge budgeted for the office and storage facilities described in response to a)? For which years?
- c) Is the rent expense for the office and storage facilities described in b) included in the General Plant – Office and Vehicles row of Table 1? If no, please indicate where this expense is included in the application.
- d) What amount for purchasing an office is included in the General Plant – Office and Vehicles row of Table 1? In what year(s)?
- e) What will be the annual cost for operating and maintaining the office that NextBridge expects to purchase? Please indicate where these expenses are included in the application.

RESPONSE

- a) The two NEET field personnel will be working remotely in Thunder Bay and in surrounding municipalities until an office is established. See also NextBridge's response to Staff 13-g.
- b) The estimated cost for renting an office and adjacent small storage space is \$3,000/month. NextBridge plans to lease this space until an office is purchased. Initially NextBridge will be using an existing Hydro One storage yard the cost of which is included in the competitively procured maintenance services contract (see also

Staff #36). NextBridge will begin renting the office space in 2022 and the cost will be included for the length of the IR Term.

- c) No, the rent expense for the office and storage facilities described in part b above is not included in the General Plant – Office and Vehicles row of Tab 1. That table refers to Capital Expenditures over the IR term. The office lease is an annual expense in OM&A, as part of the \$1.27 million in Exhibit F, Tab 4, Schedule 1, Page 2. The cost of the storage yard is included in the maintenance services contract (see also Staff #36).
- d) The amount for purchasing an office is included in the General Plant – Office and Vehicles row of Table 1. NextBridge estimates the cost of purchasing an office is approximately \$100,000 and plans to buy the office in 2024.
- e) The annual cost for operating and maintaining the office that NextBridge expects to purchase are estimated as follows;
 - Utilities (electric, water, sewer) - \$3,600 per year
 - Miscellaneous (janitorial, office supplies, security) - \$2,400 per year

These expenses are not included in the Application in the test year OM&A.

STAFF INTERROGATORY #36

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 6 / Table 1
(2) Exhibit B / Tab 1 / Schedule 6 / p. 5

Preamble:

Reference 2 states:

The use of an initial storage yard will be through the maintenance services contract using existing storage facilities which will have been competitively procured. Once that contract has lapsed, NextBridge is expecting to build and operate its own storage yard in an area determined to be the most convenient along the ROW based on areas where potential environmental impacts may become known. This secure location will allow for 24-hour storage and access of spare towers and equipment, and will be conveniently located in order reduce to [sic] maintenance and transportation time and costs. This storage yard is expected to be purchased and placed into service by 2025 and reduce overall costs of maintenance services in the long-term past 2025.

Question(s):

- a) Please clarify the maintenance services contract, existing storage facilities and competitive procurement that are being referenced in Reference 2.
- b) In what year will this maintenance services contract expire?
- c) In what year will NextBridge build its own storage yard?
- d) Will the storage yard that NextBridge expects to build be located on the same site as the office that NextBridge expects to purchase by 2025?
- e) What will be the annual cost for operating and maintaining the storage yard that NextBridge expects to build? Please indicate where these expenses are included in the application.
- f) What will be the net change in annual operations and maintenance costs once the maintenance services contract lapses, and NextBridge builds its own storage yard?

RESPONSE

- a) As the successful bidder in the competitive procurement for maintenance services, a partnership between HONI and Supercom has been selected as NextBridge's maintenance services provider. They have existing locations for storage of spare material used for the existing East-West Tie line and numerous other assets in close proximity to the line. The two most appropriate storage sites for the larger spare material are located in Sault Ste. Marie and Thunder Bay. Other storage locations for

the smaller components are located in Nipigon, Marathon, and Geraldton. The use of these yards is included as part of the Maintenance services scope of work (Attachment to Staff #16), "Maintenance services will include identification and storage of spare material." This will allow establishment of the storage yard at a location most efficient for use by the maintenance services provider.

- b) The maintenance contract has a three-year term and will conclude three years from the March 31, 2022 in-service date in 2025. There is an option to extend the contract for two additional years.
- c) Currently, NextBridge plans to build a storage facility in 2025. However, this may be deferred if the maintenance services contract is extended.
- d) No, the storage facility mentioned next to the office is for miscellaneous items, tools, and UTVs. At this time, the storage yard location has not been identified, as HONI/Supercom will be providing the storage yard for major material during at least the first three years of operation.
- e) Operating and maintenance expenses for the storage yard, if built, are expected to be minimal. Once built, the fenced yard will include an outdoor laydown area for the spare towers and a small storage building for some of the smaller components. The expenses will include a security system, electricity costs, some minor vegetation control and taxes. Other than taxes (which cannot be estimated until the location of the yard is chosen), the costs would be in the range of \$300/month.
- f) Annual operating costs are not expected to change.

STAFF INTERROGATORY #37

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 6 / Table 1
(2) Exhibit B / Tab 1 / Schedule 6 / p. 6-7
(3) Exhibit F / Tab 4 / Schedule 2 / p. 2

Preamble:

Reference 2 states that “installation of bird deterrent devices is a highly effective and inexpensive solution to potential roosting bird excrement problems. Bird deterrents are routinely recommended to minimize faults to transmission systems.”

Reference 3 includes “potential future reliability projects (i.e., camera and bird deterrent installations)” under the list of examples of services and items which will be arranged by or carried out by NextBridge field personnel.

Question(s):

- a) Please describe a bird deterrent device, and where and how one is installed.
- b) Is the use of bird deterrents common practice?
- c) Please provide a source for the recommendation included in Reference 2 and comment on its applicability to northern Ontario.
- d) Please provide a detailed breakdown of the costs in the Reliability-Bird Deterrents, ROW Cameras line of Reference 1, Table 1, including the specific number of devices to be installed each year.
- e) Do any of the device installations described in Table 1 necessitate planned outages? If yes, please describe the number, timing and duration of required outages.
- f) Is the use of ROW cameras common practice?
- g) Which towers will NextBridge place the ROW cameras on? How will these be selected?
- h) What is the purpose of the ROW cameras? What are they expected to capture? Are they able to capture useful images at night?
- i) Which personnel will be responsible for monitoring ROW cameras? In which location(s)?
- j) Are the potential future reliability projects described in Reference 3, the same ones that are included in the capital investment plan in Reference 1? If yes, why are they described as ‘potential’ projects?
- k) What is the potential for ice accretion and salt spray to impact reliability? What mitigation and/or monitoring is planned to address these risks?

RESPONSE

- a) Bird deterrents are fixtures which can be placed on transmission line structures to prevent birds from perching and nesting, and to provide protection from incidental avian contact with overhead lines.

The goal of the utilization of bird deterrents is to help reduce customer outages, resulting revenue losses, and regulatory enforcement action. They can be generally installed at specific locations on the structure where birds would normally roost. Large roosting birds often excrete feces when they take off from their perch, and this excrement can create a streamer that could come into direct contact with the transmission line, insulator, and structure. This event can lead to a line-to-ground fault and subsequent outage. In addition, excrement can build up over time on the structures, and more importantly the insulators and hardware, which can lead to further faults on the transmission line. Leaving the excrement buildup on the structure components is not an option because it increases the chances of re-occurring line faults and potentially risking outages and line downtime.

Bird deterrents can also help prevent birds from building nests. During the nest building process, birds bringing branches/sticks to the nest have been known to directly contact the energized transmission line and nest location creating a line-to-ground fault.

If the line is in-service, bird deterrents can be installed using a hot stick, but are typically installed by helicopter for efficiency. They can also be installed manually if line is deenergized. There are many different types of deterrents available, and the type of deterrent and placement are dependant on the types of birds in the area, the specific location they are to be installed on the structures, and other observed conditions. A common type of bird deterrent involves welded-rod bird guards and cones. Example photos of bird deterrents can be found attached to this response.

- b) Yes, the use of bird deterrents is common practice. NEET and their affiliates across North America use bird deterrents on transmission structures where signs of bird roosting exist to remove the risk of outages caused by bird streamers and nests. They can also be installed pre-emptively in locations where large species at risk live, or along migration paths to help ensure roosting is deterred.
- c) The APLIC (Avian Power Line Interaction Committee) document "Suggested Practices for Avian Protection on Power Lines: The State of the Art 2006" provides recommendations and guidance on the installation of structure deterrents in certain circumstances to prevent bird-related outages. These applications are relevant in northern Ontario as large raptors, such as Bald Eagle (Species at Risk-Special Concern), and other woodland raptors and osprey whose nests are considered

Significant Wildlife habitat, have been documented nesting in adjacent habitat and powerline structures. Since the East-West Tie line transects major waterbodies and rivers, other species, such as herons and other water birds, have the potential to roost in these structures and cause electrical outages and damage to the infrastructure. Additionally, NextBridge is obligated to install perch discouragers in areas of concern as per the commitments in the approved Amended Environmental Assessment and Construction Environment Protection Plan to mitigate negative effects to avian species.

- d) As part of NextBridge's regular annual inspection program on the East-West Tie line, the maintenance inspectors will be monitoring for signs of bird excrement buildup on the structure arms, insulators, and problematic nesting material. Until these assessments are performed, it is difficult to forecast exactly where future bird deterrents will be needed. However, NextBridge has proactively assumed there will be some future need along the 450km line that will require this mitigation and included an annual capital spend of \$30k for installing bird deterrent devices at approximately six structures.

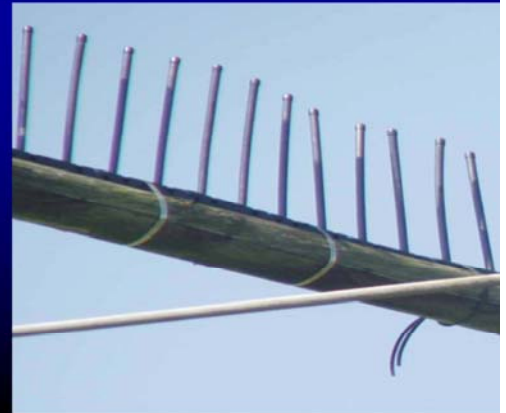
Right-of-way cameras are planned to be installed at river and major highway crossings to increase visibility of tower and conductor status at critical locations. NextBridge plans to install two cameras on each of the targeted structures listed in Response g) below, facing opposing directions. The installation cost is expected to be approximately \$100k/structure, and two to six cameras are planned to be installed per year.

- e) Depending on the location of the risk, outages are not expected to be needed to install bird deterrents. Outages will not be required to install the right-of-way cameras proposed.
- f) NEET and its affiliates (e.g., Lone Star Transmission, LLC) have installed cameras in remote locations to increase situational awareness at stations and on transmission ROWs.
- g) Right-of-way cameras will be installed at major crossings, and deployment will continue to include all mayor highway crossings, particularly over the east-west running Trans-Canada Highway and across the Nipigon River. Crossing locations are chosen by selecting locations where safety issues for the public could arise if problems were encountered.

Targeted structures and their specific crossings are as follows;

- A2 - Trans Canada Hwy,

- B100 - Nipigon River,
 - B118 - Trans Canada Hwy,
 - B135 - Trans Canada Hwy,
 - B145 - Trans Canada Hwy,
 - C129 - Trans Canada Hwy,
 - C154 - Trans Canada Hwy,
 - C197 - Trans Canada Hwy,
 - C215 - Trans Canada Hwy,
 - C218 - Trans Canada Hwy,
 - C244 - Trans Canada Hwy,
 - D008 - Trans Canada Hwy,
 - D106 - HWY 614,
 - E093 - Trans Canada Hwy, and;
 - F169 - Trans Canada Hwy.
- h) Right-of-way cameras are expected to provide an increased level of situational awareness along the right-of-way. Cameras will provide various current environmental conditions such as vegetation growth concerns, icing on the line or structures, line galloping and wildfires at critical crossings. The right-of-way cameras will be equipped with night vision.
- i) Access to the right-of-way cameras will be provided to local NEET field personnel, with NEET support personnel in Austin Texas having overall responsibility for monitoring and alerting field operations.
- j) Yes, the potential future reliability projects described in Reference 3 are the same ones that are included in the capital investment plan in Reference 1. If the condition assessments reveal additional locations where bird perching or nesting is an issue or if the right-of-way cameras are seen to be extremely useful, additional deployment may be sought.
- k) NextBridge has complied with ice accretion requirements in the applicable codes and standards and designed the East-West Tie line accordingly. Beyond meeting applicable code requirements, a 1 in 100-year return period (a statistical measurement to assess ice accretion) was used in the tower design, instead of the 50-year return period identified in the OEB Minimum Technical Requirements (MTR), improving the structural reliability in severe weather events compared to the OEB MTR requirement. Salt spray was not identified as an issue on the East-West Tie line as there is no significant source of saltwater located near the project.



STAFF INTERROGATORY #38

INTERROGATORY

Reference: (1) Exhibit C / Tab 3 / Schedule 1, p. 1

Preamble:

Reference 1 states:

As described in NextBridge's capital expenditures spend plan in Exhibit B, NextBridge plans to continue to invest in capital over the IR Term. In service additions of \$0.2 million in the Test Year represent increases to rate base as a result of capital work being declared in-service and ready for use within the Test Year. This work will begin in the year 2022 with investments in ROW cameras, with expected additions to be in-service by the end of the Test Year.

Question(s):

- a) Please clarify what is driving the in-service additions to total \$0.2 million.
- b) Please explain why this is added to the Rate Base instead of included in the IR Capital Expenditure plan.

RESPONSE

- a) Test Year in-service additions are described in Exhibit C, Tab 2, Schedule 1 of the Application. The \$0.2 million represents an investment in right-of-way cameras and bird deterrents. The in-service additions are also explained on Exhibit B Tab 1 Schedule 6 Pages 6 and 7 of the Application.
- b) The East-West Tie line is in a remote region of Northwest Ontario known for harsh weather conditions. The use of cameras will facilitate the situational awareness of conditions on the transmission line, the ability to make an assessment on the necessary response to an issue on the transmission line, and avoid the need for either the NEET field personnel in Thunder Bay or Hydro One as the operation and maintenance contractor from having to physically travel to the site of the issue. Bird deterrent devices on structures reduces roosting bird excrement problems which can cause the line to be unavailable until excrement is resolved. The bird deterrent plan will also be triggered by the maintenance inspection activities. If evidence of large birds is found during an inspection, the roosting area on the structure will be considered for installation of bird deterrents. Excrement or streamers from large birds may bridge the air gap between the structure and a live conductor. This proactive countermeasure aims to prevent the possible outages. The strategic placement of

right-of-way cameras and bird deterrents during the Test Year is appropriate and prudent to proactively increase situational awareness and mitigate against outage for day-one of operations. Therefore, right-of-way cameras and bird deterrents will be part of the closing rate base gross plant at the end of the Test Year.

STAFF INTERROGATORY #39

INTERROGATORY

Reference: (1) Exhibit G / Tab 1 / Schedule 1 / p.1

Preamble:

Reference 1 states:

NextBridge will continue to complete an annual capital investment planning process (as outlined in Exhibit B, Tab 1, Schedule 6) to continually refine a plan that appropriately reflects operational needs, while minimizing rate impacts by not requesting these annual capital expenditures be added to rate base over the IR Term. This is NextBridge's proposal to mitigate any potential for significant earnings due to planned capital expenditures.... Ultimately, this annual review of capital expenditures will be included in NextBridge's annual update filing on an informational basis but will not impact the UTR calculation during the IR Term.

Questions:

- a) NextBridge has detailed \$4.28 million in capital expenditures during the IR Term. Please clarify if the annual planning process is expected to impact the \$4.28 million expenditure.
- b) If the annual planning process is above and beyond the \$4.28 million could you specify and quantify the expected investments.
- c) The annual depreciation expense is \$9.26 million. Could you please explain how NextBridge's Capital Investment Plan adequately supports the infrastructure?

RESPONSE

- a) The annual planning process is not expected to impact the \$4.28 million expenditure. Instead, the annual planning process will help ensure that expenditures are implemented in the most effective manner to increase reliability. As an example, the maintenance and monitoring of the line will help inform placement of the bird deterrents and right-of-way cameras.
- b) The annual planning process is not above and beyond the \$4.28 million. At this time, NextBridge expects the \$4.28 million to be the best estimate of the annual planning process needs over the IR term.

- c) NextBridge's Capital Investment Plan supports the infrastructure, because the infrastructure is new and the Investment Plan is targeted at increasing reliability during the IR term rather than replacing aged components.

STAFF INTERROGATORY #40

INTERROGATORY

Reference: (1) Exhibit A / Tab 3 / Schedule 1 / p. 3

Preamble:

NextBridge states that the emergence of health threats associated with Novel Coronavirus 2019 ("COVID-19"), caused unforeseeable delays in current construction activities. As a result of these unavoidable delays, at NextBridge's request the IESO confirmed that there is no unacceptable risk to reliability created if the projected in-service date for the East-West Tie line was shifted to on or before March 31, 2022.

With respect to the COVID-19 pandemic:

Question(s):

- a) Please provide a list of any impacts on the 2022 revenue requirement resulting from the COVID-19 pandemic.
- b) Please provide details regarding the impact of the COVID-19 pandemic on NextBridge's 2022 cost forecasts and operation of the East-West Tie line.
- c) Please explain how the impacts of the COVID-19 pandemic have or have not been included in its cost forecasts. If not, please provide the impacts.
- d) Please describe the interplay between the cost forecasts made in the NextBridge's evidence and the impacts of COVID-19 that are dealt with by way of Account 1509.

RESPONSE

- a) There will be no impact on the 2022 revenue requirement due to COVID-19 costs. The 2022 revenue requirement presented in the Application does not include the cost impact of the COVID-19 pandemic. Because the COVID-19 costs are unknown at this time, NextBridge has requested inclusion of COVID-19 pandemic costs in the construction cost variance account. The proposed disposition of the variance account will be after 2022, and, therefore, it will not impact the 2022 revenue requirement.
- b) NextBridge's 2022 cost forecast does not include impacts from the COVID-19 pandemic, as these costs are not known yet. The line is expected to become operational on March 31, 2022.
- c) See response to part a.

- d) NextBridge has not included COVID-19 costs in any forecasts set forth in the Application, as these costs are unknown at this time. Also, NextBridge is not using Account 1509 as all costs incurred at this time are capital costs. Instead, NextBridge is using Account 2055 (CWIP) to track COVID-19 costs.

STAFF INTERROGATORY #41

INTERROGATORY

- Reference:** (1) Exhibit B / Tab 1 / Schedule 1 / p. 3
(2) Exhibit C / Tab 1 / Schedule 1 / Attachment 3 / p. 44
(3) Exhibit A / Tab 2 / Schedule 1 / p. 5

Preamble:

Reference 1 states that “additionally, the flexibility in scheduling and construction planning that the date change affords to NextBridge is potentially avoiding some COVID-19 related costs, for example building all season roads in the caribou zone as outlined in the letter to the IESO.”

In Reference 2, the July 22, 2020 letter from NextBridge to the IESO, NextBridge states:

Due to winter road restrictions in the OBP [Overall Benefits Permit from the Ministry of Environment, Conservation and Parks] only one winter construction season remains to complete construction on the approximately 80 kilometre transmission line segment in the Lake Superior caribou habitat. To mitigate this schedule risk and ensure an October 28, 2021 in-service date, NextBridge is seeking an amendment to this condition which would allow for all season roads to be built in order to extend the construction season.

Reference 3 states that “The Applicant requests that the OEB’s rate orders be effective one day after the East-West Tie line comes into service, which is scheduled to occur on March 31, 2022.”

Question(s):

- a) What is the status of the requested amendment?
- b) What benefit can be achieved by receiving the requested amendment?
- c) Is the amendment required in order to achieve the March 31, 2022 in-service date? If the answer is yes, what would be the latest date on which NextBridge could receive the requested amendment in order to meet the March 31, 2022 in-service date and what would be the impact on the in-service date if the amendment was not received?

RESPONSE

- a) NextBridge received the requested amendment to allow all season access to be constructed in caribou nursery habitat on December 3, 2020.
- b) The amendment was obtained to use, when and if needed, to mitigate against potential force majeure events (e.g., increased COVID-19 infections) which could impact and jeopardize the East-West Tie line schedule. If these events occur, NextBridge will use the amendment in the winter of 2022 in order to achieve the March 31, 2022 in-service date.
- c) No, the amendment is not needed to meet the March 31, 2022 in-service date, but, rather, the amendment will help mitigate against unforeseen events from impacting a March 31, 2022 in-service date.

STAFF INTERROGATORY #42

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 1 / p. 4

Preamble:

NextBridge states:

Now that construction has started again in mid-May 2020 with the support of the surrounding Indigenous and non-Indigenous communities, NextBridge believes, barring other unforeseen circumstances, that it can achieve the March 31, 2022 in-service date. NextBridge will continue to keep the Board informed of developments in this regard, as it has done previously in the quarterly report submitted October 22, 2020.

Question(s):

- a) Please identify if there any circumstances, other than those directly associated with COVID-19, that have delayed the in-service date to March 31, 2022. If so, please specify those circumstances and the impact that they have had on the schedule.
- b) Please confirm that NextBridge will achieve the March 31, 2022 in-service date.

RESPONSE

- a) To date, there were no other circumstances known to NextBridge, other than those directly associated with COVID-19, that have delayed the March 31, 2022 in-service date. After receiving the necessary initial permits, NextBridge began construction of the East-West Tie line in the fall of 2019. During the winter of 2019/2020, there were additional delays in receiving other government permits that required NextBridge to accelerate construction during the winter of 2019/2020 in order to meet the in-service date. Unfortunately, NextBridge was unable to fully implement the accelerated construction plans and had to halt construction activities all together in April 2020 at the height of winter construction due to the COVID-19 pandemic. NextBridge would have remained on track to make the original in-service date despite these permitting delays if it had been able to continue construction uninterrupted due to COVID-19.
- b) Confirmed, based on the information known as of the date of this response.

STAFF INTERROGATORY #43

INTERROGATORY

Reference: (1) Exhibit C / Tab 1 / Schedule 1 / Attachment 4 / p.10

Preamble:

Reference 1 states:

Once the spring thaw period is confirmed for the 2019/2020 winter construction period, the schedule will be re-evaluated to determine the amount of work completed this winter season and establish plans for clearing activities to resume after September 1, 2020. At that time, it will also be possible to analyze the potential impacts to the East-West Tie's cost and schedule resulting from the delay of permit approvals.

Question(s):

- a) Could you please advise if there were ever any delays associated with permit approvals?
- b) Could you please provide the impact of any permit delays to the project cost and schedule?
- c) What actions is, or did, NextBridge undertaking to mitigate the delays and costs?

RESPONSE

- a) See response to Staff #42.
- b) See response to Staff #42a, for a discussion on East-West Tie line schedule and permitting.

The delay in receiving permits will not have an impact on the current East-West Tie line schedule of achieving the March 31, 2022 in-service date.

At this time, NextBridge has not analyzed the impact to East-West Tie line costs from these permitting delays. NextBridge will not be able to determine if these costs materialize or their quantum until the East-West Tie line has been placed into service. Once the East-West Tie line is in-service, actual costs associated with permitting delays will be determined and tracked in the construction costs variance account.

- c) NextBridge's proactive work with the IESO to move the in-service date to March 31, 2022 has saved between \$15-\$20 million, which were costs that NextBridge would have to spend in order to accelerate the East-West Tie line to meet the original October 28, 2021 in service date. Due to the winter road restriction in the Overall Benefits Permit, only one winter construction season remains to complete construction on the approximately 80 kilometer transmission line segment in the Lake Superior caribou habitat. The original mitigation strategy was to add additional construction crews and build all-season roads in caribou nursery habitat which would have allowed for construction work to commence in this area in the winter of 2020/2021. However, the building of these roads could result in an increased cost to the East-West Tie line of between \$15-\$20 million. NextBridge's preference was to avoid these additional costs to customers, and, at the same time, comply with the current condition. It approached the IESO to ask for an additional winter construction season (i.e., the extension of the in-service date to March 31, 2022) in order to avoid building these roads and incurring these costs.

STAFF INTERROGATORY #44

INTERROGATORY

Reference: (1) EB-2017-0182 / Decision and Order / February 11, 2019 / p.7

Preamble:

During the oral hearing of the LTC application, NextBridge stated that if it did not have to accelerate to ensure a December 2020 in-service date, it could bring the construction costs in lower⁵.

Reference 1 states that it “should not be taken as accepting the level of costs of the NextBridge-EWT Project for the purposes of recovery from ratepayers. NextBridge will have to demonstrate the prudence of its costs when seeking to recover those costs in the future.”

Question(s):

- a) The planned in-service date is now March 2022. Despite the change to in-service date, NextBridge has continued to work toward a total cost of \$737 million through all its quarterly reports – even prior to the COVID-19 pandemic. Given the planned in-service date was delayed beyond December 2020, does NextBridge currently estimate construction costs lower than the \$737 million included in the LTC application?
- b) If yes, please provide the updated estimate. If no, please explain why the construction cost estimate is not lower given the later in-service date.

RESPONSE

- a) NextBridge does not currently estimate construction costs to be lower than \$737 million.
- b) At the time of the statement in Reference 1, construction had not yet begun. Since the start of construction in 2019, NextBridge has encountered unexpected costs (including those that fall into the caveats set forth in response to Staff IR-49 in EB-2017-0182, also quoted below), that NextBridge addressed through the distribution of its contingency, as explained in its quarterly reports, including in the February 12, 2020 response to the OEB’s request for additional information on contingency spending filed in the Application at Exhibit C, Tab 1, Schedule 1, Attachment 4, Pages 4 of 12. In addition, in the October 2020 quarterly report NextBridge indicated that

⁵ 4 EB-2017-0182/EB-2017-0194/EB-2017-0364 Oral Hearing Transcript, Volume 7, October 12, 2018, p. 50, lines 4-9

the last of NextBridge's contingency was distributed due to an incremental Stage 2 archaeology study at White Lake, required as a result of cultural values concerns by Pic Mobert First Nation that were not previously known.

Despite these unknown activities and unexpected costs, NextBridge has managed its contingency and budget in a manner that has maintained the overall costs of the project to \$737 million.

References

Transcript cite:

"MS. TIDMARSH: So if NextBridge did not have to accelerate to ensure that it was going to meet a December 2020 date, and a decision was made and communicated to NextBridge by the Board that the 2021 date was more appropriate, we believe that we could actually bring the costs in lower than what we have."

For additional context, the answer continues below:

"So we have some costs in there that are -- you can see in IR 49 there's four caveats about doubling up on management crews and that type of thing.

So we think that we will still be within the plus or minus 10 percent band, but we could be tighter on that."

In response to Staff IR49 from the Leave to Construct proceeding, NextBridge indicated that it could bring the costs within the minus 10% range, but cited four caveats that would increase the cost.

"(1) additional environmental conditions that may need to be in place to start construction in the Spring of 2019 versus the Fall of 2018 as originally planned; (2) increasing equipment and crews and/or shifts to achieve a December 2020 in-service date or as close to 2020 as possible based on receiving a decision on its Leave to Construct; (3) adjustment to equipment, materials, and labor as may be impacted by the schedule consistent with Article IV of the EPC agreement; and (4) increased oversight of additional construction crew and/or shifts."

STAFF INTERROGATORY #45

INTERROGATORY

Reference: (1) Exhibit A / Tab 3 / Schedule 1 / Page 6-8

Preamble:

In addition to the August 28, 2020 letter from the IESO confirming that an in-service date of March 31, 2022 does not present an unacceptable risk to reliability, a detailed economic overview and consideration of capacity needs associated with the East-West Tie line were studied and provided by the IESO. Those IESO assessments are dated December 15, 2015, June 29, 2018 and December 1, 2017.

Question(s):

- a) The IESO provided a detailed economic overview of the East-West Tie compared to non-wires alternatives only. The IESO analysis did not examine the detailed construction costs of the NextBridge proposal. Please confirm.

RESPONSE

- a) NextBridge cannot confirm on behalf of the IESO what construction costs, if any, were included in the IESO economic analyses dated December 15, 2015, June 29, 2018 and December 1, 2017.

STAFF INTERROGATORY #46

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 5 / Attachment 2 / p. 8

Preamble:

Reference 1 states:

For this update, the IESO used the updated capital cost estimates for the new line and the station upgrades that the transmitters filed with the OEB on July 31, 2017 in their LTC applications. Based on its filed evidence, NextBridge estimates a cost of \$777 million for the E-W Tie line, an increase from the previous planning estimate of \$500 million used in the December 2015 Report. NextBridge has stated that the cost increase reflects unbudgeted costs, new scope requirements, other unforeseeable factors such as the delay to the in-service date, and development phase project refinements.

Question(s):

- a) Please explain the details and provide the amounts that resulted in the cost estimate increasing by 55 per cent from \$500 million to \$777 million in 2017.
- b) Please explain how the cost estimate has remained the same from 2017 to the time of this application, while the in-service date has changed to March 31, 2022.

RESPONSE

- a) The increase in NextBridge's construction and development costs from the original estimate to \$777 million was explained in detail in the LTC hearings and can be found in its LTC Application filed in EB-2017-0182, Exhibit B, Tab 9, Schedule 1, Page 5 through 11. However, NextBridge's LTC Application used the cost indicated in its designation proceedings of approximately \$420 million. NextBridge does not know how the IESO derived the \$500 million amount in its December 2015 planning estimate.
- b) Construction costs for the East-West Tie line are forecasted to be on budget when compared to the budget in the LTC Application. While increases have been identified in certain budget areas, the use of the previously-budgeted value for contingency allows for sufficient allocation of funds to address areas where budget increases were identified.

STAFF INTERROGATORY #47

INTERROGATORY

Reference:

- Ref:** (1) Exhibit B / Tab 1 / Schedule 6 / p. 1
(2) Filing Requirements for Electricity Transmission Applications / Chapter 2
Revenue Requirement Applications / p. 17
(3) Filing Requirements for Electricity Transmission Applications / Chapter 2
Revenue Requirement Applications / pp. 2-3

Preamble:

Reference 2 states that applicants filing a revenue cap application must include in the Transmission System Plan “a proposal to mitigate the potential for any significant earning by the transmitter above the regulatory net income supported by the approved return on equity, using such tools as a capital variance account or an earnings sharing mechanism”.

Reference 3 states:

A transmitter seeking approval of revenue requirements under Custom IR or Revenue Cap will be expected to demonstrate that its planning has been sufficiently robust that the utility will be able to manage within the revenue set, given that actual costs and revenues will vary from forecast.

In Reference 1, NextBridge states that:

NextBridge’s proposal to mitigate the potential for overearning is to not include in the revenue requirement during the currently requested IR Term and not record it in a deferral account:

- i. any additional OM&A costs above the rates set in this Application; nor
- ii. any increased financing costs as a result of maturing and reissuing debt throughout the IR Term.

Question(s):

- a) Please confirm that NextBridge is expected to manage any additional OM&A costs above the rates set in this application in accordance with the requirement outlined in Reference 3.

RESPONSE

- a) Yes, NextBridge plans to manage any additional OM&A costs above the rates set in this Application. The exception would be if a material, unplanned event occurred, NextBridge would request Z-factor account treatment.

STAFF INTERROGATORY #48

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 7 / p.2 / Table 1
(2) EB-2017-0182 / OEB Staff Submission / November 1, 2018 / p. 14 / Table 1

Preamble:

In Table 1 of Reference 2 OEB staff compares NextBridge's project cost of \$777M to five Hydro One project scenario costs. Scenario 2 indicates a Hydro One total project cost of \$682.8M for the route around Pukaskwa National Park.

Question(s):

- a) Please provide a revised version of Table 1 of Reference 1 that includes the cost for the proposed Lake Superior Link project that was submitted by Hydro One during the Leave to Construct proceeding (EB-2017-0364).
- b) Can NextBridge provide an explanation for differences between its estimate of \$777M and the forecast project cost of \$682.8M provided by Hydro One in scenario 2 of Reference 2 from the LTC proceeding?

RESPONSE

- a) Table 1 of Reference 1 is an excerpt from the report and work product of independent consultant Charles River Associates (CRA) based on its benchmarking against comparable existing transmission projects. CRA's approach to benchmarking is addressed in section 1.2. In summary, in preparing the evidence, "CRA reviewed publicly available data from transmission solicitations, public documents, regulatory filings" (at p.2). CRA's assumptions and calculations are further addressed in section 2 and Figures 1-15 of its report.

In contrast, the data and cost estimates provided in Table 1 Reference 1 Lake Superior Link (LSL) project is not a comparable completed transmission project, but, rather, a proposed project based on data and estimates of how the LSL may proceed that are now well over two years old. Therefore, NextBridge does not accept Staff's inference that information and estimates of LSL project that are reasonable comparable to the East-West Tie line, and, thus, it is not appropriate to incorporate them into the work of CRA, an independent expert. Furthermore, it is misleading to effectively "cut and paste" the data and estimate(s) of data over two years old into CRA's table of comparable, completed transmission projects.

Accordingly, NextBridge will not produce the information requested by Staff, as it is not information that is reliable and has no probative value.

- b) NextBridge is not aware of the assumptions or motivations in support of the LSL cost projections, and, therefore, cannot speak to the differences between the two figures. Moreover, the LSL cost projects are well over two years old, and any information provided related to the LSL cannot be considered current or probative of current estimates and actuals. Further, the old LSL estimates are not probative of the prudence of NextBridge's construction costs in this proceeding. Rather, the probative evidence on construction costs is the detailed evidence that NextBridge has submitted in its Application on the prudence of its construction costs and how these construction costs compare to comparable, completed transmission projects in the CRA benchmarking report.

STAFF INTERROGATORY #49

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 7 / Attachment 1 / p. 5-8
(2) Exhibit B / Tab 1 / Schedule 7 / Attachment 1 / p. 9 / Figures 3 and 4
(3) Exhibit B / Tab 1 / Schedule 7 / Attachment 1 / p. 18
(4) Exhibit C / Tab 2 / Schedule 2
(5) Exhibit C / Tab 2 / Schedule 4 / p. 1

Preamble:

Page 5 of Reference 1 states that “in general, all historical costs have been escalated to 2022 Canadian dollars (“CAD”) using the extrapolated 2017 Handy-Whitman Index for utility construction costs in the United States (“US”) Plateau region and the Canadian Price Index (“CPI”).”

Page 8 of Reference 1 states that “for comparative purposes, CRA has analyzed the present value of the annual project costs for the New EWT Line so that all benchmark results could be compared in 2022 dollars.”

Reference 3 states:

The estimated average project capital cost per km for the New EWT Line in 2022 CAD is approximately \$1.65 M/km which is calculated by discounting annual Construction project costs by the 10-year CAGR for CPI, annual Materials costs by the 10-year CAGR of the Handy-Whitman Plateau Indices, and by discounting Other costs again, by CPI. Construction costs, however, can be very weather-dependent, and harsher weather in Northwestern Ontario compared to the Plateau region may lead our estimates to be conservative.

Question(s):

- a) Please explain why Figure 4 refers to “discounted costs”. If this Figure contains incorrect calculations, please provide a replacement.
- b) Please explain the description of discounting costs in Reference 3 and how this relates to the description of escalating costs in Reference 1.
- c) Why does this study extrapolate the 2017 Handy-Whitman Index instead of obtaining the Handy-Whitman Index for years subsequent to 2017 (e.g. 2018, 2019)?
- d) Please confirm that the Handy-Whitman Plateau Indices were only used to adjust materials costs and were not used to adjust construction costs.

- e) If the Handy-Whitman Plateau Indices were only used to adjust materials costs, how is the difference between weather conditions in the Plateau region and northwestern Ontario relevant? How are materials costs affected by weather conditions?
- f) Please explain the comment that “harsher weather in Northwestern Ontario compared to the Plateau region may lead our estimates to be conservative.” If a less conservative approach were utilized, would the values in Figure 4 increase or decrease?
- g) Please explain the description of “present value of the annual project costs” from page 8, and how this relates to 2022 dollars.
- h) Please confirm that the costs shown in Figures 3 and 4 (Reference 2) are in thousands of dollars, such that the total cost shown at the bottom of p. 9 is \$740,521,000.
- i) Please provide the year(s) that the costs shown in Figure 3 are based in.
- j) Please explain why the costs for 2020 to COD are combined into a single column in Figures 3 and 4 instead of separated into costs for individual years.
- k) Please explain how the IDC row of expenses were adjusted between Figure 3 and Figure 4, and why Figure 4 has no entry for IDC in the ‘2020 to COD’ column.
- l) Which costs shown in Figure 4 equate to the development costs of \$31.2 million described in Reference 4.
- m) Which costs shown in Figure 4 equate to the construction costs of \$737.1 million shown in Reference 5?
- n) Which cost categories shown in Reference 5 equate to the materials costs shown in Figure 4?
- o) Compare the current project budget to the total cost shown in Figure 3.

RESPONSE

- a) The calculations are correct. Costs incurred by NextBridge on the East-West Tie line prior to 2022 avoid the increased cost of inflation that would have been incurred if the costs were incurred in 2022. Therefore, those costs must be discounted/de-escalated before they are summed.
- b) Refer to response (a). For projects which were already in-service prior to 2022, those costs were escalated to 2022 dollars for comparative purposes to the East-West Tie line.
- c) The original benchmarking of the East-West Tie line was conducted in 2018. At that point, the most recent Handy-Whitman Index available was from 2017. To minimize the cost of performing an entirely new study, CRA decided to keep some assumptions consistent from the 2017 study. Since construction indices typically do not change dramatically from year to year, CRA elected to keep the same approach to ensure comparability.
- d) Confirmed. The Canadian CPI was used to adjust construction costs, as detailed in section 2.1 of the report.

- e) The terrain in Northwestern Ontario has more varied and difficult terrain than the relatively flat terrain of the Niagara region. In general, construction in more mountainous terrain increases construction and material costs due to challenging terrain and transportation costs. CRA has neither quantified nor included that impact in any costs for the East-West Tie line.
- f) NextBridge East-West Tie line costs in Figure 4 would remain the same because the costs are already reflective of the harsher Northwestern Ontario conditions. The comparable projects, not located in Northwestern Ontario, would have increased costs to adjust for harsher weather conditions. To normalize the data and ensure comparability across the projects, the weather conditions were not considered.
- g) "Present value" was not an accurate term in this reference. Please see the answer to question (a) in this interrogatory. The costs were adjusted to 2022 according to a combination of indices for materials and labour.
- h) Confirmed.
- i) The costs in Figure 3 represent nominal dollars and represent expenses in the year in which they were incurred.
- j) The costs "2020 to COD" were combined because they are forecasted costs and the timing of spend can shift within the timeframe. The costs shown in prior years are actuals therefore the timing was known. This was a conservative assumption.
- k) The IDC was shifted one column over in the production of the report from Figure 3 to Figure 4. This is immaterial to the overall report as \$230k was left out of the IDC.
- l) Figure 3 is in nominal dollars and most closely aligns with the actual cost of the project. The development costs of \$31.2 million are part of the row "Development" in Figure 3. The "Development" row in Figure 3 of \$36.5 million is made up of \$31.2 million of Development from Reference 4, along with \$5.3 million of Phase Shift costs shown in Exhibit C, Tab 1, Schedule 1, Page 2.
- m) Figure 3 is in nominal dollars and most closely aligns with the actual cost of the East-West Tie line. In Figure 3, all rows except the "Development" row equate to the \$737 million in construction costs.
- n) Figure 3 is in nominal dollars and most closely aligns with the actual cost of the East-West Tie line. In reference 5, the row "Materials and Equipment" is equivalent to the row "Materials" in Figure 3 of the report, both showing \$66.9 million.
- o) The current East-West Tie line forecast is the same as the project total shown in Figure 3. The current project forecast for construction can be found in Exhibit C, Tab 1, Schedule 1, Page 2, Table 2. This Table shows Construction along with Spare Strategy of \$1.2 million for a total of \$774.9 million (excluding spares, the total is \$773.7 million.)

STAFF INTERROGATORY #50

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 7 / Attachment 1 / p. 5
(2) Exhibit B / Tab 1 / Schedule 7 / Attachment 1 / p. 10 / Figure 5

Preamble:

Reference 1 states that “on average [the WECC 2014 study by Black and Veatch] found that the base capital cost of a 500 kV double circuit project was 1.99 times more expensive than a 230 kV double circuit project.”

Question(s):

- a) Please provide the underlying data from the WECC 2014 study by Black and Veatch which resulted in an average of 1.99.
- b) In Figure 5, what is the difference between the CAGR column and the Growth column? How were the values in the Growth column determined?
- c) In Figure 5, cost is broken down into materials, construction and other segments, which total 100%. How were these percentages determined?
- d) In Figure 5, cost is broken down into materials, construction and other segments, which total 100%. Are development costs included in these costs?
- e) In Figure 5, the cost is broken down into materials, construction and other, which total 100%. Are IDC costs included in these costs?

RESPONSE

- a) This report is included as an attachment to this response. The calculation was made from the data in Table 2-1 of the report.
- b) The Growth column is simply an average of the CAGR column, provided for informational purposes. The 4.7% in the Growth Column for H-W costs is the average of the 4.7 and 4.8 in the CAGR column, rounded to one decimal point.
- c) The Bruce-Milton application identified 38.4% of the total costs to be Materials, and 13.4% of the total costs to be Construction. The 48% is a calculation representing the remainder of the costs (subject to rounding). The source of this information is EB-2007-0050, Exhibit B, Tab 4, Schedule 2, p.3
- d) As Footnote 4 indicates, the data from Hydro One’s application does not appear to include development costs, though their application does not provide sufficient information to know this with certainty.
- e) The Hydro One application does not specify that IDC costs are included in their figures.

CAPITAL COSTS FOR TRANSMISSION AND SUBSTATIONS

Recommendations for WECC Transmission Expansion Planning

B&V PROJECT NO. 176322

PREPARED FOR



Western Electricity Coordinating Council

OCTOBER 2012

Principal Investigators:

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Assumptions and Limitations Disclaimer

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Figure 6-1	Map of the Four Transmission Projects Selected for Scenario Analysis	6-1

1.0 Introduction

As part of the Western Electricity Coordinating Council (WECC) transmission planning process, Black & Veatch assisted WECC to develop updated assumptions on transmission line and substation costs, as well as to develop a process to ensure that these costs can be readily updated in the future. The effort was completed under the auspices of a peer review workgroup composed of regional transmission experts to ensure that the resulting costs and cost development methodology is robust and appropriate for WECC's current and future requirements.

This report details the transmission and substation costs and development efforts, including the assumptions, methodology, and results. Additionally, it describes the tool developed by Black & Veatch for WECC to be used to estimate transmission and substation costs that will be integrated into WECC's planning process. Finally, the report discusses the benchmarking of this methodology to several recent transmission project examples. This was completed to ensure that the theoretical costs reasonably reflect actual transmission development costs in the WECC region.

1.1 APPROACH

Black & Veatch developed capital costs for transmission lines and substations for high-voltage transmission facilities in the WECC using a "bottom-up" approach, detailing the component and land costs and then adjusting these to take into consideration potential cost variations such as location and terrain. "High-voltage" is defined as transmission facilities operating at 230 kilovolts (kV) or higher. The transmission line voltage classes and substation types included in this study are listed in Table 1-1.

Table 1-1 Transmission and Substation Facilities Included in This Study

TRANSMISSION LINE VOLTAGE CLASSES	SUBSTATION TYPES
230 kV Single Circuit	230 kV
230 kV Double Circuit	345 kV
345 kV Single Circuit	500 kV (ac)
345 kV Double Circuit	500 kV (dc)
500 kV Single Circuit	
500 kV Double Circuit	
500 kV HVDC Bi-pole	

In addition to developing a set of costs to be used by WECC for the instant planning effort, this effort also resulted in the development of a methodology for developing transmission costs in the future and a tool to develop estimates for the cost of individual lines under consideration. These are detailed in the report.

1.2 PEER REVIEW PROCESS

To ensure that the costs and cost methodology were appropriate for its purposes, WECC convened a peer review group composed of regional transmission experts to review and provide recommendations on the costs and methodology. The group provided valuable information about specific transmission line costs to assist in the validation of the methodology, and ensure the costs proposed are reasonable. The group also provided written input and discussion of assumptions during several conference calls between June and September of 2012. The peer review group members are listed in Table 1-2.

Table 1-2 Transmission Cost Peer Review Group Participants

Bill Pascoe	TransWest Express
Bill Hosie	TransCanada
Carl Zichella	Natural Resources Defense Council
Grace Anderson	California Energy Commission
James Cauchois	Western Electricity Coordinating Council
Jeff Billinton	California Independent System Operator
James Feider	City of Redding, CA
Keith White	California Public Utilities Commission
Marv Landauer	Columbia Grid
Nick Schlag	Energy & Environmental Economics (E3)
Ric Campbell	Utah Public Service Commission
Stan Holland	Western Electric Coordinating Council
Steve Ellerbecker	Western Governors Association
Brad Nickell	Western Electric Coordinating Council
Keegan Moyer	Western Electric Coordinating Council
Byron Woertz	Western Electric Coordinating Council
Arne Olson	Energy & Environmental Economics (E3)

In addition to the input from the peer review group, the draft methodology and tools were presented to the WECC Technical Advisory Subcommittee (TAS) group for review and comments in September 2012. Several comments were received on the costs, which have been incorporated into this report, as appropriate. A summary of the Stakeholder Comments is included in Section 7.0.

1.3 VARIABILITY OF COSTS

The costs included in this report are believed to reasonably represent the cost to develop transmission and substation facilities in the WECC region. It is imperative to note, however, that transmission lines and substations are all unique, and the cost of a specific line or substation may be significantly different than the costs provided here due to a variety of factors. Most new transmission and substation facilities interconnect to the existing grid, and a “typical” transmission project will include some level of new equipment and some upgrades to existing equipment.

Furthermore, transmission facilities are developed not only to transmit incremental power generation, but also to provide additional system reliability and serve load. It is often impossible to segregate “capacity costs” from the cost to provide reliability and serve load. The costs here should be used as a guide to develop approximate costs for new transmission, but should not be used to measure the cost or cost-effectiveness of any specific transmission facility.

2.0 Transmission Capital Costs

Black & Veatch developed a methodology and tool to calculate indicative capital costs for transmission infrastructure projects throughout the WECC region. This methodology begins with using the current cost of specified transmission equipment and the expected cost of land. The costs are then adjusted to identify the differential cost of developing on different land with different terrain factor adjustments. Black & Veatch identified the following categories and sub-categories to consider from a capital cost perspective:

- Voltage Class
 - Alternating Current (AC) - 230 kV, 345 kV, and 500 kV (single and double circuit)
 - High Voltage Direct Current (HVDC) 500 kV Bi-Pole
- Line Characteristics
 - Conductor Type
 - Pole Structure
 - Length of line
- New Construction or Re-conductor
- Terrain Type
- Location

Black & Veatch utilized its internal knowledge of transmission equipment component costs as a starting point for the cost assumptions. The sections below key in on each of the specific costs identified while gaining a more granular understanding of the capital costs for transmission.

2.1 NEW TRANSMISSION

Black & Veatch only considered voltages 230 kV and above, as these were indicative of the majority of transmission infrastructure projects being proposed on the bulk electric transmission network in the WECC region. In addition to AC transmission, 500 kV Bi-Pole HVDC transmission was also considered, which would be more appropriate for long, high capacity transmission projects.

For AC transmission lines, there are many components that make up the entire line cost. First, Black & Veatch identified the initial physical considerations. Without engineering a detailed design, there were many components that could be broken apart into individual cost multipliers. Three key components were determined to be the most important cost considerations for transmission line designs:

- Conductor type
- Structure
- Length of line

Starting from the transmission capital costs developed in the Western Renewable Energy Zones (WREZ) project for the Western Governors Association, Black & Veatch identified a baseline assumption for capital costs per mile based on these three key components. The initial costs per

mile for transmission from the WREZ, escalated from the original 2008 values, are shown in Table 2-1.

Table 2-1 Baseline Transmission Costs

LINE DESCRIPTION	NEW LINE COST (\$/MILE)
230 kV Single Circuit	\$927,000
230 kV Double Circuit	\$1,484,000
345 kV Single Circuit	\$1,298,000
345 kV Double Circuit	\$2,077,000
500 kV Single Circuit	\$1,854,000
500 kV Double Circuit	\$2,967,000
500 kV HVDC Bi-pole	\$1,484,000

These costs were based on the following assumptions:

- Aluminum Conductor Steel Reinforced (ACSR) conductor
- Tubular (230 kV) / Lattice (345 kV and 500 kV) pole structure
- Line longer than 10 miles

Starting from these baseline costs, Black & Veatch identified various multipliers when adjusting for specific design considerations. For specific projects, it may be important to have a higher rated conductor, especially for transmission lines that are loaded heavily or may span longer distances. This decreases line power losses, and increases current carrying capability. Black & Veatch identified three common conductor types that could be used in new transmission lines: ACSR, Aluminum Conductor Steel Supported (ACSS), and High Tensile Low Sag (HTLS). Each of these conductor types increases the ampacity of the transmission line due to the relative physical properties. ACSR is used most commonly, and is the basis for most transmission lines in the WECC region.

It was important for Black & Veatch to quantify the additional cost to the entire line length if one of these higher ampacity conductors was selected, as it would affect the entire cost of the line. Table 2-2 below indicates the cost multipliers for each of these conductor types, which would be multiplied against the base transmission cost for each voltage level.

Table 2-2 Conductor Cost Multipliers

CONDUCTOR	230 KV SINGLE	230 KV DOUBLE	345 KV SINGLE	345 KV DOUBLE	500 KV SINGLE	500 KV DOUBLE	500 KV HVDC BI-POLE
ACSR	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ACSS	1.08	1.08	1.08	1.08	1.08	1.08	1.08
HTLS	3.60	3.60	3.60	3.60	3.60	3.60	3.60

Various structure types can be considered to support transmission lines. Areas that have higher population may use a tubular steel pole, whereas wide-open mountain ranges may use the lattice steel structure. Since this design constraint can have an impact on the capital cost, it was important to capture these costs as well. While most 230 kV transmission lines are typically made of steel poles, 345 kV and above transmission lines typically use lattice steel structures; however, this is not always the case. For instance, in urban areas, some 345 kV transmission lines may use steel poles, as they reduce the amount of required right of way. An example of each type of structure is shown in Figure 2-1.



Figure 2-1 Pole Structures: Steel Pole (Populus-Terminal 345 kV) vs. Lattice (Path 26)

Black & Veatch quantified the capital cost multipliers associated with each type of structure, as shown in Table 2-3.

Table 2-3 Transmission Structure Type Cost Multipliers

STRUCTURE	230 KV SINGLE	230 KV DOUBLE	345 KV SINGLE	345 KV DOUBLE	500 KV SINGLE	500 KV DOUBLE	500 KV HVDC BI-POLE
Lattice	0.90	0.90	1.00	1.00	1.00	1.00	1.00
Tubular Steel	1.00	1.00	1.30	1.30	1.50	1.50	1.50

Finally, it is important to consider the length of the transmission line. In general, the longer the transmission line, the less it costs per mile. The primary reason for this is that design and engineering, costs are non-linear—it takes almost as much to design and approve a short line as it does a long line. The capital cost multipliers associated with various transmission line lengths are indicated in Table 2-4 below.

Table 2-4 Transmission Length Cost Multipliers

LENGTH	230 KV SINGLE	230 KV DOUBLE	345 KV SINGLE	345 KV DOUBLE	500 KV SINGLE	500 KV DOUBLE	500 KV HVDC BI-POLE
> 10 miles	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3-10 miles	1.20	1.20	1.20	1.20	1.20	1.20	1.20
< 3 miles	1.50	1.50	1.50	1.50	1.50	1.50	1.50

2.2 RE-CONDUCTORING

In areas where there are existing transmission lines, it may be necessary or more cost-effective to re-conductor an existing transmission rather than to build a new line. Re-conductoring can be defined many different ways, but for simplicity re-conductoring in this effort is defined as replacing an existing conductor to increase ampacity. This assumes that the new conductor would be of similar size and weight, hence no upgrading of poles or insulators is required.

To quantify the capital costs associated with re-conductoring a transmission line, Black & Veatch assumed the following:

- 230 kV Transmission Conductors
 - 2 conductors per phase
 - Conductor assumed to be 35% of total capital cost
- 345 kV Transmission Conductors
 - 3 conductors per phase
 - Conductor assumed to be 45% of total capital cost
- 500 kV Transmission Conductors

- 4 conductors per phase
- Conductor assumed to be 55% of total capital cost
- 500 kV Bi-Pole Transmission Conductors
 - 3 conductors per phase
 - Conductor assumed to be 55% of total capital cost

2.3 TERRAIN MULTIPLIER

Transmission equipment capital costs are only a portion of the overall transmission line capital costs. A substantial factor in total transmission line costs is the construction cost for developing lines in different types of terrain. Black & Veatch identified nine different terrain types and then developed cost multipliers to compensate for the difficulty of construction in each terrain type. The lowest cost of development was identified as scrub or flat terrain, and the most difficult and expensive type of terrain is forested areas. Table 2-5 identifies the different types of terrain assessed.

Black & Veatch surveyed published information to ascertain terrain cost differences. California Investor-Owned Utilities (IOUs) publish their terrain cost multipliers annually. The only other public source of terrain multipliers for Western U.S. transmission development is the WREZ. Using stakeholder input and validation, the Peer Review Group adopted a set of terrain cost multipliers that represent a mix of these factors, detailed on Table 2-5.

Table 2-5 Terrain Cost Multipliers

TERRAIN	PG&E ¹	SCE ²	SDG&E ³	WREZ	WECC
Desert	1.00	1.10	1.00	-	1.05
Scrub / Flat	1.00	1.00	1.00	1.00	1.00
Farmland	1.00	1.00	1.00	1.10	1.00
Forested	1.50	3.00	-	1.30	2.25
Rolling Hill (2-8% slope)	1.30	1.50	-	-	1.40
Mountain (>8% slope)	1.50	2.00	1.30	-	1.75
Wetland	-	-	1.20	1.20	1.20
Suburban	1.20	1.33	1.20	-	1.27
Urban	1.50	1.67	-	1.15	1.59

¹ 2012 PG&E Per Unit Cost Guide - http://www.caiso.com/Documents/PGE_2012FinalPerUnitCostGuide.xls

² 2012 SCE Per Unit Cost Guide - http://www.caiso.com/Documents/SCE_2012FinalPerUnitCostGuide.xls

³ 2012 SDG&E Per Unit Cost Guide - http://www.caiso.com/Documents/SDGE_2012FinalPerUnitCostGuide.xls

2.4 RIGHT OF WAY COSTS

In addition to the capital costs for transmission line equipment and difficulty of construction based on terrain, there are costs associated with acquiring land for the transmission line. In some cases, right of way costs can come to 10% of total project costs, although this proportion varies significantly between projects. In order to estimate per-mile right of way costs for generic transmission projects, two pieces of information are needed:

- Right of way widths for each voltage class (from which one can calculate the number of acres required per mile of transmission line)
- Right of way costs per acre

With these pieces of information, one can simply multiply the acres per mile by the cost per acre to calculate the total right of way cost per mile of transmission line. Black & Veatch developed estimates for both right of way widths and right of way costs per acre which can be applied across the WECC region; the methodology and results are discussed separately below.

2.4.1 Right of Way Widths

In order to develop generic right of way width estimates for each voltage class considered in this study, Black & Veatch surveyed available information from a variety of industry sources—FERC and NERC documents, individual utility estimates, and actual project right of way widths from existing and proposed projects throughout the WECC region. This survey revealed that transmission project right of way widths vary significantly, even within the same voltage class. Table 2-6 below shows the results of a comprehensive survey that FERC conducted in 2004 to quantify right of way widths by utility (note that this survey included utilities nationwide, not just those in the WECC region).⁴

Table 2-6 FERC Nationwide Survey of Right of Way Widths (2004)

MINIMUM WIDTH	230 KV (# OF UTILITIES)	345 KV (# OF UTILITIES)	500 KV (# OF UTILITIES)
< 125 ft.	40	6	4
126 - 175 ft.	36	36	21
> 175 ft.	30	30	13

Note: This survey included utilities nationwide, not only those in the WECC region.

However, the FERC data were only one of the many sources investigated. Table 2-7 below shows the larger set of data sources that Black & Veatch drew from (which focused on utilities and projects in the WECC region), and the right of way widths specified for each voltage class in each data source. In the “WECC Assumption” row, the right of way width assumption for each voltage class is shown; this was based on adopting the most common value from the various data sources for each voltage class, and also ensuring a logical progression so that widths increased at successively higher voltages and double circuit line widths were greater than those for single

⁴ <http://www.ferc.gov/industries/electric/indus-act/reliability/veg-mgmt-rpt-final.pdf>

circuits. The bottom row shows the acres of right of way per mile of transmission. These “acre/mile” values were the values used in all subsequent right of way cost calculations for this study.

Table 2-7 Right of Way Widths by Voltage Class and Data Source

SOURCE	230-KV SINGLE CIRCUIT	230-KV DOUBLE CIRCUIT	345-KV SINGLE CIRCUIT	345-KV DOUBLE CIRCUIT	500-KV SINGLE CIRCUIT	500-KV DOUBLE CIRCUIT	500-KV DC BI- POLE
FERC Nation-wide Utility Survey	100 ft.	-	125 ft.	-	175 ft.	-	-
DRECP (SCE/LADWP)	100 ft.	-	-	-	200 ft.	-	-
SDG&E	-	300 ft.	-	-	200 ft.	-	-
PG&E	75 ft.	-	-	-	-	-	-
PacifiCorp	125/150 ft.	-	150 ft.	-	250/300 ft.	300	-
BPA	125/225 ft.	-	-	-	150 ft.	-	-
Idaho Power	-	-	-	-	250 ft.	-	-
Xcel Energy	-	-	-	225/250 ft.	-	-	-
WREZ	150 ft.	150 ft.	160 ft.	160 ft.	175 ft.	175 ft.	200 ft.
WECC Assumption	125 ft.	150 ft.	175 ft.	200 ft.	200 ft.	250 ft.	200 ft.
Acres/mile*	15.14	18.17	21.20	24.23	24.23	30.29	24.23

*Acres/mile values were calculated by multiplying the right of way width by 5,280 feet per mile and dividing by 43,560 sq. ft. per acre.

2.4.2 Right of Way Costs Per Acre

To develop estimates of right of way costs, the Peer Review Group adopted a methodology based on the Bureau of Land Management’s (BLM) Linear Right of Way Schedule for Year 2015 (taken from 43 CFR Parts 2800, 2880, 2920).⁵ This document provides estimates of land rental costs in each U.S. county, developed specifically for the purpose of linear right of way uses such as transmission lines. Although these rental costs do not differentiate between different land uses (e.g. farmland, pasture land, urban or suburban land, etc.) and may not accurately predict the cost of any particular parcel of land, they do provide the following advantages:

⁵ http://www.blm.gov/pgdata/etc/medialib/blm/wo/MINERALS_REALTY_AND_RESOURCE_PROTECTION/_cost_recovery.Par.47392.File.dat/RentLinearRentSchedule2009-2015-NoHighlight.pdf

- Consistent data across all states and counties
- Transparent, public data source
- Costs designed for the purpose of right of way leases
- Capture the relative cost differences between different regions and land uses

Because these costs are given in rental terms (dollars per acre per year) and the WECC transmission costs are expressed in capital costs it is necessary to convert the lease costs to capital costs (dollars per acre). The following formula was used for this conversion:

6

Black & Veatch assumed a Capitalization Rate of ten percent and assumed that Land Taxes are equal to one percent of the Land Rental Cost.

In addition to providing per-acre rental costs for each U.S. county, the BLM right of way schedule also categorizes all counties into twelve different cost “zones”. For simplicity, Black & Veatch used the zone data rather than individual county-level cost data. Table 2-8 lists the BLM land rental costs by zone and the equivalent capital cost by zone.

Table 2-8 BLM Land Rental and Land Capital Costs by Zone

BLM ZONE NUMBER	LAND RENTAL COST (\$/ACRE-YEAR)	LAND CAPITAL COST (\$/ACRE)
1	\$ 9	\$ 85
2	\$ 17	\$ 171
3	\$ 34	\$ 341
4	\$ 52	\$ 512
5	\$ 69	\$ 683
6	\$ 103	\$ 1,024
7	\$ 172	\$ 1,707
8	\$ 345	\$ 3,414
9	\$ 690	\$ 6,828
10	\$ 1,035	\$ 10,242
11	\$ 1,724	\$ 17,071
12	\$ 3,449	\$ 34,141

⁶ **Land Rental Value** is the annual fee individuals are willing to pay for the exclusive right to use a land site for a period of time. **Land Taxes** is the portion of the land rental value that is claimed for the community. **Capitalization Rate** is a market determined rate of return that would attract individuals to invest in the use of land, considering all of the risks and benefits which could be realized.

2.5 TRANSMISSION CALCULATION METHODOLOGY

Multiplying the right of way acres per mile by the land cost per acre yields the total right of way cost per mile of transmission line. This value was then added to the base transmission costs discussed in Sections 2.1, 2.2, and 2.3 to develop the total transmission line capital cost. The exact equation used to calculate the total transmission cost is explained in Section 2.5.

Total Transmission Line Cost =

$$[(\text{Base Transmission Cost}) \times (\text{Conductor Multiplier}) \times (\text{Structure Multiplier}) \times (\text{Re-conductor Multiplier}) \times (\text{Terrain Multiplier}) + (\text{ROW Acres/Mile}) \times (\text{Land Cost/Acre})] \times (\text{\# of Miles})$$

3.0 Substation Capital Costs

Transmission cost estimates often only consider the conductor cost, without consideration of the requirements for new substation facilities needed to connect the transmission to the existing grid. This section quantifies the substation costs associated with transmission infrastructure development.

There are numerous considerations that go into the design of a substation that will significantly impact the cost of the facility. For the purpose of this effort, however, the Peer Review Group adopted a methodology that was simple enough to be repeatable, but granular enough to estimate a capital cost for various sized substations with different line and transformer positions, additional reactive equipment, or new transformers. Since HVDC lines were also identified in the transmission capital costs, HVDC converter station equipment and costs were also estimated. The following cost components were identified to calculate the substation cost:

- Base Substation Cost
- Line/Transformer Positions
- Transformer
- HVDC Converter Station
- Static VAR Compensator, Shunt Reactors and Series Capacitors

3.1 NEW SUBSTATION BASE COST

Black & Veatch first identified a set of base substation costs, which excludes all major equipment. Since substations can be built in very remote areas, it was important to note that the substation costs in this methodology assume flat, barren land with relatively easy site access. The new substation costs, which include land, substation fence, control building, etc are identified in Table 3-1 below.

Table 3-1 New Base Substation Capital Costs

EQUIPMENT	230 KV SUBSTATION	345 KV SUBSTATION	500 KV SUBSTATION
Base Cost (New Substation)	\$1,648,000	\$2,060,000	\$2,472,000

3.2 LINE AND TRANSFORMER POSITIONS

In addition to the substation base cost Black & Veatch considered the cost of breaker positions necessary to interconnect lines and transformers for new and existing substations. All of these require circuit breakers and switches for isolation of equipment. This isolation can be designed in multiple configurations; however, two are most common: ring bus and breaker-and-a-half (BAAH).

A ring bus configuration assumes one breaker for each line or transformer position; whereas, a BAAH configuration assumes one and a half breakers for every line or transformer configuration (e.g. 4 lines equates to 6 breakers); see Figure 3-1 for a diagram of each configuration.

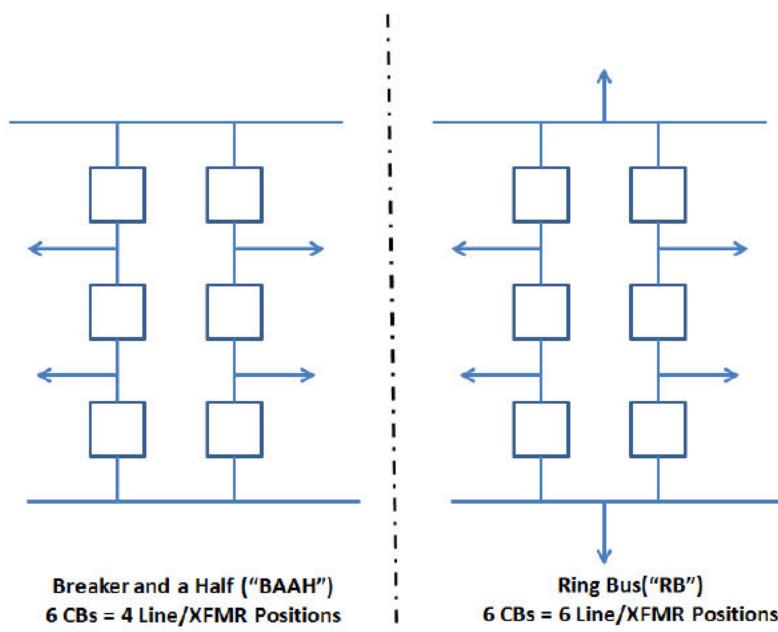


Figure 3-1 Substation Configurations

A line position is defined as a transmission line entering or exiting and terminating at the substation. For one transmission line looping into a substation, it would require two line positions. A transformer position is equal to the number of transformers added. Each of these types of configurations is used at different voltages and number of lines in and out of the substation. Smaller substations typically assume a ring bus configuration, while larger substations use a BAAH configuration. Table 3-2 identifies the basic cost per line or transformer position and the associated multipliers. These costs include the breaker, switches, structures, and protection schemes associated with these configurations.

Table 3-2 Line/Transformer Position Cost and Multipliers

EQUIPMENT	230 KV SUBSTATION	345 KV SUBSTATION	500 KV SUBSTATION
Cost Per Line/XFMR Position	\$1,442,000	\$2,163,000	\$2,884,000
Ring Bus Multiplier	1	1	1
Breaker and a Half Multiplier	1.5	1.5	1.5

If an existing substation is expanded, in the case of connecting two existing substations with a new transmission line, no incremental base substation costs are incurred.

3.3 TRANSFORMERS

Many transmission lines connect to substations that serve load areas, typically at a lower voltage level than the bulk transmission system. To do so, transformers are needed to decrease the voltage and deliver electricity to load centers. Transformers vary by voltage, as well as by current carrying

capability. Transformers can vary in cost substantially based on variables such as copper commodity prices, as well as cost of freight; however, the costs considered and vetted by the WECC stakeholders are typical in the industry. The costs considered include foundation and oil containment for the transformer.

Table 3-3 below identifies the capital costs associated with each voltage class in a cost per megavolt ampere (MVA), which is dependent on the amount of current carrying capability necessary to deliver from the high voltage side to the low voltage side of the transformer.

Table 3-3 Transformer Capital Costs

TRANSFORMER COST (\$/MVA)	230 KV SUBSTATION	345 KV SUBSTATION	500 KV SUBSTATION
115/230 kV XFMR	\$7,000	-	-
115/345 kV XFMR	-	\$10,000	-
115/500 kV XFMR	-	-	\$10,000
138/230 kV XFMR	\$7,000	-	-
138/345 kV XFMR	-	\$10,000	-
138/500 kV XFMR	-	-	\$10,000
230/345 kV XFMR		\$10,000	-
230/500 kV XFMR	\$11,000	-	\$11,000
345/500 kV XFMR	-	\$13,000	\$13,000

3.4 REACTIVE COMPONENTS

An ideal transmission system does not require any reactive support; however, this is rarely the case. Many transmission networks are integrated in a manner that supports voltage dips across the network; however, some weaker systems may require additional reactive power support to maintain grid reliability. The amount of reactive support, and the speed with which the support needs to be transferred to the grid, will determine what type of reactive component is required at the substation.

Black & Veatch identified three key reactive components commonly used for transmission level grid support. Each piece of equipment has its own level of complexity, size, and cost.

- Shunt Reactor
- Series Capacitor
- Static VAr Compensator (SVC)

Shunt reactors are commonly used to reduce voltages due to high line charging on lightly loaded transmission networks. Series capacitors do the exact opposite – they increase voltages by providing additional reactive charging to the transmission network to maintain system voltages.

Black & Veatch worked with stakeholders to assume a “turnkey” installation, which includes with engineering, design, and construction support for a site that “has been rough-graded and has access to a source of medium voltage auxiliary power”⁷. Table 3-4 identifies the typical costs for shunt reactors and series capacitors.

Table 3-4 Shunt Reactor and Series Capacitor Capital Costs

EQUIPMENT	230 KV SUBSTATION	345 KV SUBSTATION	500 KV SUBSTATION
Shunt Reactor (\$/MVAR)	\$20,000	\$20,000	\$20,000
Series Capacitor (\$/MVAR)	\$30,000	\$10,000	\$10,000

Static VAR Compensators (SVCs) combine both technologies, while adding speed of support. SVCs are constantly connected to the grid, whereas capacitors and reactors typically have to be switched. SVCs are more expensive than their static counterparts; however, they offer more flexibility in resources. The costs for SVCs vary based on size and the assumptions made about the ease of installation. Table 3-5 below shows SVC costs identified by HydroOne, Arizona Public Service Company (APS), and the Peer Review Group adopted costs. Like Shunt Reactor and Series Capacitor capital costs, SVC costs assume a “turnkey” installation.

Table 3-5 SVC Capital Costs

VOLTAGE CLASS	HYDRO ONE ⁸	APS ⁹	WECC
500 kV	-	-	\$85,000
345 kV	-	-	\$85,000
230 kV	\$94,500	\$75,000	\$85,000
115 kV	\$141,000	-	-
Medium Voltage	\$142,000	-	-
Low Voltage	\$250,000	-	-

⁷ Stakeholder comment from Eric John of ABB, regarding turnkey SC turnkey installation.

⁸ http://www.appro.org/docs/HONIconnectionsJan2009/Naren_Pattani_%20- Tx presentation at %20APPrO-CanWEA-OWA workshop, Jan 22 2009.pdf

⁹ <http://www.wecc.biz/committees/BOD/TEPPC/020209/Lists/Agendas/1/Reactors%20%20Capacitors%20%20SVC%20%20PSS.pdf>

3.5 HIGH VOLTAGE DIRECT CURRENT CONVERTER STATION

HVDC converter stations are required at both ends of a HVDC transmission line. The converter stations change the HVDC power to AC power and then interconnect it to the AC transmission network. There are benefits to using HVDC transmission lines for very long transmission segments, as line losses are substantially lower due to the lack of reactive losses, which make up the majority of AC transmission line losses. For shorter distances, HVDC lines are generally not cost-effective, as the converter substation costs are substantially higher than the cost of an AC substation.

There are various costs associated with a HVDC converter station, and the most variable cost is the reactive component. The costs on Table 3-6 are indicative of a typical transmission system, and what is needed to provide reliable power to the AC transmission network.

Table 3-6 HVDC Converter Station Costs

HVDC 500 KV CONVERTER STATION	
MW Rating	3000 MW
Cost Components	
Converter Terminal (including DC switching station equipment)	\$275,000,000
Reactive Support (synchronous condensers, SVCs, etc.)	\$150,000,000
AC Switchyard	\$20,000,000
Total Cost	\$445,000,000

3.6 SUBSTATION CALCULATION METHODOLOGY

Using the substation components detailed above, the total substation cost is calculated using the following equation:

Total Individual Substation Cost =

$$[(\text{Substation Base Cost}) + (\text{Line/XFMR Position Base Cost}) \times (\# \text{ of Line/XFMR Positions}) \times (\text{RB or BAAH Multiplier}) + (\text{XFMR Cost/MVA}) \times (\text{XFMR MVA Rating}) \times (\# \text{ of XFMRs}) + (\text{SVC Cost/MVAR}) \times (\# \text{ MVARs}) + (\text{Series Cap. Cost/MVAR}) \times (\# \text{ MVARs}) + (\text{Shunt Reactor Cost/MVAR}) \times (\# \text{ MVARs}) + (\text{HVDC Converter Station Cost})]$$

If the substation has a high side and a low side voltage, both Line/XFMR Position costs have to be calculated; however, the Substation Base Cost does not have to be added again. The highest voltage of the substation will be the basis for the Substation Base Cost.

4.0 Summary of Capital Costs

The methodology in Sections 2.0 and 3.0 above considers multiple components to compute a complete capital cost for a transmission infrastructure project. The capital costs above are summarized in the sections below.

4.1 TRANSMISSION CAPITAL COSTS

Using the methodology discussed in Section 2.0, Black & Veatch surveyed various transmission costs as well as used internal industry knowledge to determine a typical value for transmission costs. While industry costs can vary substantially, the Peer Review Group determined that these values are reasonable for projects installed in the WECC region.

Using the numbers from tables above and the equation below, the total capital cost for a transmission line can be calculated.

Total Transmission Line Cost =

$$[(\text{Base Transmission Cost}) \times (\text{Conductor Multiplier}) \times (\text{Structure Multiplier}) \times (\text{Re-conductor Multiplier}) \times (\text{Terrain Multiplier}) + (\text{ROW Acres/Mile}) \times (\text{Land Cost/Acre})] \times (\text{\# of Miles})$$

Table 4-1 Transmission Capital Cost Summary

EQUIPMENT	230 KV SINGLE CIRCUIT	230 KV DOUBLE CIRCUIT	345 KV SINGLE CIRCUIT	345 KV DOUBLE CIRCUIT	500 KV SINGLE CIRCUIT	500 KV DOUBLE CIRCUIT	500 KV HVDC BI- POLE
Base Cost	\$927,000	\$1,484,000	\$1,298,000	\$2,077,000	\$1,854,000	\$2,967,000	\$1,484,000
Multipliers							
Conductor							
ACSR	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ACSS	1.08	1.08	1.08	1.08	1.08	1.08	1.08
HTLS	3.60	3.60	3.60	3.60	3.60	3.60	3.60
Structure							
Lattice	0.90	0.90	1.00	1.00	1.00	1.00	1.00
Tubular Steel	1.00	1.00	1.30	1.30	1.50	1.50	1.50
Length							
> 10 miles	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3-10 miles	1.20	1.20	1.20	1.20	1.20	1.20	1.20
< 3 miles	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Age							
New	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Re-conductor	0.35	0.45	0.45	0.55	0.55	0.65	0.55
Terrain							
Desert	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Scrub / Flat	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Farmland	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Forested	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Rolling Hill (2-8% slope)	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Mountain (>8% slope)	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Wetland	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Suburban	1.27	1.27	1.27	1.27	1.27	1.27	1.27
Urban	1.59	1.59	1.59	1.59	1.59	1.59	1.59

In addition to the capital cost of equipment for transmission lines, the acquisition of land for ROW was determined based on BLM land values. The land costs are detailed on Table 2-8.

4.2 SUBSTATION CAPITAL COSTS

Using the methodology discussed in Section 3.0, Black & Veatch surveyed various substation costs as well as used internal industry knowledge to determine a typical value for substation costs. While industry costs can vary substantially, the Peer Review Group determined that these values are reasonable for projects installed in the WECC region, with the key assumption that the substation would be constructed on flat, barren land.

Table 4-2 Substation Capital Cost Summary

EQUIPMENT	230 KV SUBSTATION	345 KV SUBSTATION	500 KV SUBSTATION
Base Cost (New Substation)	\$1,648,000	\$2,060,000	\$2,472,000
Cost Per Line/XFMR Position	\$1,442,000	\$2,163,000	\$2,884,000
Ring Bus Multiplier	1	1	1
Breaker and a Half Multiplier	1.5	1.5	1.5
500 kV HVDC Converter Station	-	-	\$445,000,000
Shunt Reactor (\$/MVAR)	\$20,000	\$20,000	\$20,000
Series Capacitor (\$/MVAR)	\$30,000	\$10,000	\$10,000
SVC Cost (\$/MVAR)	\$85,000	\$85,000	\$85,000
Transformer Cost (\$/MVA)			
115/230 kV XFMR	\$7,000	-	-
115/345 kV XFMR	-	\$10,000	-
115/500 kV XFMR	-	-	\$10,000
138/230 kV XFMR	\$7,000	-	-
138/345 kV XFMR	-	\$10,000	-
138/500 kV XFMR	-	-	\$10,000
230/345 kV XFMR		\$10,000	-
230/500 kV XFMR	\$11,000	-	\$11,000
345/500 kV XFMR	-	\$13,000	\$13,000

Using the above table and the equation below, the capital cost for the substation can be calculated.

Total Individual Substation Cost =

$$[(\text{Substation Base Cost}) + (\text{Line/XFMR Position Base Cost}) \times (\# \text{ of Line/XFMR Positions}) \times (\text{RB or BAAH Multiplier}) + (\text{XFMR Cost/MVA}) \times (\text{XFMR MVA Rating}) \times (\# \text{ of XFMRs}) + (\text{SVC Cost/MVAR}) \times (\# \text{ MVARs}) + (\text{Series Cap. Cost/MVAR}) \times (\# \text{ MVARs}) + (\text{Shunt Reactor Cost/MVAR}) \times (\# \text{ MVARs}) + (\text{HVDC Converter Station Cost})]$$

4.3 ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION AND OVERHEAD COSTS

The transmission and substation costs described in Sections 2.0 and 3.0 above are given as “overnight” costs, i.e. the cost if the project could be engineered, procured and constructed overnight without financing or overhead costs. To address this, Black & Veatch developed estimates of Allowance for Funds Used During Construction (AFUDC) and overhead, which could be added to the transmission and substation costs to produce realistic total project cost estimates.

In general, AFUDC is defined as the cost of debt and equity funds used to finance construction projects; overhead is defined as the miscellaneous costs required to maintain an organization but are not directly tied to a specific project, e.g. administrative costs, legal costs, internal management costs, etc. AFUDC and overhead costs are usually estimated as a percentage of transmission and substation costs. It is important to note that different entities (investor-owned utilities, public utilities, independent project developers) use very different definitions of what is included in AFUDC and Overhead costs, and also have widely differing estimates of these costs. Black & Veatch surveyed a number of sources to understand the range of these estimates, and to develop a recommended value which could be used by WECC to reasonably represent all types of project ownership structures. A sampling of AFUDC and overhead costs are shown in Table 4-3 below.

Table 4-3 Survey of AFUDC and Overhead Costs and Recommended Values

	INDEPENDENT DEVELOPER	IOU	PUBLIC UTILITY
Source	B&V Estimate	NV Energy/PacifiCorp	BPA
AFUDC Cost	10.0%	8.6%	4.1%
Overhead Cost	10.0%	6.2%	23.0%
Recommended Values	7.5% (AFUDC) + 10.0% (Overhead) = 17.5%		

Based on the collected data, Black & Veatch recommended and the Peer Review Group adopted a value of 7.5% for AFUDC costs and 10.0% for overhead costs, for a total of 17.5%. This 17.5% adder for AFUDC and overhead costs was used in all calculations for this study.

Adding the cost of the transmission calculated in Section 4.1 and the substation costs calculated in Section 4.2 together will result in the total project capital costs prior to AFUDC and overhead. Using the above information, the entire cost of a project can be calculated.

Total Project Cost =

$$[(\text{Total Transmission Capital Cost}) + (\text{Total Substation Capital Cost})] \times [(\text{AFUDC} - 7.5\%) + (\text{Overhead} - 10\%)]$$

5.0 Cost Calculator

After developing the capital cost estimates for transmission and substations described in Section 4.0, Black & Veatch created a cost calculator which incorporated all of the cost estimates for transmission and substations cost components into a single, user-friendly Excel-based tool. The cost calculator is simple but flexible, and can be used to estimate the costs of any hypothetical transmission project and associated substations within the WECC region. The calculator employs the cost formulas for transmission and substations to calculate total project costs (for the entire line length and on a per-mile basis), and is automated to the extent possible to allow for quick estimates. The cost calculator workbook is split into three different sheets, each of which is described below:

- Transmission Cost Calculator
- Substation Cost Calculator
- Cost Totals

5.1 TRANSMISSION COST CALCULATOR

A screenshot of the Transmission Cost Calculator sheet of the cost calculator workbook is shown in Figure 5-1 below.

Black & Veatch Transmission Line Capital Cost Calculator					User Selection
	Selection	Multiplier	Cumulative Cost/Mile		Auto-calculated
Voltage Class	500 kV Single Circuit	1	\$	1,854,000.00	Adjustable Parameter
Conductor Type	230 kV Single Circuit	1	\$	1,854,000.00	
Structure	345 kV Single Circuit	1	\$	1,854,000.00	
Length Category	345 kV Double Circuit	1	\$	1,854,000.00	
New or Re-conductor?	500 kV Single Circuit	1	\$	1,854,000.00	
Terrain Multiplier	500 kV Double Circuit	1	\$	1,854,000.00	
	500 kV HVDC Circuit	1.08	\$	1,998,533.77	
Terrain Type	Miles of Terrain Type	Multiplier	Weighted Miles		
Forested	0.9	2.25	1.9		
Scrubbed/Flat	189.0	1	189.0		
Wetland	0.0	1.2	0.0		
Farmland	0.0	1	0.0		
Desert/Barren Land	0.9	1.05	1.0		
Urban	0.0	1.59	0.0		
Rolling Hills (2-8% Slope)	40.1	1.4	56.2		
Mountain (>8% Slope)	1.2	1.75	2.2		
Total Miles	232.1				
BLM Cost Zone Number	ROW Miles in BLM Zone	\$/Acre	\$/Mile of ROW	Zone ROW Costs	
1	20.0	\$ 85.34	\$ 2,068.80	\$ 41,376.00	
2	50.0	\$ 170.68	\$ 4,137.60	\$ 206,880.00	
3	23.0	\$ 341.45	\$ 8,277.60	\$ 190,384.80	
4	10.0	\$ 512.13	\$ 12,415.20	\$ 124,152.00	
5	5.0	\$ 682.80	\$ 16,552.80	\$ 82,764.00	
6	5.0	\$ 1,024.25	\$ 24,830.40	\$ 124,152.00	
7	5.0	\$ 1,707.06	\$ 41,383.20	\$ 206,916.00	
8	5.0	\$ 3,414.11	\$ 82,766.40	\$ 413,832.00	
9	5.0	\$ 6,828.23	\$ 165,532.80	\$ 827,664.00	
10	5.0	\$ 10,242.34	\$ 248,299.20	\$ 1,241,496.00	
11	5.0	\$ 17,070.57	\$ 413,832.00	\$ 2,069,160.00	
12	5.0	\$ 34,141.14	\$ 827,664.00	\$ 4,138,320.00	
AFUDC/Overhead Cost	17.5%				
Project Cost Results	Per Mile	Total			
Line Cost	\$ 1,998,533.77	\$ 463,873,675.03			
ROW Cost	\$ 41,649.31	\$ 9,667,096.80			
AFUDC Cost	\$ 357,032.04	\$ 82,869,635.07			
All Costs	\$ 2,397,215.12	\$ 556,410,406.90			

Figure 5-1 Transmission Cost Calculator Sheet of Cost Calculator Workbook

On this sheet, the user first selects the basic transmission line characteristics from a series of drop-down menus. The options for each follow the different equipment types and specifications described in Section 2.1. After that, the user must enter information about the line routing. This information consists of the number of miles of line which pass through each terrain type described in Section 2.3, and the number of miles of line which pass through each BLM cost zone described in Section 2.4. These line routing values are not calculated within this sheet—rather, the user must obtain these values by performing a separate Geographic Information System (GIS) analysis.

Once all selections are made and all values are entered, the transmission line, right of way, and AFUDC/overhead costs for the project are automatically calculated at the bottom of the sheet in the “Project Cost Results” section, for the entire line length and on a per-mile basis.

The calculator is also flexible. In addition to the cells highlighted in yellow, which indicate places where the user must select from a drop-down menu or enter a value, a number of cells are highlighted green, to indicate that the values in those cells are parameters that can be adjusted by the user. Adjusting these values allows the user to test the sensitivity of the project cost results to certain parameters. The following are parameters which can be adjusted on this sheet:

- Terrain type multipliers
- AFUDC/overhead cost adder
- Transmission base costs
- Conductor type multipliers
- Structure type multipliers
- Length category multipliers
- New vs. re-conductor multipliers
- Right of way width assumptions
- BLM Zone Land Rental Costs
- Land Tax Rate
- Capitalization Rate

5.2 SUBSTATION COST CALCULATOR

A screenshot of the Substation Cost Calculator sheet of the cost calculator workbook is shown in Figure 5-2 below.

Black & Veatch Substation Capital Cost Calculator				User Selection
Selection		Cost Component	Cost	Auto-calculated
				Adjustable Parameter
Voltage	500 kV Substation	Base Cost	\$ 2,472,000	
New or Existing Site?	New	Circuit Breakers	\$ 17,304,000	
Circuit Breaker Type	Breaker and a Half	500 kV HVDC Converter	N/A	
# of Line/XFMR Positions	4	Transformer(s)	\$ 11,000,000	
500-kV HVDC Converter?	No	SVC(s)	\$ 10,000,000	
Transformer Type	230/500 kV XFMR	Shunt Reactor(s)	\$ 10,000,000	
MVA Rating Per Transformer	115/345 kV XFMR	Series Capacitor(s)	\$ 20,000,000	
# of Transformers	115/500 kV XFMR	AFUDC/Overhead Cost	\$ 12,385,800.000	
SVC MVAR Rating	138/230 kV XFMR			
Shunt Reactor MVAR Rating	138/345 kV XFMR			
Series Capacitor MVAR Rating	230/345 kV XFMR	Total Substation Cost	\$ 83,161,800	
AFUDC/Overhead Cost	345/500 kV XFMR			
	17.5%			

Figure 5-2 Substation Cost Calculator Sheet of Cost Calculator Workbook

On this sheet, the user selects the basic substation characteristics from a series of drop-down menus, and also enters appropriate values for certain characteristics (e.g. “# of Transformers”), according to the options described in Section 2.1. The cost for each substation component is shown on the right side, the AFUDC/overhead cost is automatically calculated, and the total substation cost is automatically summed at the bottom.

It is important to note that this sheet can be used to calculate costs for only one individual substation at a time. If a particular transmission project involves more than one substation, then information about each substation will need to be entered separately, and the total cost of each individual substation will need to be entered in the empty cells in the Cost Totals sheet of the workbook.

There are also a number of adjustable parameters in this sheet, which are:

- AFUDC/overhead cost adder
- Base substation costs
- Cost per line position
- Line position type multipliers
- HVDC converter station cost
- Shunt reactor cost
- Series capacitor cost
- SVC cost
- Transformer costs

5.3 COST TOTALS

A screenshot of the Cost Totals sheet of the cost calculator workbook is shown in Figure 5-3 below.

Black & Veatch Transmission and Substation Cost Totals				
	<u>Project Cost Results</u>	<u>Per Mile</u>	<u>Total</u>	<div>User Selection</div> <div>Auto-calculated</div>
	Line Cost	\$ 1,998,533.77	\$ 463,873,675.03	
	ROW Cost	\$ 41,649.31	\$ 9,667,096.80	
	Substation #1	N/A	\$ 83,161,800.00	
	Substation #2	N/A	\$ 50,000,000.00	
	Substation #3	N/A		
	Substation #4	N/A		
	Substation #5	N/A		
	AFUDC Cost	\$ 357,032.04	\$ 106,172,950.07	
	All Costs	\$ 2,397,215.12	\$ 712,875,521.90	

Figure 5-3 Cost Totals Sheet of Cost Calculator Workbook

On this sheet, the transmission and substation costs calculated on the other two sheets are summed to find the total project cost, for the entire line length and on a per-mile basis. The transmission line and right of way cost data are automatically transferred from the Transmission Cost Calculator sheet. Since it is anticipated that most projects will have multiple associated substations and each individual substation cost must be calculated separately, there are five empty cells in which the user can enter the cost of individual substations from the Substation Cost Calculator sheet. Once the substation costs are entered, the AFUDC and overhead cost is automatically calculated and the total project cost is automatically summed at the bottom.

6.0 Scenario Analysis

After creating the cost calculator, Black & Veatch tested it to ensure that it was user-friendly, and more importantly to ensure that the transmission and substation cost assumptions incorporated into the calculator were reasonable when compared to existing and proposed transmission projects. An initial list of over 20 projects was narrowed down to four representative projects which were used to validate Black & Veatch's cost assumptions. To perform this scenario analysis, Black & Veatch obtained the most detailed information possible within the time available about the four real transmission projects, with significant help from WECC staff and other stakeholders; sources included internal utility documents, regulatory filings, and information filed with WECC. The four projects are:

- PacifiCorp: Gateway Central Line (Populus - Terminal Segment)
- NV Energy: One Nevada Line
- Bonneville Power Administration (BPA): McNary – John Day Line
- Xcel Energy: Comanche – Daniels Park Line

The map in Figure 6-1 below shows the location of each of the four selected projects. They are spread throughout the WECC region, each in a different utility territory, and they cover the full range of terrain types as well as both the 345-kV and 500-kV voltage classes.

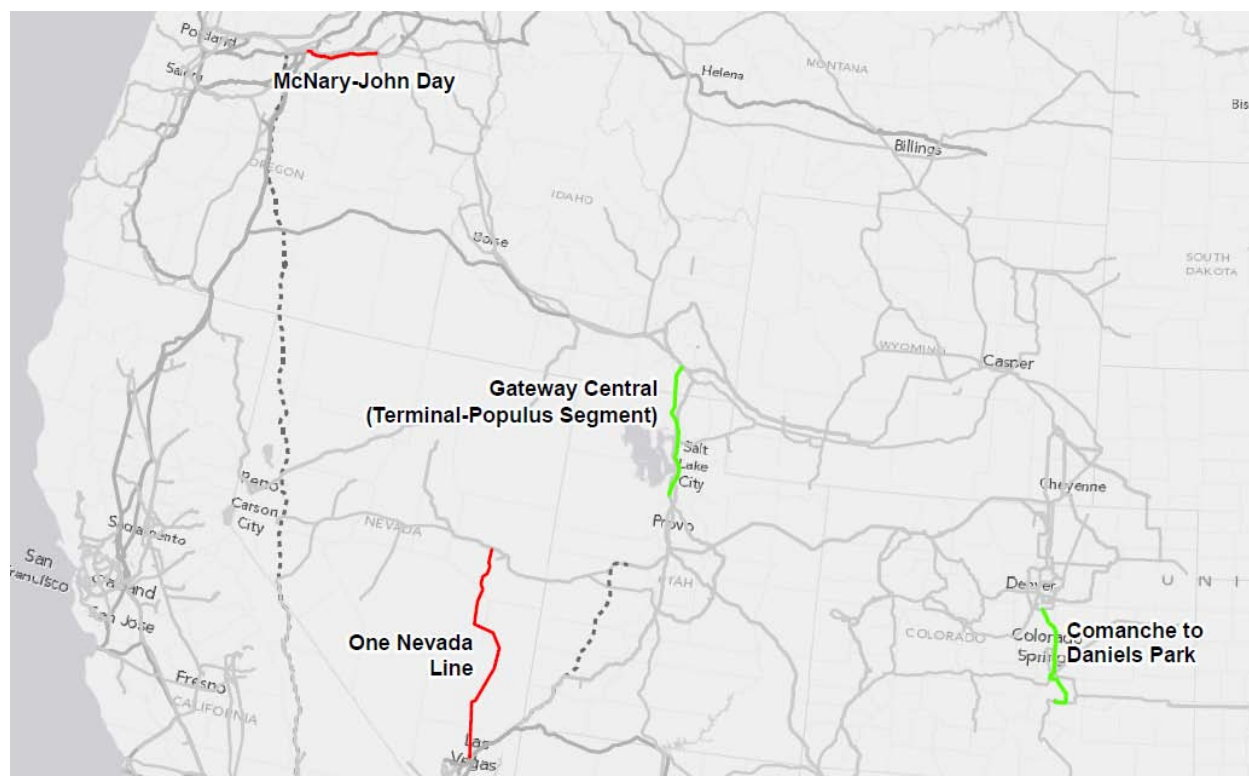


Figure 6-1 Map of the Four Transmission Projects Selected for Scenario Analysis

For each project, once detailed information had been obtained about project characteristics and project costs, Black & Veatch entered information in the cost calculator to simulate the real

transmission project as closely as possible. Values were also entered for the number of miles of each terrain type, and the number of miles in each BLM cost zone, based on a separate GIS analysis performed outside of the cost calculator. Table 6-1 below shows the project characteristics used to simulate each project, and Table 6-2 shows the number of miles in each terrain type for each project.

Table 6-1 Transmission Project Characteristics Used in Scenario Analysis

PROJECT	VOLTAGE	LENGTH (MILES)	CONDUCTOR TYPE	STRUCTURE	NEW OR RE-CONDUCTOR
PacifiCorp - Gateway Central (Populus-Terminal)	345-kV Double Circuit	135	ACSR	Tubular Steel	New
NV Energy - One Nevada	500-kV Single Circuit	235	ACSR	Lattice	New
BPA – McNary-John Day	500-kV Single Circuit	79	ACSR	Lattice	New
Xcel Energy – Comanche-Daniels Park	345-kV Double Circuit	125	ACSR	Tubular Steel	Re-conductor

Note: This is based on the information available to Black & Veatch at the time of this analysis, and may not reflect actual project characteristics in all cases.

Table 6-2 Miles in Each Terrain Type for Transmission Projects in Scenario Analysis

PROJECT	FORESTED	SCRUB/ FLAT	WETLAND	FARMLAND	DESERT/ BARREN LAND	URBAN	ROLLING HILL (2-8% SLOPE)	MOUNTAIN (>8% SLOPE)
PacifiCorp - Gateway Central (Populus-Terminal)	0.3	49.3	0.6	29.8	0.5	23.7	17.7	11.7
NV Energy - One Nevada	0.9	189.0	0.0	0.0	0.9	0.0	40.1	1.2
BPA – McNary-John Day	0.0	31.5	0.0	28.1	0.0	2.4	9.1	0.7
Xcel Energy – Comanche-Daniels Park	6.1	111.6	0.0	3.1	0.0	0.2	0.0	0.0

Note: These values are based on Black & Veatch GIS analysis, and may not reflect the actual number of miles in each terrain type for each project.

For each project scenario, the analysis output from the calculator was the project transmission line costs, ROW costs, substation costs, and AFUDC/overhead costs. These costs were then summed to find the total project cost, and this estimated project cost was compared to the total cost of the actual project. Black & Veatch did not attempt to match the actual project costs component-by-component (e.g. estimated right of way costs were not intended or expected to closely match actual right of way costs)—rather, Black & Veatch attempted to match the estimated total project cost to the actual total project cost. This was because for some projects cost data was not available at this detailed level, and also because projects often differ in what is included in each cost component. Thus, the total project cost was considered the key metric for testing the cost calculator.

6.1 PACIFICORP: GATEWAY CENTRAL LINE (POPULUS – TERMINAL SEGMENT)

This 345-kV double circuit line segment is part of PacifiCorp’s Gateway Central project, centered in Utah, and extends from the new Populus substation in southeastern Idaho to the existing Terminal substation in the Salt Lake City area. It was completed in 2010. The most notable characteristic of this line is that it crosses a significant amount of mountainous terrain and urban and suburban terrain around Salt Lake City, which the other three lines do not. Table 6-3 shows the results of the scenario analysis.

Table 6-3 Scenario Analysis Results for PacifiCorp: Gateway Central Line

COST COMPONENT	ACTUAL COST	B&V ESTIMATED COST	DIFFERENCE (ACTUAL - ESTIMATED COST)
Line Cost (including wires, poles, etc.)	\$ 498,439,614	\$ 443,071,335	11%
ROW Cost	\$ 70,183,253	\$ 2,774,370	96%
Substation Cost	\$ 126,054,613	\$ 187,689,000	- 49%
AFUDC/Overhead Cost	\$ 122,152,660	\$ 110,868,573	9%
Total Cost	\$ 816,830,140	\$ 744,403,278	9%

Note: These results are not meant as a comment on the actual project costs listed; they are simply meant to provide a test of the cost calculator developed by Black & Veatch.

The estimated and actual project costs match within 9%, which indicates that the cost calculator provides a relatively close approximation of actual project costs in this case. Black & Veatch was able to obtain detailed cost information for this project, which provides more confidence in the accuracy of the estimate.

6.2 NV ENERGY: ONE NEVADA LINE

This 500-kV single circuit project extends from the Robinson Summit substation in northern Nevada to the Harry Allen substation near Las Vegas in southern Nevada; its purpose is to connect the two different grids operated by NV Energy’s subsidiaries Sierra Pacific Power Company and Nevada Power Company. It is currently under construction and is expected to be completed in 2013. The most notable characteristic of this line is that it crosses land that is almost entirely

uninhabited and either flat or rolling hill terrain, while the other three lines cross land that is mostly inhabited. Table 6-4 shows the results of the scenario analysis.

Table 6-4 Scenario Analysis Results for NV Energy: One Nevada Line

COST COMPONENT	ACTUAL COST	B&V ESTIMATED COST	DIFFERENCE (ACTUAL – ESTIMATED COST)
Line Cost (including wires, poles, etc.)	Unknown	\$ 463,873,675	N/A
ROW Cost	Unknown	\$ 2,226,191	N/A
Substation Cost	Unknown	\$ 131,404,000	N/A
AFUDC/Overhead Cost	Unknown	\$ 104,563,176	N/A
Total Cost	\$ 509,710,592	\$ 702,067,042	-38%

Note: These results are not meant as a comment on the actual project costs listed; they are simply meant to provide a test of the cost calculator developed by Black & Veatch.

The estimated and actual project costs match within 38%. The larger difference between estimated and actual costs for this project is likely the result of the fact that Black & Veatch was not able to obtain either detailed cost data or complete information about the technical characteristics of the line. However, it was discovered that a novel type of tower structure was used, which does not match the generic type of lattice tower that was assumed in this analysis.

6.3 BONNEVILLE POWER ADMINISTRATION (BPA): MCNARY – JOHN DAY LINE

This 500-kV single circuit project is part of a series of upgrades and new lines throughout BPA's territory, and extends from the existing McNary substation to the existing John Day substation along the southern side of the Columbia River in northern Oregon. It was completed in early 2012. The most notable characteristic of this line is that it crosses a significant amount of farmland—the terrain is mostly flat. Table 6-5 shows the results of the scenario analysis.

Table 6-5 Scenario Analysis Results for BPA: McNary – John Day Line

COST COMPONENT	ACTUAL COST	B&V ESTIMATED COST	DIFFERENCE (ACTUAL – ESTIMATED COST)
Line Cost (including wires, poles, etc.)	\$126,814,842	\$ 143,288,287	-13%
ROW Cost	Unknown	\$ 265,993	N/A
Substation Cost	\$17,484,816	\$ 14,420,000	18%
AFUDC/Overhead Cost	\$39,105,207	\$ 27,645,499	29%
Total Cost	\$183,404,865	\$ 185,619,780	-1%

Note: These results are not meant as a comment on the actual project costs listed; they are simply meant to provide a test of the cost calculator developed by Black & Veatch.

The estimated and actual project costs match within 1%, which indicates that the cost calculator provides a very close approximation of actual project costs in this case. Black & Veatch was able to obtain detailed cost and technical information about the project, which provides confidence about the accuracy of the estimate.

6.4 XCEL ENERGY: COMANCHE – DANIELS PARK LINE

This 345-kV double circuit project extends from the substation at the Comanche coal plant near Pueblo, CO to the Daniels Park substation in the southern part of the Denver metro area. It was completed in 2009. The most notable characteristic of this project is that it mostly consisted of re-conductoring existing lines, re-energizing them at a higher voltage, and constructing some new line parallel to existing lines on existing right of way. Table 6-6 shows the results of the scenario analysis.

Table 6-6 Scenario Analysis Results for Xcel Energy: Comanche – Daniels Park Line

COST COMPONENT	ACTUAL COST	B&V ESTIMATED COST	DIFFERENCE (ACTUAL – ESTIMATED COST)
Line Cost (including wires, poles, etc.)	Unknown	\$ 191,146,222	N/A
ROW Cost	Unknown	\$ 1,188,954	N/A
Substation Cost	Unknown	\$ 12,978,000	N/A
AFUDC/Overhead Cost	Unknown	\$ 35,929,805	N/A
Total Cost	\$ 151,950,000	\$ 241,242,982	-59%

Note: These results are not meant as a comment on the actual project costs listed; they are simply meant to provide a test of the cost calculator developed by Black & Veatch.

The estimated and actual project costs match within 59%. The larger difference between estimated and actual costs for this project is likely the result of the fact that Black & Veatch was not able to obtain either detailed cost data or complete information about the technical characteristics of the line. Specifically, the estimated cost may be higher than the actual cost because the project involved less line construction or substation construction than Black & Veatch assumed.

6.5 SUMMARY

The results of the scenario analysis for all four transmission projects are summarized in Table 6-7 below.

Table 6-7 Summary of Scenario Analysis Results for All Four Projects

COST COMPONENT	ACTUAL COST	B&V ESTIMATED COST	DIFFERENCE (ACTUAL - ESTIMATED COST)
PacifiCorp - Gateway Central (Populus-Terminal)	\$ 816,830,140	\$ 744,403,278	9%
NV Energy - One Nevada	\$ 509,710,592	\$ 702,067,042	-38%
BPA - McNary-John Day	\$183,404,865	\$ 185,619,780	-1%
Xcel Energy - Comanche-Daniels Park	\$ 151,950,000	\$ 241,242,982	-59%

Note: These results are not meant as a comment on the actual project costs listed; they are simply meant to provide a test of the cost calculator developed by Black & Veatch.

These results show that the cost calculator provided very good estimates for the PacifiCorp and BPA projects (within 9% and 1%, respectively), and reasonable, though not perfect, estimates for the NV Energy and Xcel Energy projects (within 38% and 59%, respectively). The two projects for which Black & Veatch obtained the most detailed cost and technical information—PacifiCorp and BPA—were the ones for which the estimates most closely matched the actual costs. This increases confidence that with a sufficient level of information, the cost calculator provides a good approximation of the costs of a real transmission project. Thus, the capital cost validation exercise described in this section shows that Black & Veatch’s transmission and substation cost assumptions are appropriate when compared to actual projects.

In addition, it should be noted that the cost calculator will be used by WECC to assess the relative costs of different possible transmission projects in the Western Interconnection, i.e. it will be used to compare potential projects rather than to estimate exactly how much a single actual project will cost. Given the high degree of variability in these costs, the cost calculator provides a good estimate of the relative costs of developing transmission projects throughout the WECC region, and will serve the purpose for which it was intended.

7.0 Discussion of Stakeholder Comments

Black & Veatch received a number of formal comments from stakeholders after the final presentation of its recommendations on capital costs for WECC. All comments were considered and addressed to the extent possible. The comments and responses are summarized in Table 7-1 below, and the name and affiliation of each commenter is provided.

Table 7-1 Summary of Stakeholder Comments and Responses

COMMENTS NAME AND AFFILIATION	COMMENT	BLACK & VEATCH RESPONSE
Eric John, ABB Inc.	The costs stated for series capacitors (SC) far exceed the market levels that ABB has seen as the market leader for this product. Firm prices for EPC SC banks range from \$10,000/MVAr to \$30,000/MVAr. The higher range applies to banks 300 MVAr and less. The lower part of the range applies in cases where for banks larger than 300 MVAr or in cases where multiple banks are to be supplied as part of a reactive compensation program.	Black & Veatch discussed this in detail with ABB, and \$50,000/MVAr was found to be too high. ABB indicated that there are significant fixed costs involved in sizing a Series Capacitor, and based on their experience, the typical range indicated that the smaller SC's were around \$30,000/MVAr, and larger SC's were around \$10,000/MVAr, assuming turnkey installation with rough-grading complete. Black & Veatch has updated the costs to reflect this: \$30,000/MVAr (230 kV), \$10,000/MVAr (345 kV and 500 kV).
Eric John, ABB Inc.	Suggest an additional comment about the scope for a "Turnkey" SC installation. The above \$/MVAr figures assume a site has been rough-graded and access to a source of medium voltage auxiliary power.	Black & Veatch has documented this assumption in the report.
Eric John, ABB Inc.	The costs stated for series capacitors (SVC) are reasonable. However, ABB recommends that the values be stated as a range from \$60,000/MVAr to \$85,000/MVAr.	Black & Veatch appreciates that there are ranges for these costs; however, for the purpose of this methodology, it was decided to use one value. As the SVC sizes are arbitrary in this methodology, Black & Veatch assumed the more conservative value of \$85,000/MVAr.

Eric John, ABB Inc.	Suggest an additional comment about the scope for a "Turnkey" SVC installation. The limit of the SVC supply is the HV side of the transformer bushing. The equipment and services include design, engineering, manufacture, routine testing at factories, transportation to the site, installation supervision, commissioning, spares, tools, and training, civil works and installation labor. The estimates are based on a site that has been rough graded.	Black & Veatch has documented this assumption in the report.
Bart Miller	I am just curious as to why the base assumption for 345kV structures was lattice when everywhere I go the preferred structure for 345kV seems to be tubular steel. With the increased size and loads of population centers, more and more the 345kV voltage class is entering more heavily populated areas and lattice towers are not the solution. I see that you do have a multiplier for the tubular, I would just think that in this day, tubular structures tend to be the direction most companies are moving towards.	The Black & Veatch cost calculator allows the user to select either lattice or tubular steel tower structures. WECC will likely use lattice structures since they are used more in open range, which constitutes the majority of the line miles.
PacifiCorp	Like the idea of a calculator, but need more information on the Base Cost. Note long transmission lines can be a mix of terrain multipliers.	All assumptions used in developing the transmission base cost estimates are described in the final presentation and report. The cost calculator allows users to select a mix of terrain multipliers based on the proposed line routing.
PacifiCorp	Need to verify the equipment costs. Also installing equipment in 'green field' versus retrofit environment is big cost differential. Upgrading existing facilities often has ripple effect on related facilities such as station bus or making installation seismic compliant.	Costs are indicative of current market costs based on B&V experience, and all costs were vetted by stakeholders and agreed to be reasonable. The Black & Veatch cost calculator allows the user to select whether the project is a new line or a re-conducted line. All assumptions about re-conducting costs are stated, but they do not include "ripple effects" as these are project-specific and stakeholders did not provide guidance on generic assumptions.
PacifiCorp	Total cost per mile seems too high for the facilities being described.	Costs are indicative of current market costs based on Black & Veatch experience, and all costs were vetted by stakeholders and agreed to be reasonable.

Bill Pascoe, Trans West Express	General comment - I support these recommendations as a package. This is a much improved data set over the WREZ numbers which TEPPC relied upon for the 2011 10-Year Plan analyses.	Black & Veatch thanks all stakeholders who participated in ensuring these recommendations were reasonable and reflected market realities.
Bill Pascoe, Trans West Express	This is a very important slide to document that the \$445M DC converter cost includes the converter AND all of the supporting equipment.	Black & Veatch has documented that the HVDC converter station does include the converter equipment and all major supporting equipment.
Bill Pascoe, Trans West Express	Many (most?) counties would fall into the "other" category that is based on "double the linear ROW rental fee". I would like to see some numerical examples for these "other" counties.	Black & Veatch has documented the BLM land costs used, including the exact cost assumptions for each cost "zone".
Keith White, California Public Utilities Commission	Going beyond the hypothetical line cost calculation on slide 11, another Black & Veatch presentation "120807_BVTxCost_TAS.pdf" provides example benchmarking applications of the transmission line cost methodology (spreadsheet) to four recently completed transmission lines outside of California. CPUC Staff identified prospective versus actual transmission cost comparisons for four recent transmission projects in California: Trans-Bay Cable, Tehachapi, Eldorado-Ivanpah, and Sunrise. The last two of these should be reasonably amenable to the kind of cost benchmarking (versus the cost estimation spreadsheet) done for the four recent non-California projects, by assigning line segments to three categories: new line with new ROW, new line in existing ROW, and reconductor. (An underground section of Sunrise could be excluded.) It would be helpful to see such benchmarking.	The Eldorado-Ivanpah and Sunrise Powerlink transmission projects were considered as candidates to use in benchmarking Black & Veatch 's cost assumptions. However, sufficient information was not available for the Eldorado-Ivanpah project, and the Sunrise Powerlink project was discussed but ultimately excluded because it was considered an outlier in terms of cost.

Keith White, California Public Utilities Commission	It should be explicitly and prominently stated that these are base substation costs for the most straightforward circumstances including flat terrain without access challenges, and without needing to design for subsequent needs. For example, a 500 kV substation under construction in California in large part to support new wind generation in a hilly area, having two 500 kV, one 230 kV and one 138 KV lines, mostly breaker-and-a-half design (with additional breakers for possible future needs) and four 500 kV shunt reactors, has a publicly estimated cost of about \$150-200M excluding contingency and AFUDC, whereas the standard per unit cost factors from slide 13 would give less than half this cost, even when very conservatively multiplying the "per line/XFMR Position" costs by a factor of three to account for the additional breakers included for subsequent needs.	Black & Veatch has documented all assumptions related to the base substation costs, including the fact that they apply to substations sited on flat terrain with easy access.
Keith White, California Public Utilities Commission	Generally, it will be important to attach reasonable uncertainty ranges to major infrastructure investment costs. Useful long-term planning studies will need to find some way to communicate risks and opportunities (option values), not just mid-point estimates.	Black & Veatch was asked to provide single "mid-point estimates" for all costs rather than uncertainty ranges. Uncertainty ranges could be generated by selecting different values and adjusting various parameters within the cost calculator if desired.

STAFF INTERROGATORY #51

INTERROGATORY

Reference: (1) Exhibit B / Tab 1 / Schedule 7 / Attachment 1 / pp. 15-16

Preamble:

Footnote 13 on page 15 of Reference 1 states that “the Niagara region has different, and more difficult, terrain than that of Northwestern Ontario, which may lead to lower construction costs compared to Northwestern Ontario.”

Question(s):

- a) Please explain and/or clarify Footnote 13.
- b) Section 2.2.6 on page 15 of Reference 1 states “CRA used the Handy-Whitman Index and the USD/CAD exchange rate in order to calculate material and index cost growth from 2017 to 2022[...].” Please confirm that the costs in Figure 9 were escalated from 2019 to 2022.
- c) In Figure 9, cost is broken down into materials and construction, which total 100%. How were these percentages determined?
- d) In Figure 9, cost is broken down into materials and construction, which total 100%. Are development costs included in these costs?
- e) In Figure 9, the cost is broken down into materials and construction, which total 100%. Are IDC costs included in these costs?

RESPONSE

- a) The footnote is intended to note that Northwestern Ontario has more varied and difficult terrain than the relatively flat terrain of the Niagara region. In general, construction in more mountainous terrain increases construction and material transportation costs, though neither have been quantified nor included in the cost comparison.
- b) Confirmed.
- c) These percentages represent the fraction of the Niagara Reinforcement project rate base costs for materials and construction as determined by the statement of average rate base shown below which did not provide much detail of separate construction costs. If it were assumed that Niagara Reinforcement project had the same materials verses construction cost split as Bruce to Milton, the \$/km would change very minimally from \$1.66/km to \$1.64/km.

NRLP Statement of Average Rate Base Bridge Year (2019) and Test Year (2020) Year Ending December 31 (\$ Millions)			
Line No.	Particulars	2019	2020
	<u>Electric Utility Plant</u>		
1	Gross plant		
	Transmission Corridor Land and Rights	1.00	1.00
	Towers and Fixtures	78.43	78.43
	Conductors and Devices	40.00	40.00
	Roads and Trails	0.00	0.00
	Total Gross Plant	119.43	119.43
2	Accumulated Depreciation	0.79	2.38

- d) The source document from HONI indicates that development costs are included.
e) The source document from HONI indicates that IDC costs are included.

STAFF INTERROGATORY #52

INTERROGATORY

Reference: (1) Exhibit C / Tab 2 / Schedule 4 / p. 1
(2) OEB Minimum Technical Requirements for the Reference Option of the E-W Tie Line / November 9, 2011
(3) EB-2017-0182 / NextBridge Argument-in-Chief / October 22, 2018
(4) Exhibit C / Tab 2 / Schedule 4, p. 3, paragraph 9
(5) Exhibit C / Tab 2 / Schedule 4, p. 4, paragraph 11
(6) Exhibit C / Tab 2 / Schedule 4, p.30, paragraph 99
(7) Exhibit C / Tab 6 / Schedule 1

Question(s):

- a) Please state what year the construction costs are based in (e.g. 2021 or 2022 dollars).
- b) Please confirm that the design and technical specifications of the project comply with the OEB's Technical Requirements outlined in the designation proceeding (Reference 2).
- c) At the time of the LTC proceeding, NextBridge argued that the construction cost would fall within the range of \$737M +/- 10% (Reference 3). What band of uncertainty exists around the forecast budget of \$737.1M at this point in time?
- d) Reference 4 states that "[...] most costs are now essentially fixed for the majority of activities." Please identify which costs are fixed and which are not yet fixed. For the costs that are fixed, please indicate whether the fixed cost is consistent with the budgeted amount, and if not, provide the difference and explain any discrepancy. For the costs that are not yet fixed, indicate when NextBridge expect these costs to be finalized.
- e) Reference 5 states that "As of the date of this filing, nearly 90% of forecasted construction costs have been contracted [...]" Please identify construction costs that have not been contracted. When does NextBridge expect these costs to be finalized?
- f) Reference 6 states that "NextBridge has no contingency in the construction costs." Please explain how NextBridge plans to address any future construction budget increases when there is no remaining contingency.
- g) Please identify which cost category of the table on Exhibit C, Tab 2, Schedule 4, p. 1 includes the cost of the Capital Cost Recovery Agreement described in Reference 7.

RESPONSE

- a) The construction costs are in nominal dollars. The remaining spend has been escalated to the appropriate year of spend. As an example, spend in 2022 is in 2022 dollars.

- b) NextBridge's design and technical specifications of the East-West Tie line comply with the OEB's Technical Requirements outlined in the designation proceeding – with two exceptions. As indicated in its Leave to Construct application (EB-2017-0182, Exhibit C, Tab 2, Schedule 1, Page 1 to 9) NextBridge took exception to the 20 ohm maximum tower grounding resistance requirement and the requirement to use Stockbridge dampers from the designation proceeding.

Preliminary soil resistivity tests on the East-West Tie line indicated that the 20 ohm limit prescribed in the technical requirements would be difficult to achieve with reasonable effort and at a reasonable cost. Instead NextBridge achieved the technical requirement for lightning outage rates by installing surge arresters on three phases of one circuit. This is a proven effective mitigation in areas of high soil resistivity such as the Canadian Shield.

Instead of using Stockbridge-type vibration dampers, NextBridge used spiral vibration dampers to dampen shield wires, which are more effective than Stockbridge-type vibration dampers on small diameter conductors.

- c) There is no uncertainty around the \$737 million of construction costs. Please refer to Staff #42.
- d) The largest fixed cost in the forecast is the EPC contract, which is consistent with the forecasted amount. Additionally, materials have also been contracted at a fixed price which is consistent with forecast. Work to be completed by contractors other than the EPC contractor has also been contracted and is expected to align with the forecast.
- e) The vast majority of the uncontracted costs are for costs that will not be contracted or are already finalized under firm agreements and do not require further contracting. For example, the labour costs of parent/partner personnel supporting the East-West Tie line will not be contracted as it is an internal cost. Additionally, the majority of Indigenous costs are under firm executed agreements and are already finalized or paid. Land costs are also under firm agreements with landowners and considered finalized or already paid.
- f) See answer c) above.
- g) NextBridge is not seeking the recovery of costs under the Customer Connection and Cost Recovery Agreement with Hydro One.

STAFF INTERROGATORY #53

INTERROGATORY

Reference: (1) Exhibit C / Tab 2 / Schedule 4 / Page 30
(2) Exhibit C / Tab 1 / Schedule 1 / Page 39

Preamble:

Reference 1 states:

NextBridge has no remaining contingency in the construction costs. NextBridge's Q4 2019 OEB Quarterly Report and the Response to OEB Request – February 2020 (included in Exhibit C, Tab 1, Schedule 1, Attachment 2 & 4) specifically addresses this allocation of contingency and how it is actively managing the budget in order to contain costs and mitigate risks. Contingency was allocated in a proactive manner with the understanding that known costs (both spent and contracted) would be actively managed to reduce risk and associated cost to the furthest extent possible. This proactive approach to the allocation of contingency also provided increased transparency of NextBridge's forecast of overall construction costs.

Question(s):

- a) Could you please explain, with all the contingency costs allocated, how NextBridge will actively manage and allocate unknown costs?
- b) Based on its forecasted risk allocation, does NextBridge foresee it spending all the allocated contingency costs? If so, why?

RESPONSE

- a) In its November 8, 2019 Quarterly Report in Appendix A submitted in EB-2017-0182, NextBridge explained how, with all the contingency costs allocated, NextBridge will actively manage and allocate unknown costs. The approach set forth in Appendix A has not changed.
- b) Yes. In NextBridge's February 26, 2020 submittal in EB-2017-0182, (also filed in the Application, Exhibit C, Tab 1, Schedule 1, Attachment 4) at pages 3-11 there is a detailed explanation of the allocation of contingency among the cost categories. As also explained at Exhibit C Tab 2 Schedule 4 Page 4 of 34 of the Application, nearly 90% of the forecasted construction costs have been contracted, which significantly mitigates the need for additional contingency. For example, the amounts in for Indigenous Participation have been firmly contracted for in the participation

agreements with Indigenous communities for all Reserve crossing permits and economic participation.

STAFF INTERROGATORY #54

INTERROGATORY

Reference: (1) Exhibit C / Tab 1 / Schedule 1 / p. 2 / Table 1
(2) Exhibit C / Tab 2 / Schedule 1 / p. 1

Preamble:

NextBridge requests that the gross plant for the Test Year consist of the following items which are described in Table 1, assuming an in-service date of March 31, 2022.

Reference 2 states:

NextBridge's gross assets are made up of costs expected to be incurred to put the East-West Tie line in service: development costs, phase shift costs, construction costs and spare strategy costs. These tables can be found at Exhibit C, Tab 4, Schedule 1. Each of the cost categories are discussed in detail in this Exhibit in Schedules 2, 3, and 4.

The Rate Base Gross Plant is \$775.2 million which consists of Construction Costs of \$737.1 million, Phase Shifting of \$5.3 million, Spare Strategy of \$1.2 million and OEB-approved Development Costs of \$31.2 million.

Question(s):

- a) Please explain the project savings that have occurred due to the \$5.3 million of Phase Shifting that occurred in the Designation stage.
- b) Please explain the savings to ratepayers due to the \$1.2 million Spare Strategy.

RESPONSE

- a) NextBridge outlines the project savings that have occurred due to the spending of \$5.3 million at the Designation stage in Exhibit C, Tab 2, Schedule 3 of the Application. Below are further details to what is outlined in Exhibit C:

EA Review Participation:

There were project savings associated with NextBridge providing the various government review agencies, such as the Ministry of the Environment, Conservation, and Parks, Reserves and with Ministry of Natural Resources and Forestry with upfront and additional data to facilitate their review prior to the initiation of project permitting, as this information materially supported the ability to secure permits prior to commencing project construction. By sourcing this data and refining the East-West

Tie line route prior to project permitting, NextBridge was able to provide this information to government permitting agencies expeditiously after the approval of the Amended EA Report to reduce some of the delay that occurred in providing permit approvals, thus reducing schedule delay costs.

Land Optioning:

Early engagement supported the result of a high percentage (96%) of landowners and interest holders executing option agreements, which reduced the number of parcels potentially required to be subject to a costly, and sometimes lengthy, regulatory expropriation process. Early engagement, therefore, helped ensure timing certainty for the acquisition of land and prevented potential schedule delays and associated costs.

The early initiation of land optioning negotiations reduced overall project risks and provided greater cost certainty (i.e., reduced costs) by allowing NextBridge to secure a route with a comparatively nominal initial cost, when compared to outright payment for property rights, paired with reasonable financial incentive upfront. By securing option agreements upfront based on a well-defined and transparent compensation program land values were locked in early and not subject to changes in market values, thus reducing costs.

The early initiation of land optioning also allowed for early access to support surveys for the EA (e.g., geotechnical investigations) and engineering in order to identify a specific route in the Leave to Construct Application. Lastly, the approach allowed for the early identification of landowner and potential property title issues, which, as explained, provided greater cost certainty and reduced costs by not exposing the land acquisition process to changes in market conditions and expropriation proceedings.

First Nation & Métis Land Acquisition Negotiation:

The East-West Tie line parallels the existing East-West Tie line and crosses Reserve land. Negotiations of agreements were essential to the East-West Tie line's ability to use the land of Pays Plat, Pic Mobert, and Michipicoten First Nations to route the line. As a result of incurring these costs, NextBridge will be able to construct the East-West Tie line through these Reserve lands and avoid costly re-routes. These agreements are complex and also involve the Federal government as a signatory. By doing this activity early in the project lifecycle NextBridge reduced the risk of schedule delay costs while waiting for these agreements to be finalized.

Economic Participation:

As noted by Bamkushwada during the hearings of EB-2017-036 in their written submission (attached to this interrogatory), in order to meet the Duty to Consult accommodation in the form of economic participation must be made for communities

to allow the East-West Tie line to proceed in their traditional territories. They also note that to meet the Duty to Consult takes time (page 2, para.7-8). By spending costs related to finalizing agreements for Indigenous economic participation early in the project lifecycle, NextBridge greatly reduced the risk of schedule delay costs from communities not providing their permission for permits to be issued (such as a Federal Section 28.2 permit to cross Reserve lands, which community consent is required).

- b) Due to the long procurement times of transmission towers, good utility practice is to have a spare strategy to procure a minimum requirement of towers and associated components to address potential events. The spares were sourced with favourable pricing as part of the original tower procurement to minimize costs of the supplier beginning another and separate production cycle for this specific type of tower. Additionally, the raw material price of steel was locked in at a favourable rate. In the event of a tower failure, without the upfront spare strategy, NextBridge would have paid just-in-time costs for production and expedited shipping, which would be higher than pre-ordering the towers as NextBridge has done under its spare strategy. Therefore, ratepayers will benefit from NextBridge proactively and prudently having sufficient spare towers, so it is not required to pay higher costs for just-in-time procurement.



OLTHUIS KLEER
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B A R R I S T E R S A N D S O L I C I T O R S

Kate Kempton
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June 1st, 2018

Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto ON M4P 1E4
Attn: Ms. Kirsten Walli
Board Secretary

Dear Ms Walli:

Re: NextBridge motion for the dismissal of Hydro One's Lake Superior Link Application
OEB File No. EB-2017-0364
Written Submission- BLP First Nations

Pursuant to the Ontario Energy Board ("OEB") Procedural Order No. 2 dated May 18, 2018, Bamkushwada Limited Partnership ("BLP") and the following First Nations: Pays Plat First Nation, Fort William First Nation, Red Rock Indian Band, Pic Mobert First Nation and Biigtigong Nishnaabeg (all five First Nations with BLP the "BLP First Nations") are filing their written submission to the OEB. A book of authorities is also being filed with this written submission.

Please contact the undersigned if you have any questions.

Yours truly,

Olthuis, Kleer, Townshend LLP

JULIE-ANNE PARISEAU FOR KATE KEMPTON

cc. Chief Patricia Tangie, Michipicoten First Nation
 Chief Michano, Biigtigong Nishnaabeg
 Chief Mushquash, Pays Plat First Nation
 Chief Collins, Fort William First Nation

Chief Desmoulin, Pic Mobert First Nation
Chief Wawia, Red Rock Indian Band
Oliver MacLaren, Olthuis Kleer Townshend LLP

Filed: 2018-06-01
EB-2017-0364
Written Submission
for Intervenor BLP First Nations

ONTARIO ENERGY BOARD
EB-2017-0364

BAMKUSHWADA LIMITED PARTNERSHIP (“BLP”)
and
BIIGTIGONG NISHNAABEG
PAYS PLAT FIRST NATION
FORT WILLIAM FIRST NATION
PIC MOBERT FIRST NATION
RED ROCK INDIAN BAND
 (“Five First Nations”)
(BLP and the Five First Nations being “BLP First Nations”)

WRITTEN SUBMISSION
FROM
BLP First Nations

To:

Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto ON M4P 1E4
Attn: Ms. Kirsten Walli
Board Secretary

Introduction

1. Hydro One Networks Inc. (“HONI”)’s application for Leave to construct (“LTC”) must be dismissed.
2. Under section 96(2) of the *Ontario Energy Board Act*, the Ontario Energy Board (“OEB”) at the LTC stage, must consider whether the HONI project (the “HONI Project”) is in the public interest by assessing the interests of consumers with respect to prices (and the reliability and quality of electrical services).
3. The Duty to Consult and Accommodate (“Duty”) Indigenous peoples will have to be fully met before any construction on the HONI line starts, and before any impacts on Indigenous peoples occur. This is a constitutional Duty that cannot be ignored. It trumps non-constitutional law.
4. While the OEB does not directly consider whether the Duty has been or will be met as part of the LTC decision, it does have to know that the Duty must be met before construction starts, and has to therefore account for delays and costs that will be required to meet it.
 - (a) The HONI Project already imposes a delay (of one year). But in order for the Duty to be met both before and after LTC is granted – and in all cases before construction actually starts – significantly more delay would be required, much greater than one year. Such delays will impose greater and greater costs on the BLP First Nations, that HONI will have to account for and make up. This will drive the cost of the HONI Project up a fair bit.
 - (b) At least three matters will require time to address in order to meet the Duty, and will thus cause delays (likely significant) beyond the short time frames proposed by HONI: (i) the Pukaskwa National Park (“Park”); (2) the Environmental Assessment (“EA”) and the First Nations’ contributions to it, of highly sensitive information; and (3) the economic accommodation/participation.
5. HONI says that the timing of the HONI Project is but one factor that the OEB has to consider at LTC; that costs are another factor. HONI then goes on to assert that the costs of the HONI Project are substantially lower than those of the Nextbridge project (of which BLP is a part). **This is not correct.**
 - (a) The delay of the HONI Project is likely not just one year. It will likely be several years. This is the likely time period required to have the Duty met.
 - (b) The costs may end up being higher, even a lot higher, than the Nextbridge project. Such costs will be caused by the delays, and by the harm to the BLP First Nations that such delays will impose.
6. Why will the requirement to meet the Duty require time (further delay) and costs for HONI? The Duty must always be carried out with the intent of *substantially addressing*

the concerns of the affected Indigenous peoples (ie: concerns about project impacts). To prove that such intent was operating, one has to show *that all good faith efforts* were made to substantially address those concerns, through provision of *adequate accommodation measures*. **That requires time. And it requires money. Both far more than HONI has allowed for in its LTC application.**

7. The Duty has both procedural and substantive elements.
 - (a) The procedural requirement is timing: that the Duty must be fulfilled – the consultation engagement completed and accommodation measures in place – before the project construction starts and impacts start. **Timing requirements here will yield a greater delay than one year.**
 - (b) The substantive requirement is results: to yield (or to make all good faith efforts to yield) accommodation measures sufficient to address the BLP First Nations' concerns. **Accommodation requirements here will yield much higher costs than HONI has accounted for.**
8. On the timing and delay: Time must be sufficient to fulfill the Duty. That means there needs to be time to:
 - (a) fully allow the BLP First Nations to understand the potential impacts of the HONI Project on them;
 - (b) allow HONI to fully understand the BLP First Nations' concerns about those impacts;
 - (c) allow HONI and the BLP First Nations to take all reasonable steps in good faith to substantially address those concerns through accommodation measures.¹
9. Time must be available before LTC is granted, in regard to the routing and design of the HONI Project – especially where the line location differs from the Nextbridge project, as in the Park. HONI cannot meet those requirements in the few short months before LTC would be granted. There are two Aboriginal title claims underway covering the Park area, and those two BLP First Nations do not agree that HONI may impact the Park any more than it already has. They say HONI needs their consent to do anything else. HONI does not appear to agree. This huge disagreement, and the impacts of the title claims processes, will take time to work through. Possibly years.
10. For all other matters, time has to be available after a conditional LTC is granted but before construction actually starts. The 12 or 14 month time period now estimated, is wholly inadequate for this purpose. There cannot be any engagement on any accommodation measures like economic returns or participation, in the time period prior to LTC. It would have to start afterward. There is an exclusivity contractual requirement

¹ *Delgamuukw v British Columbia*, [1997] 3 SCR 1010 [*Delgamuukw*] at para 168; *Mikisew Cree First Nation v Canada (Minister of Canadian Heritage)*, 2005 SCC 69 [*Mikisew Cree*] at para 64.

that BLP First Nations are bound to with Nextbridge. Even if there weren't, the OEB cannot effectively compel the BLP First Nations to compete with themselves by entering into negotiations with a bidder for ownership in a project that is competing with the one they already own. To do so would cause the BLP First Nations harm in any future business or economic accommodation engagements. What companies are going to spend all the time and money entering into deals with these First Nations for projects in the future, when they could all be undone? Engagement between HONI and the BLP First Nations about economic accommodation cannot commence until the agreement with Nextbridge expires, and there is no longer any competition, which means after LTC is granted to HONI and Nextbridge is out.

11. Finally, the real possibility of legal challenges to any approvals issued to HONI that would or do breach the Duty, must be factored in. Resolving such challenges will cause delays, and costs.
12. On accommodation measures and costs: The real human and financial costs and losses that the BLP First Nations will suffer as the result of a one year delay are significant and would have to be made up. But the delay is likely to be years, and the costs to be made up thus exponentially larger.

1. How the Duty Applies in this Case

13. While the OEB might not be able to directly rule on whether the Duty was met at the LTC stage, it cannot:
 - (a) effectively *prevent* the Duty from being met; or
 - (b) fail to *account* for what the meeting of the Duty requires, as that affects the “interests of consumers in respect of price, reliability and quality.”

Because regardless of anything else, the Duty must be met fully before the first shovel digs into the ground to construct the project. This is the law. No Crown or statutory entity can avoid, shirk or breach this law.

14. The OEB's decision-making processes must be consistent with s. 35 of the *Canadian Constitution* and its purpose of advancing reconciliation.² Because the Duty is constitutional in nature, it lies “upstream” of any statutory regime and cannot be ousted by legislation.³ The OEB must do what the Duty requires to the extent that its statutory powers allow.⁴ That means in this case that the OEB must not prevent the Duty from

² *Quebec (Attorney General) v Canada (National Energy Board)*, [1994] 1 SCR 159 at 185; *Clyde River (Hamlet) v Petroleum Geo-Services Inc*, 2017 SCC 40 [*Clyde River*] at paras 36-37; *R v Sparrow*, [1990] 1 SCR 1075 [*Sparrow*] at 1106; *Mikisew Cree* at para 1.

³ *Clyde River* at para 19; *Wahgoshig First Nation v Her Majesty the Queen in Right of Ontario et al*, 2011 ONSC 7708 at para 41; *West Moberly First Nations v British Columbia (Chief Inspector of Mines)*, 2011 BCCA 247 at para 106.

⁴ *Rio Tinto Alcan Inc v Carrier Sekani Tribal Council*, 2010 SCC 43 [*Carrier Sekani*] at para 61; *Chippewas of the Thames First Nation v Enbridge Pipelines Inc*, 2017 SCC 41 [*Chippewas of the Thames*] at para 32.

being met (by the Crown and the proponent), and must account for what meeting the Duty will require.

Cannot Prevent the Duty

15. The OEB cannot prevent the Duty from being met (including in later processes), by granting LTC at a time or in such a way that would render the Duty moot or meaningless afterward.
16. The Duty is the Crown's at law; in this case, the Crown has delegated it to the proponent (HONI).
17. The OEB must not render its decision on LTC until *after the Duty has been met in respect of the routing and design*. LTC is focussed on these core aspects of a project – routing and design. Costs and timing of a project are grounded in the route and design. Major routing and design aspects cannot readily be changed after LTC – and if they are, this would change the very basis on which LTC was initially granted, and require a new or amended LTC application process.⁵
18. The LTC decision effectively locks in route and design – things that future decisions (such as the EA) cannot undo or fix. The Duty must be met before LTC, in respect of route and design. HONI agrees with this.⁶
19. The Duty must commence at the earliest possible planning stages for a project, and must be completed *before* final decisions about a matter are made, for example:
 - (a) before the transfer of ownership or control of tree farm licences;⁷
 - (b) before the sale or sub-leasing of lands subject to a claim;⁸
 - (c) before a change in a regulatory regime applicable on privately owned lands;⁹ and
 - (d) before making an agreement to purchase electricity from a hydro-electricity project.¹⁰
20. Not all of the Duty in respect of the project has to be met before and as a condition of granting LTC. Some consultation and accommodation on some other aspects of the project can be completed later, such as during the EA and as a condition of the EA approval. More detailed environmental management issues about the line, and

⁵ *Union Gas Ltd and Quaggyotto et al*, (1974), 1 OR (2d) 751 (CA); *Hydro One Networks Inc (Re)*, 2010 LNOEOB 365 at paras 26-27.

⁶ See the testimony of Ms. Croll, p. 101, lines 1-12 of the Transcript from May 17, 2018 Technical Conference.

⁷ *Haida Nation v British Columbia (Minister of Forests)*, 2004 SCC 73 [*Haida Nation*] at paras 35, 46-47.

⁸ *Musqueam Indian Band et al v City of Richmond et al*, 2005 BCSC 1069 at paras 114 and 116.

⁹ *Hupacasath First Nation v British Columbia (Minister of Forests) et al*, 2005 BCSC 1712 at paras 201-233.

¹⁰ Although the Court found that in that case, the agreement would not adversely affect Aboriginal rights, it held that the agreement was "Crown conduct": *Carrier Sekani* at para 81.

compensatory accommodation measures (economic participation) are types of consultation and accommodation that can occur after LTC is granted. Note that the issuance of LTC would have to be conditional on the Duty being met in regard to these, and in fact, all, issues, pertaining to the project.

21. But as stated, the Duty about the route and core design, must be completed before the granting of LTC. To lock in the route and core design is to foreclose a change to the route. A route change is a form of accommodation measure. Accommodation measures cannot be foreclosed unless the Duty has been met about that issue (i.e. route). It is not possible to consult about a *fait accompli*.
22. If the Duty does not allow meaningful change to be made in the decision at the conclusion of the process, so-called consultation will be nothing more than inviting Indigenous peoples to “blow off steam.”¹¹ To fulfill the Duty, the process cannot foreclose accommodation from the outset.¹² Where accommodation is foreclosed from the beginning, it is open to infer that meaningful consultation did not occur and that the Crown is not negotiating in good faith. If a decision-making process leaves few if any meaningful choices in which the First Nation can be accommodated, such that the final decision is mere rubber stamping of earlier steps, this will render the Duty meaningless, and breached.¹³

Must Factor in What Duty Requires

23. The OEB cannot ignore the Duty and its effect on prices, or costs, of the project. The OEB can and must consider at LTC the “interests of consumers with respect to prices.” It must consider how the Duty must be met in this case, and how the meeting of that Duty will impact such costs. This is as much a relevant factor in the costs of the project as anything else, such as design of towers or routing of the line.
24. The OEB must factor in all relevant matters when it assesses prices, or costs. No decision-maker may fail to consider relevant factors, but must “be seen to have turned its mind to all the factors relevant to the proper fulfilment of its statutory decision-making function.”¹⁴ In this particular case, the OEB knows that the Duty applies and must be met, and that accommodation measures are to include economic participation, since the Crown gave Aboriginal consultation and economic participation high priority at the beginning of this entire new process – the designation stage – in the letter from the Minister of Energy

¹¹ *Haida Nation v British Columbia (Minister of Forests)*, 2004 SCC 73 [*Haida Nation*] at para 46; *Mikisew Cree* at para 54.

¹² *Wii'litswx v British Columbia (Minister of Forests)*, 2008 BCSC 1139 at para 243.

¹³ Jack Woodward, *Native Law*, Vol 1 (looseleaf 2018, release 1), ch 5 at 88.2-88.3; *Musqueam Indian Band v British Columbia*, 2005 BCCA 128 at para 95; *Squamish Indian Band v British Columbia (Minister of Sustainable Resource Management)*, 2004 BCSC 1320 at para 74; *Sambaa K'e Dene Band v Canada (Minister of Indian Affairs & Northern Development)*, 2012 FC 204 at para 165.

¹⁴ *Oakwood Development Ltd v St-François Xavier*, [1985] 2 SCR 164 at para 16; *Hilewitz v Canada (Minister of Citizenship and Immigration)*; *De Jong v Canada (Minister of Citizenship and Immigration)*, 2005 SCC 57 at para 70.

(“MOE”) to the OEB dated March 29, 2011, which the OEB incorporated into its filing requirements.¹⁵ Even had the MOE not explicitly required consultation and economic participation to be factors in this process, the Duty always applies anyway.

25. The OEB’s LTC decision would be judicially reviewable as unreasonable if it granted a LTC approval when it knew or ought to have known that delays and costs were likely to escalate as a result of the Duty having to be met prior to construction starting, and not taking these fully into account.

2. HONI’s LTC Application and Applying the Duty to it: Delays and Costs

a. Fulfilling the Duty will delay the HONI LSL Project

26. There must be sufficient time for consultation to be meaningful, as opposed to a “box checking” exercise:

The Crown must give the aboriginal group a reasonable amount of time to respond to a referral and engage in consultation. The Crown must be prepared to let consultation run its course; it cannot abort the consultation process because of other time pressures where the aboriginal group is actively engaged in the consultation process, there remain outstanding issues, and there is value to further discussions.

...

A reasonable consultation period is required to give aboriginal groups time to consider the proposed decision, gather any internal information, and seek any outside advice on technical issues. A reasonable time period must also take into account the volume of referrals that the aboriginal group is handling (which in some cases is extremely high) as well as its capacity level (in many cases, there is no person designated to handle referrals due to the group’s inability to fund such a position).¹⁶

27. It has taken Nextbridge five years to consult and accommodate the BLP First Nations for the EWT Project.¹⁷

¹⁵ Letter from the MOE to the OEB dated March 29, 2011 filed as Exhibit D of Chief Collins’ Affidavit filed in the file EB-2017-0364 on May 7, 2018; OEB, “Filing Requirements for Designation Applications,” Appendix A to Phase 1 Decision and Order, ss 3, 10 (2-3, 13-14).

¹⁶ Jack Woodward, *Native Law*, Vol 1 (looseleaf updated 2017, release 4), ch 5 at 97 [footnotes omitted]; *Squamish Nation v British Columbia (Community, Sport and Cultural Development)*, 2014 BCSC 991 at para 214; *Dene Tha’ First Nation v Canada (Minister of Environment)*, 2006 FC 1354 at para 116, aff’d *Canada (Minister of Environment) v Imperial Oil Resources Ventures Ltd*, 2008 FCA 20; *Tsilhqot’in v British Columbia*, 2007 BCSC 1700 at para 1138; *Moulton Contracting Ltd v British Columbia*, 2013 BCSC 238 at para 293.

¹⁷ See paras 15 and 19 of the Affidavit from Chief Collins, para 9 of the Affidavit from Chief Desmoulin, and para 10 of the Affidavit from Chief Michano filed in the file EB-2017-0364 on May 7, 2018.

28. It took HONI and GLPT about three years of engagement just to come up with an outline agreement on how ownership would work, as part of the designation application.¹⁸
29. It is an insult to the BLP FNs and the Constitution of Canada (where the Duty arises) to propose as HONI is doing, that the Duty can be met in such unreasonably short time frames. If the OEB were to issue LTC to HONI, such that adequate time and effort was effectively not provided to fulfill the Duty, then these proposed time frames would be imposed on the BLP First Nations. And this would be a breach of the Duty. Time to consult and accommodate about the route and design has to be adequate to fulfill the Duty before LTC; and time to consult and accommodate about everything else has to be adequate to fulfill the Duty after LTC and before construction starts.
30. Consultation requires the time, attention and human capital of First Nation leaders and their designates. A proponent or the Crown cannot create such a short time frame to begin with and then effectively compel the First Nations to drop everything else to meet it. That is not good faith. That is not procedurally fair. HONI acknowledges that lack of capacity is an issue for First Nations.¹⁹ HONI acknowledges that First Nations are often overwhelmed with information notices and other requests for consultation.²⁰ Yet these capacity problems cannot be fixed purely by throwing money at the situation. Time to enable the overworked leadership and their designates to participate – has to also be provided. First Nations should not be made to jump just because a proponent snaps its fingers.
31. The BLP First Nations informed HONI of this stress on their time and attention and resources.²¹
32. Consultations between HONI and the BLP First Nations have not commenced. HONI met with BLP First Nations on April 6, 2018 to deliver a presentation of the HONI Project.²² This meeting was to discuss HONI's need to start consultation but was not consultation itself.
33. HONI acknowledges the importance of building trust as a key aspect of consultations.²³ HONI admits that the relationship now between HONI and the BLP First Nations, about this project, is "bad".²⁴ HONI refused to abandon this LTC application when asked directly on behalf of the BLP First Nations, if it would. It intends to proceed over the objections of the BLP First Nations. This is despite stating on the record at the

¹⁸ See Exhibit KT2.1 submitted by Nextbridge at the Technical Conference on May 17, 2018. See lines 27-37, p. 12 of 74 of Exhibit KT2.1 and p.55-56 of the Transcript from May 17, 2018 Technical Conference.

¹⁹ See the testimony of Ms. Goulais at p.238, line 16-28 and p. 239, lines 1-15 of the Transcript from May 17, 2018 Technical Conference.

²⁰ *Ibid.*

²¹ See EB-2017-0364, LSL Motion Additional Evidence, Attachment 13, p. 2 of 3.

²² Introduction & Summary, Lake Superior Link Project - Additional Evidence at p.12.

²³ See Exhibit KT2.2 submitted by Nextbridge at the Technical Conference on May 17, 2018. See p. 13 and 14 of 122 of Exhibit KT2.2 and the testimony of Ms. Goulais at p.58-60 of the Transcript from May 17, 2018 Technical Conference.

²⁴ See lines 14-19, p. 113 of the Transcript from May 17, 2018 Technical Conference

designation hearing that it understands the value of the “social licence,”²⁵ which it admits includes First Nation approval.²⁶ The BLP First Nations cannot now trust HONI’s commitments at all. Given the damage to the relationship between HONI and the BLP First Nations, about this project, one has to question whether trust could be rebuilt and if so how long it would take. Certainly a long time. This will cause significant delays in the consultation engagement.

34. These delays would have to be allowed for – to the extent reasonable. The content of the Duty is assessed on the standard of reasonableness.²⁷
35. Given that HONI knew that the BLP First Nations had spent years working through all accommodation measures with Nextbridge, and that they include ownership of that project, HONI would be reasonably expected to know that undoing all of that – caused by a competitive bid being successful – would impose significant hardships on the First Nations - which it would.²⁸ Thus, allowing, in fact requiring, significant time and effort to build trust and relationship – let alone to try to accommodate for all the damage – would be more than reasonable.
36. There are at least three subject matters in this case that will cause significant time to be spent meeting the Duty, and thus cause significant delays:
 - (a) the Park;
 - (b) the EA, and the provision of the BLP First Nations’ information for it; and
 - (c) economic accommodation/participation.

The Park

37. The issue of the routing of the HONI line through the Park will take a lot of time and effort to resolve, or to make all good faith efforts to try to resolve which is the minimum of what the Duty requires.
38. HONI cannot piggyback on Nextbridge’s consultation with and accommodation of Indigenous peoples, or the EA, in respect of the Park.²⁹ HONI admits this.³⁰

²⁵ See Exhibit KT2.2 submitted by Nextbridge at the Technical Conference on May 17, 2018. See Executive summary at p. 2 and p. 39 of Exhibit KT2.2.

²⁶ See the testimony of Ms. Goulais from p.107-109 of the Transcript from May 17, 2018 Technical Conference. See also Ms. Goulais testimony at p. 58 of the Transcript from May 17, 2018 Technical Conference.

²⁷ *Haida Nation* at para 62.

²⁸ See paras 15, 19 and 34 of the Affidavit of Chief Collins and testimony of Chief Collins, p. 14, lines 12-20 and p. 23, lines 5-16 of the Transcript from May 16, 2018 Technical Conference; See para 10 of the Affidavit of Chief Michano; See para 9 of the Affidavit of Chief Desmoulins and testimony of Chief Desmoulins, p. 17, lines 1-28 and p. 18, lines 1-4 of the Transcript from May 16, 2018 Technical Conference

²⁹ See testimony from Mr. Evers of the Minister of the Environmental and Climate Change, p. 167, lines 18-25 of the Transcript from May 16, 2018 Technical Conference.

39. The routing of the line through the Park is hotly contested.
40. Two of the BLP First Nations – Pic Mobert First Nation and Biigtigong Nishnaabeg – are actively pursuing Aboriginal title claims in court, and the areas claimed overlap with the Park.³¹ Both say that HONI will require their consent before any further development may occur in the Park.³² HONI does not appear to agree with this.³³
41. Yet HONI acknowledges that when Aboriginal title claims exist and affect a development about which the Duty is owed, this can lead to serious delays to try to figure out if and how such development can occur so as to not render such title useless.³⁴
42. The Supreme Court of Canada goes even further. It says that in many cases there is a risk of proceeding on lands claimed for Aboriginal title, without the First Nations’ consent. If such a claim succeeds, the Crown runs the risk of having to cancel a project that it approved without the title-holder’s consent.³⁵ When a claim is particularly strong, such as shortly before a court declaration of title, the Crown must take steps to preserve the Aboriginal interest pending final resolution of the claim.³⁶
43. Strong Aboriginal title claims push the Duty to the high end of the spectrum. This means that the content of the Duty must be comprehensive and all possible efforts to resolve concerns must be made.³⁷ This takes time – a lot of time.
44. While HONI’s line through the Park might not *permanently* take up more than the current right of way, there will likely be impacts on other lands in the area at least during construction, that the two BLP First Nations do not consent to. The First Nations are concerned that there would have to be many “laydown areas” between the helicopters’ points of origin and the places on the right of way where work is occurring, both of which will be constantly moving.³⁸
45. Further, replacing older towers in the Park with newer bigger ones essentially guarantees that those towers and lines will be there for a longer period of time, keeping that right of way land unavailable to be returned to the First Nations as title land for a much longer period of time.

³⁰ See the testimony of Ms. Croll, p. 22, lines 27-28, p. 23, lines 1-12, p. 27, lines 15-23 and p. 28, lines 3-9 of the Transcript from May 17, 2018 Technical Conference. See also the testimony of Ms. Goulais, p. 93, lines 5-12 of the Transcript from May 17, 2018 Technical Conference.

³¹ See paras 4-9 of the Affidavit of Chief Desmoulin and paras 4-9 of the Affidavit of Chief Michano filed in the file EB-2017-0364 on May 7, 2018.

³² See para. 8 of the Affidavit of Chief Desmoulin and para. 9 of the Affidavit of Chief Michano filed in the file EB-2017-0364 on May 7, 2018.

³³ See the testimony of Ms. Goulais, p. 92-94 of the Transcript from May 17, 2018 Technical Conference.

³⁴ See Ms. Goulais’ testimony at p.100, lines 6-14 of the Transcript from May 17, 2018 Technical Conference.

³⁵ *Tsilhqot’in Nation v British Columbia*, 2014 SCC 44 [*Tsilhqot’in*] at para 92.

³⁶ *Tsilhqot’in* at para 91.

³⁷ *Haida Nation* at paras 44, 47.

³⁸ See the testimony of Chief Michano, p. 9, lines 2-10 of the Transcript from May 16, 2018 Technical Conference.

46. Further still, the construction via helicopter will cause significant impacts on the exercise of other rights of the BLP First Nations in the area. Ground disturbance, the presence of humans, noise of helicopters and construction, and air pollution would drive wildlife out of their regular habitats, potentially to places where harvesters can access them only with great difficulty or not at all.
47. All of this would have to be resolved, as a routing issue, prior to the LTC decision being made. This will take a long time – much longer than a few short months. It could well take several years. Even if this were left to be resolved later, the LTC would have to be conditional on the Duty being met later. Such Duty after LTC would also take a long time to be met. And again, the Park routing in no way overlaps with the Nextbridge line and in no way duplicates any of the consultation or accommodation that Nextbridge has already undertaken.
48. There is a significant risk that in carrying out the Duty, the two title-claiming BLP First Nations, and HONI, will reach an impasse on the routing of the line through the Park. This would then lead to one of three possible scenarios: 1) HONI goes back to the OEB seeking a re-routing of the line; 2) the First Nations launch a legal challenge if HONI intends to proceed with the line through the Park over their objections; or 3) the First Nations lie down and accept the imposition without a fight. The last scenario is not likely. The first two would both impose significant delays before construction was able to start.

The Environmental Assessment

49. As part of the EA, in accordance with best EA practices, BLP First Nations provided NextBridge with sensitive and confidential Traditional Ecological Knowledge ("TEK") and Traditional Land Use Study ("TLUS") information.
50. These studies contain very sensitive information which was given to Nextbridge under confidentiality agreements.³⁹ They were provided to their project partner, after years of trust had been built up.
51. The BLP First Nations who participated in these studies and provided the confidential information do not allow Nextbridge to release the information to HONI.⁴⁰ HONI will thus have to build such trust first with the BLP First Nations, and then if and when trust is built, to engage with them to undertake such TLUS and TEK studies unique to the HONI Project.
52. HONI acknowledges the importance of building trust as a key aspect of consultations.⁴¹ Without it, highly sensitive TLUS information will not likely be willingly disclosed.

³⁹ Affidavit from Chief Collins at paras 21 and 22 filed in the file EB-2017-0364 on May 7, 2018.

⁴⁰ Affidavit from Chief Collins, President of BLP and Chief of Fort William First Nation at paras 21, 22 filed in the file EB-2017-0364 on May 7, 2018.

⁴¹ See Exhibit KT2.2 submitted by Nextbridge at the Technical Conference on May 17, 2018. See p. 13 and 14 of 122 of Exhibit KT2.2 and p.58-60 of the Transcript from May 17, 2018 Technical Conference.

53. In order to build the requisite trust to acquire such culturally and spiritually sensitive information, and to undertake studies to acquire it, will require a fair bit of time, and cause delays in HONI's untenable projected schedule.

Economic Accommodation/Participation

54. HONI proposes to finalize economic participation agreements with all relevant Indigenous communities within 45 days of receiving LTC.⁴² This is not possible under any scenario.
55. It took three years for HONI, GLPT and BLP First Nations to reach an agreement that was more of an outline and did not comprise a partnership agreement. It took Nextbridge more time than that to reach full detailed agreements with BLP First Nations.
56. Engagement on this form of economic accommodation or participation, cannot even *commence* until after LTC is granted to HONI. At that time, and only at that time, would the exclusivity agreement between the BLP First Nations and Nextbridge expire.⁴³
57. As stated above, even if the exclusivity clause did not exist, the BLP First Nations could not be expected or compelled to compete with themselves. The BLP First Nations would compete with themselves by entering into negotiations with a bidder for ownership in a project that is competing with the one they are already own. To do so would cause the BLP First Nations harm in any future business or economic accommodation situations. What companies are going to spend all the time and money entering into deals with these First Nations, if the First Nations were known to have turned their backs on deals and companies to compete with them?
58. HONI knew or ought to have known of this reality and that it would likely be reflected in a contractual exclusivity clause – as it had been with HONI. A very similar exclusivity clause was part of the agreement between the BLP First Nations and HONI (and GLPT) – at the designation stage.
59. HONI thus would have, or ought to have, known that consultation or engagement about such economic accommodation and participation measures could not commence until after LTC.
60. The content of HONI's LTC application – that it intends to complete this engagement within 45 days after LTC, is far from credible. It could well take years to complete such an agreement between the BLP First Nations and HONI. HONI does not know what the economic participation agreements between the BLP First Nations and Nextbridge contain.⁴⁴ It does not know what it will be expected to “match”. Further, given the serious

⁴² HONI Lake Superior Link Project – Application and Evidence (February 15, 2018), Ex B, Tab 7, Schedule 1 at 7.

⁴³ Affidavit from Chief Collins at para.32 filed in the file EB-2017-0364 on May 7, 2018.

⁴⁴ See testimony of Ms. Goulais, p.103, lines 25-28 from May 17, 2018 Technical Conference.

harm that will be caused to the BLP First Nations by the delays of HONI's Project⁴⁵, it is reasonable to expect the BLP First Nations will expect HONI to do more than "match" what they have now. All of this will take a lot of time to resolve or to try to resolve through good faith efforts – which is the Duty requires.

b. Fulfilling the Duty will Increase the Cost of the HONI LSL Project

61. The substantive element of the Duty is addressing Indigenous peoples' concerns.⁴⁶ Concerns are addressed through accommodation measures. There are four types of accommodation measures:
 - (a) Preventing impacts;
 - (b) Mitigating impacts that cannot be fully prevented;
 - (c) Compensation to offset residual impacts (i.e. bringing a negative to zero), and;
 - (d) Providing upside benefits (i.e. bringing zero to a positive) to reflect the treaty sharing relationship.⁴⁷
62. The substantive component of the Duty requires that accommodation be sufficient to address an Indigenous peoples' concerns about impacts on *all* its rights.⁴⁸ Accommodation involves "taking steps to avoid irreparable harm or to minimize the effects of infringement,"⁴⁹ One of the goals of the Duty is to "avoid the impairment of asserted or recognized rights,"⁵⁰ and taking steps to "identify, minimize and address adverse impacts where possible."⁵¹
63. Accommodation measures will increase the cost of the HONI Project, potentially significantly. Because it does not account for these measures, HONI's bid is artificially low. On the other hand, Nextbridge's application fully accounts for the cost of accommodation, which was significant.
64. HONI will have to accommodate for impacts of its project. There are two types of such impacts: (1) impacts to land and rights exercised or asserted on the land; and (2) impacts on the accommodation measures BLP First Nations had developed as the outcome of being consulted and accommodated by Nextbridge. HONI cannot make the BLP First Nations worse off through its consultation and accommodation.

⁴⁵ See paras 7 to 12 of the Affidavit of Chief Collins and testimony of Chief Collins, p. 22, lines 15-28 and p. 23, lines 1-24 of the Transcript from May 16, 2018 Technical Conference; See testimony of Chief Michano, p. 25, lines 10-28 and p. 26, lines 1-12 of the Transcript from May 16, 2018 Technical Conference; See testimony of Chief Desmoulins, p. 23, lines 26-28, p.24 and p.25, lines 1-9 of the Transcript from May 16, 2018 Technical Conference.

⁴⁶ *Mikisew Cree* at para 64; *Delgamuukw* at para 168.

⁴⁷ Jack Woodward, *Native Law* (looseleaf updated 2017, release 4), ch 5 at 111-112.

⁴⁸ *Chartrand v British Columbia (Forests, Lands and Natural Resource Operations)*, 2015 BCCA 345 at para 69.

⁴⁹ *Haida Nation* at para 47.

⁵⁰ *Chippewas of the Thames* at para 2.

⁵¹ *Clyde River* at para. 25.

65. HONI admitted that it does not know what the content of the economic partnership with Nextbridge is.⁵² It is thus incorrect for HONI to have asserted as fact that its “offer” to the BLP First Nations of 34% equity in its project, is “more beneficial” than what the BLP First Nations have with Nextbridge.⁵³
66. Aside from the equity participation negotiated with Nextbridge, BLP First Nations negotiated important business and employment opportunities as part of the economic accommodation and participation.
67. Significant time, human capital and financial resources were invested to prepare for the employment and business opportunities. Supercom (owned by the BLP First Nations) and other First Nation businesses have made sizeable expenditures, such as purchasing heavy construction equipment, to prepare themselves for construction with an in-service date of 2020. Many have taken out loans to do so. These businesses are taking a risk and stretching themselves financially to take advantage of the opportunity to work on the Nextbridge project. They do not have the resources to sit on their hands for at least one – and likely many more – years. If this occurs, they are likely to go out of business.⁵⁴
68. There is no certainty about any potential future relationship with HONI should it be granted LTC. Some or many of these business relationships, developed between Supercom and other BLP First Nation owned businesses, and Nextbridge and its general contractor, may not be continued with HONI and its general contractor. As stated, many such businesses may have to fold due to delays.⁵⁵
69. In addition, approximately \$5 million was provided by both provincial and federal governmental sources to cover the costs of employee training programs, which could be wasted if the in-service date is delayed as HONI proposes.⁵⁶
70. About 300 local persons, over 90% of whom are Indigenous individuals from local First Nations, are currently participating in training programs in anticipation of work that will become available in 2020, the in-service date of the Nextbridge project⁵⁷. These persons, and their families, are relying on these jobs.⁵⁸ Given the dependence of family members on such workers’ incomes, it could be many times more than 300 persons affected by delays or losses of work caused by the HONI Project.⁵⁹ Many of these persons are

⁵² See testimony of Ms. Goulais, p.103, lines 25-28 from May 17, 2018 Technical Conference.

⁵³ Introduction & Summary, Lake Superior Link Project - Additional Evidence at p. 12 filed in the file EB-2017-0364 on May 7, 2018.

⁵⁴ See paras 7 to 11 of the Affidavit of Chief Collins and testimony of Chief Michano, p. 25, lines 18-28 and p. 26, lines 1-12 of the Transcript from May 16, 2018 Technical Conference

⁵⁵ Affidavit from Chief Collins at paras 8-10 filed in the file EB-2017-0364 on May 7, 2018.

⁵⁶ Affidavit from Chief Collins at para 7 filed in the file EB-2017-0364 on May 7, 2018.

⁵⁷ *Ibid.*

⁵⁸ See testimony from Chief Collins at p. 22, lines 15-28, p. 23, lines 1-23 of the Transcript from May 16, 2018 Technical Conference and the testimony from Chief Desmoulins at p. 23, lines 26-28, p. 24 and p.25, lines 1-9 of the Transcript from May 16, 2018 Technical Conference.

⁵⁹ See testimony from Chief Collins at p. 23, lines 17-24 of the Transcript from May 16, 2018 Technical Conference.

financially poor; they do not have the savings to wait for one or more years, and pass up other employment opportunities, until the HONI Project is ready to proceed.⁶⁰

71. Some such persons will no doubt have to look for work elsewhere far from their communities. This would then result in family and cultural separations.⁶¹
72. There is a critical human cost to delay. Some of these 300 persons have been deeply affected by systemic racism and colonialism, which leads to despair, substance abuse, suicide attempts and other reactions to trauma.⁶² The Nextbridge project has presented them with “unprecedented” opportunities to turn their lives around, toward hope. If this opportunity fails to materialize, their hopes for a better life may well be set back if not extinguished, and some may fall back into their former harmful patterns.⁶³ Momentum stalled now may have the effect of a full stop for many such persons.⁶⁴
73. No amount of money can ultimately make up for such human fallout. But some high amount of compensatory accommodation would have to be provided by HONI to enable the BLP First Nations to invest in programs that help their members and communities heal from the continuation of trauma. The HONI Project itself – by forcing the end of the self-determined agreement that BLP First Nations had developed with Nextbridge – would be a cause of trauma. It would effectively deny this exercise of self-determination. HONI admits that this type of agreement is just that – a form of self-determination.⁶⁵ And yet in the interests of profit, it would undo it here.
74. All of these costs and losses are even more pronounced and threatening if this one-year delay is prolonged, which will have to be the case in order for the Duty to be met.

⁶⁰ See testimony from Chief Collins at p. 22, lines 15-28, p. 23, lines 1-24 and p. 26, lines 16-28 and p.27 lines 1-13 of the Transcript from May 16, 2018 Technical Conference and the testimony from Chief Michano at p. 25, lines 10-28 and p.26 lines 1-12 of the Transcript from May 16, 2018 Technical Conference.

⁶¹ See testimony from Chief Collins at p. 10, lines 4-28 and p.11, lines 1-9 of the Transcript from May 16, 2018 Technical Conference. See also the following testimonies for the impacts on the members of the First Nations impacted by a delay in the in-service date of the project: Chief Collins at p. 26, lines 16-28 and p. 27, lines 1-13, Chief Desmoulins at p. 25, lines 1-9 and Chief Michano at p. 25, lines 10-27 of the Transcript from May 16, 2018 Technical Conference.

⁶² See testimony from Chief Collins at p. 22, lines 22-25, p. 23, lines 17-24, p. 26, lines 16-28 and p. 27, lines 1-13 of the Transcript from May 16, 2018 Technical Conference, testimony from Chief Desmoulins at p. 7, lines 13-23, p. 16, lines 9-28, p. 17, p. 18, lines 1-4, p. 23, lines 26-28, p. 24, and p. 25, lines 1-9 of the Transcript from May 16, 2018 Technical Conference, and testimony from Chief Michano at p. 25, lines 10-27 of the Transcript from May 16, 2018 Technical Conference.

⁶³ See testimony from Chief Collins at p. 26, lines 16-28 and p. 27, lines 1-5 of the Transcript from May 16, 2018 Technical Conference, testimony from Chief Desmoulins at p. 23, lines 26-28, p. 24 and p. 25, lines 1-9 of the Transcript from May 16, 2018 Technical Conference, and testimony from Chief Michano at p. 25, lines 21-27 of the Transcript from May 16, 2018 Technical Conference.

⁶⁴ See testimony from Chief Michano at p. 25, lines 10-27 of the Transcript from May 16, 2018 Technical Conference.

⁶⁵ See Exhibit KT2.1 submitted by Nextbridge at the Technical Conference on May 17, 2018. See lines 24-27, p. 12 of 74 of Exhibit KT2.1.

75. The bottom line is this: much more time will be required to fulfill the Duty to consult and accommodate – both before and after LTC is decided. LTC would have to be conditional on the full Duty being met before construction starts. These delays will impose costs on the HONI Project directly. These delays will also impose costs and losses on BLP First Nations – and all of these costs would have to be made up by the HONI Project.
76. It is reasonable to expect that the true costs of the HONI Project are much higher than indicated. The Duty has to be met – and the Duty requires that all such costs be accounted and paid for – not by the affected First Nations, but by the proponent.

3. Combined Line: HONI Through Park and Nextbridge the Rest of the Way

77. The BLP First Nations submit that this is not a viable option and should not in any way be considered. The same issues of delays and costs would apply, as they would to LTC being granted to HONI for the entire line.
78. If this option is the one selected by the OEB, HONI will still have to fully meet the Duty for its share of the line (which is the section that would go through the Park).
79. The Park is the issue that will most likely require the most of amount of time – or delays and costs – to allow the Duty to be met. All of the concerns above, about the Park, would apply to this scenario.
80. Further, an economic accommodation or participation agreement would have to be developed for any part of the line through the Park – should the two BLP First Nations with Aboriginal title claims that include the Park be willing to engage in this option at all. It is more likely that attempts to push this line through the Park and cause impacts that the two First Nations do not accept, would result in legal challenges.

4. General Law on the Importance and Purpose of the Duty

81. In case anyone were to think that the Duty is just another box to be ticked, or that it can be weighed against other requirements that do not have the backing of Constitutional legal protection, the importance and purpose of the Duty are explained below.
82. What is the Duty? It is not a mere token gesture, a public relations “photo op,” or the largesse of a ruler towards a subject. It is a nation-to-nation relationship that reconciles “pre-existing Aboriginal sovereignty with assumed Crown sovereignty.”⁶⁶ Indigenous peoples hold unique rights because “[l]ong before Europeans explored and settled North America, [they] were occupying and using most of this vast expanse of land in organized, distinctive societies with their own social and political structures.”⁶⁷ As the original occupiers of North America, Indigenous peoples entered into treaties with the Crown

⁶⁶ *Haida Nation* at paras 20, 25-26, 32, 53; *Behn v Moulton Contracting Ltd*, 2013 SCC 26 at para 28.

⁶⁷ *Mitchell v MNR*, 2001 SCC 33 at para 9.

- allowing for peaceful settlement by Europeans in return for certain rights.⁶⁸ In the Indigenous peoples' understanding, the essence of the treaties was to share ownership and decision-making power over a shared land and resource base.⁶⁹ Even if one accepts the Crown's deceitful claim that the treaties were surrenders of massive tracts of land, Indigenous peoples still retain significant treaty rights in their traditional territories.
83. If Indigenous peoples were properly recognized as an equal sovereign power, the Duty would require the Crown to obtain their "free, prior, and informed consent." It would be a bilateral dual-consent relationship much as it is with Canada and the US over shared lands such as boundary waters.
 84. Canadian law is moving in this direction. Canada has ratified and is in the process of implementing the *United Nations Declaration on the Rights of Indigenous Peoples* ("UNDRIP"),⁷⁰ which authoritatively sets out the requirement for the "free, prior, and informed consent" of Indigenous peoples for any development that might affect their traditional lands.
 85. But since Canadian law is not yet fully at the point of always requiring First Nations' consent for development that will affect them, the Duty is meant to substitute for that. This means that it is to be applied widely and deeply.⁷¹
 86. The Duty applies very widely. It applies whenever the Crown contemplates conduct, that conduct might adversely affect asserted or known Aboriginal or Treaty rights, and the Crown has actual or deemed knowledge of such rights.⁷²
 87. The Duty applies to any effects on any such asserted or known rights, which are also broad. They include rights to the land (title); rights to the resources on the land (hunting, fishing, trapping, gathering and other forms of harvesting); rights to self-determine through protection and practice of their cultures (ceremonial and sacred practices, cultural heritage and archaeological values); and rights to self-determination through participation in governance over their lands and their cultures.
 88. Indigenous peoples' right to self-determination is recognized in the *International Covenant on Civil and Political Rights*,⁷³ the *International Covenant on Economic, Social and Cultural Rights*,⁷⁴ and the *UNDRIP*,⁷⁵ all of which Canada has ratified.

⁶⁸ *R v Simon*, [1985] 2 SCR 387 at para 49. See also *Tsilhqot'in* at para 69: "The doctrine of *terra nullius* (that no one owned the land prior to European assertion of sovereignty) never applied in Canada, as confirmed by the *Royal Proclamation of 1763*."

⁶⁹ See, for example, Michael Jackson, "The Articulation of Native Rights in Canadian Law" (1984) 18 UBC L Rev 255 at 261-263.

⁷⁰ GA RES 61/295, UNGA, 107th Plen Mtg, UN Doc A/RES/61/295 (2007).

⁷¹ *Carrier Sekani* at para 43.

⁷² *Haida Nation* at para 35; *Carrier Sekani* at para 31.

⁷³ 19 December 1966, 999 UNTS 171, art 1 (entered into force 23 March 1976, accession by Canada 19 May 1976).

⁷⁴ 16 December 1966, 993 UNTS 3, art 1 (entered into force 3 January 1976, accession by Canada 19 May 1976).

⁷⁵ Articles 3-4.

89. The Duty is the way in which the bilateral nation-to-nation relationship is carried out. Its purpose is to effect reconciliation – between sovereign peoples in shared lands.⁷⁶
90. The Duty has both procedural (i.e. consultation) and substantive (i.e. accommodation) components.⁷⁷ Given that it falls short of requiring consent in all cases, it is critically important that every ounce of its procedure and substance is fulfilled.
91. The Crown must always consult with Indigenous peoples “in good faith, and with the intention of substantially addressing the concerns of the Aboriginal peoples whose lands are at issue.”⁷⁸
92. All of this is to make clear that it is absolutely incumbent on the OEB to not effectively prevent the Duty from being met, or to ignore what the meeting of it will entail and how this will affect the HONI Project timing and costs.

5. Application for Costs

93. As mentioned in their intervention request, the BLP First Nations will be requesting an award of costs for their participation in this proceeding pursuant to section 3.03 (b) and (c) of the Board’s Practice Direction. The BLP First Nations are requesting the OEB to advise, as soon as possible, on the timing and the procedure for this Application for Costs.

⁷⁶ *Mikisew Cree* at para 1.

⁷⁷ *Enge v Canada (Indigenous and Northern Affairs)*, 2017 FC 932 at para 137.

⁷⁸ *Delgamuukw* at para 168.

STAFF INTERROGATORY #55

INTERROGATORY

Reference: (1) Exhibit C / Tab 1 / Schedule 1 / Attachments 1-4

Question(s):

- a) Please ensure that all quarterly reports have been filed on the record in this proceeding.

RESPONSE

- a) NextBridge confirms that all quarterly reports that have been filed in EB-2017-0182 and are part of the record in this proceeding. Also see the response to SEC#4.

STAFF INTERROGATORY #56

INTERROGATORY

Reference: (1) Exhibit C / Tab 2 / Schedule 3 / Page 1

Preamble:

Reference 1 states:

A total of \$5.3 million in costs were deemed eligible for consideration as construction costs in the Decision and Order dated December 20, 2018 (EB-2017-0182). These costs were incurred during the development period and are needed to construct the East-West Tie line. They were spent during the development period because these activities take longer periods of time and by working on them as early as possible it mitigated risk to the project schedule. These costs are included in opening rate base balance.

Question(s):

- a) Could you please provide rationale for approval of these costs?

RESPONSE

- a) The OEB expressly concluded that the \$5.3 million in phase-shift costs were eligible for consideration of recovery as construction costs. See EB-2017-0182 Decision and Order at page 27 (dated December 20, 2018). NextBridge's Application included a request to recover its construction costs, which include the \$5.3 million in phase-shift costs. The basis for prudence of incurring the phase-shift costs is detailed in the Application. See EB-2020-0150 Exhibit C Tab 2 Schedule 3 Pages 1 through 5. Therefore, NextBridge is requesting full recovery of the \$5.3 million in phase-shift costs.

Table 3 – Costs Eligible for Consideration as Construction Costs

Cost Category	Proposed \$ million
Extended In-Service Date	
• EA Review Participation	\$0.460
• Land Optioning Negotiations	\$1.439
Unbudgeted at Designation	
• Land Acquisition Negotiations	\$0.017
• Economic Participation	\$3.415
Total	\$5.331

Extended In-Service Date

Fundamental activities for the construction of a transmission line are obtaining permits (such as the Environmental Assessment) and obtaining land rights. During the project lifecycle, NextBridge has continued to obtain the necessary permits to enable the construction of the line. Although these costs were initially denied by the OEB, it was not because they were not necessary, it was just that the OEB believed that they were incurred prematurely and at NextBridge's discretion.

In this regard, the OEB concluded in EB-2017-0182 Decision and Order at page 24 (dated December 20, 2018):

"The OEB does not approve the phase shift of \$0.460 M for EA review participation and \$1.439 M for land option negotiation costs that NextBridge budgeted as a construction cost at designation. It was NextBridge's decision to shift these costs to the extended development period; it was not a cost caused by the extended in-service date."

NextBridge has explained in detail how incurring these costs has saved the ratepayer in Staff #54, and, also, explained why these costs were prudent in Exhibit C, Tab 2, Schedule 3 of the Application.

Unbudgeted at Designation:

The OEB concluded in EB-2017-0182 Decision and Order at page 26 (dated December 20, 2018):

“In principle, the OEB does not approve the unbudgeted costs because such approval would conflict with the objectives of the Designation Process that enables a price comparison based on specific dollar amounts.”

The OEB goes on to conclude that the unbudgeted costs were part of the construction of the transmission line. NextBridge has explained in detail how incurring these costs has saved the ratepayer in Staff #54, and, also, explained why these costs were necessary and prudent in Exhibit C, Tab 2, Schedule 3 of the Application.

STAFF INTERROGATORY #57

INTERROGATORY

Reference: (1) Exhibit C / Tab 2 / Schedule 4

Preamble:

Reference 1 states that “a total of \$737.1 million in construction costs is forecasted to complete the East-West Tie line, of which 57% have already been incurred as of October 31, 2020.”

Question(s):

- a) With 57% of construction costs incurred to date, please clarify if 57% of the construction is complete, and if not, explain why NextBridge currently estimates the project budget of \$737.1 million will not be exceeded?

RESPONSE

- a) As of October 31, 2020, the amount of construction completed is 40%. NextBridge currently estimates the project budget of \$737.1 million will not be exceeded, because completion of 40% of the construction and spending 57% of overall costs has tracked and continues to track to an overall cost of \$737.1, absent unforeseen events and unknown costs.

For context, the percentage of construction costs spent does not necessarily align with the percentage of construction activity but does provide assurance that the East-West Tie line project is on budget. Examples of necessary costs spent:

- Material costs have already been incurred to purchase the towers and wire and ship them to the construction site;
- Land payments have already been made to landowners in order to secure access to the right of way to allow for construction;
- NextBridge has spent costs to ensure that Indigenous communities have properly been consulted prior to construction to meet Duty to Consult obligations with the Crown; and
- The work to obtain environmental permits (such as field studies) needed to be completed prior to construction activities beginning.

Additionally, construction has seasonal and environmental constraints, such as species at risk timing windows. When the 40% was calculated the winter construction season had not started and the ground was not completely frozen. Once the ground was frozen, clearing activities and foundation installations started taking place.

STAFF INTERROGATORY #58

INTERROGATORY

Reference: (1) Exhibit C / Tab 6 / Schedule 1 / p. 1

Preamble:

Reference 1 states:

NextBridge is in the process of entering into a Customer Connection and Cost Recovery Agreement (“CCRA”) with HONI.... The engineering and construction cost of the Hydro One work will be included in Hydro One’s rate base in accordance with the decision(s) of the Ontario Energy Board in EB-2017-0194. At this time the CCRA and associated terms and conditions are undergoing review between both parties with the intention of reaching a mutually acceptable agreement by the end of Q1 2021. When the agreement is finalized NextBridge and HONI will provide an update to the OEB that includes cost and accounting treatment for the agreement.

Question(s):

- a) Please file the Customer Connection and Cost Recovery Agreement when it is finalized and provide information on the cost and accounting treatment.

RESPONSE

- a) The Customer Connection and Cost Recovery Agreement (CCRA) is expected to be finalized by September 2021 and will be filed with information on the cost and accounting treatment at that time. For clarity, NextBridge is not seeking the recovery of costs under the CCRA.

STAFF INTERROGATORY #59

INTERROGATORY

Reference: Exhibit D / Tab 1 / Schedule 1 / p. 1

Preamble:

At the above noted reference, NextBridge states the following:

Given the nature of the East-West Tie line, it does not lend itself to applying the typical performance measures that might be used to evaluate the performance of other transmitters. The East-West Tie line does not include any terminal breakers or other operable assets, as the demarcation point on each of the circuits is a structure outside of the HONI stations, as noted in Exhibit B, Tab 1, Schedule 2. Also, NextBridge does not have any customer delivery points (or meter assets), which are the basis of interruption-based reliability performance measures like SAIDI and SAIFI. In addition to these operating characteristics, the life-cycle portfolio also detracts from meaningful comparisons. The East-West Tie line is new whereas most other transmitters own a portfolio of assets that traverse the various stages of asset life. Therefore, NextBridge's performance measures do not readily provide meaningful comparisons to those of other transmitters.

Question(s):

- a) Please confirm that NextBridge is proposing the tracking and annual reporting of the following performance measures. If there are any measures not included in the listing below, but that should be added, please provide the necessary update(s) to the listing.
 - 0.00 OSHA Recordable Injuries per Year
 - Return on Equity
 - NERC Vegetation Compliance
 - OM&A Cost per Circuit Kilometer
 - Average System Availability
- b) For each performance measure provided in response to (a), please indicate how in future proceedings, NextBridge will be able to demonstrate achievement against each measure target. For example, will a single metric to demonstrate performance against the Average System Availability measure be established? For NERC Vegetation Compliance, will NextBridge only provide a single statement indicating its compliance with FAC-003-004, or will NextBridge detail the vegetation prevention-related actions it has undertaken?
- c) Please provide the targets for each performance measure provided in response to (a) for the years 2022 to 2031.

RESPONSE

a) Confirmed.

b) A single value will be used to demonstrate performance against each measure.

OHSA Injuries per Year: Listing of number of injuries each year. Injury defined by OHSA which is further explained in Staff Interrogatory #60.

Return on Equity (ROE): NextBridge will utilize audited financial statements to calculate ROE. ROE is calculated by dividing the Net Income (less extraordinary non-operating items such as startup cost reimbursement) by the Partner's equity. NextBridge has proposed an ROE of 8.52% in the application, based on the 2020 OEB Cost of Capital parameters and would therefore use 8.52% as the target to measure against annually.

NERC Vegetation Compliance: NextBridge will report the number of violations as determined by FAC-003-004.

OM&A Cost per Circuit Kilometer: NextBridge's target is to keep its cost of OM&A per kilometer at the number filed in its Application (\$4.94 million (total cost of OM&A in the Application) / 450km = 10,977

Average System Availability: NextBridge will report a single number for this number for this metric which should be greater than the target listed below

c) Targets below:

YEAR	OHSA Recordable Injuries	ROE	NERC Veg Compliance Violations	OM&A \$/km	Ave. System Availability
2022	0	8.52%	0	\$10,977	99%
2023	0	8.52%	0	\$10,977	99%
2024	0	8.52%	0	\$10,977	99%
2025	0	8.52%	0	\$10,977	99%
2026	0	8.52%	0	\$10,977	99%
2027	0	8.52%	0	\$10,977	99%
2028	0	8.52%	0	\$10,977	99%
2029	0	8.52%	0	\$10,977	99%
2030	0	8.52%	0	\$10,977	99%
2031	0	8.52%	0	\$10,977	99%

STAFF INTERROGATORY #60

INTERROGATORY

Question(s):

- a) Does the 0.00 OSHA metric target pertain solely to Supercom and NEET staff, or would this also include any third-party contractors who may be working on the East-West Tie line?
- b) Please more fully describe what specific parameters comprise this “Safety” measure and how NextBridge will monitor its performance.

RESPONSE

- a) The 0.00 OHSA metric target pertains only to the two NEET field personnel who will be stationed at Thunder Bay and the East-West Tie line area.
- b) This “Safety” measure will track all OHSA required notifications to the Ministry of Labour, Training, and Skills Development for the two NEET field personnel. For additional details on the notification requirements, please see <https://www.ontario.ca/page/reporting-workplace-incidents-or-structural-hazards>

STAFF INTERROGATORY #61

INTERROGATORY

Reference: Exhibit D / Tab 1 / Schedule 1 / pp. 3-4 / Table 2

Preamble:

In the evidence, NextBridge proposes to report on OM&A cost per circuit kilometer as a performance measure. In Table 2, NextBridge provides OM&A benchmarking study results.

Question(s):

- a) In terms of its annual reporting for OM&A cost per circuit kilometer, please clarify and explain what specifically NextBridge intends to report as its OM&A cost for this performance measure? For instance, in Table 2, NextBridge provides Total OM&A (which is the sum of OM&A Expenses, Admin. & Corporate, and Regulatory). Would the OM&A value used for OM&A cost per circuit kilometer be Total OM&A, only OM&A Expenses, or something else?
- b) Please clarify what specific costs constitute being reported as the following:
 - OM&A Expenses
 - Admin. & Corporate
 - Regulatory
 - Total OM&A
- c) Please confirm the circuit length, in kilometres, that NextBridge will commit to use for the OM&A cost per circuit kilometre is 450 km.

RESPONSE

- a) NextBridge will report OM&A cost per circuit kilometer annually, based upon total OM&A. Total OM&A for the test year is \$4.94 million and can be found in Exhibit F, Tab 4, Schedule 1, Page 2, Table 1. In the Reference above, Table 2 is NextBridge's benchmarking study results, which were normalized to ensure comparability across projects in the study. Indigenous Participation and Compliance costs were excluded from Table 2 as these are not directly comparable to the other projects.
- b) A detailed breakdown of OM&M costs, per category, can be found in Exhibit F, Tab 4, Schedule 2, Page 1 through 9.
- c) NextBridge will commit to use 450 km as the metric for circuit length when annually reporting OM&A per circuit kilometer.

Filed: 2020-11-04
EB-2020-0150
Exhibit F
Tab 4
Schedule 1
Page 2 of 2

Table 1. NextBridge OM&A Expense (\$ Millions)

Cost Category	2022
Operations & Maintenance	1.27
Regulatory	0.07
Compliance & Administration	1.67
Indigenous Participation	0.89
Indigenous Compliance	0.44
Property Taxes & Rights Payments	0.60
Total OM&A	4.94

More details on the future spending on each of these components are included below.

STAFF INTERROGATORY #62

INTERROGATORY

Reference: Exhibit D / Tab 1 / Schedule 2 / p. 1

Preamble:

At the above noted reference, NextBridge states the following:

In the absence of T-SAIDI and T-SAIFI metrics, NextBridge will provide additional information, on a best efforts basis, to demonstrate the performance of NextBridge's transmission circuits. NextBridge will measure interruptions to HONI delivery points caused by NextBridge's circuits using the two proposed measures. The proposed contribution measures would not be NextBridge's true T-SAIDI and T-SAIFI measure because NextBridge has no delivery points, but the denominator would be all HONI delivery points.

Question(s):

- a) Please explain why NextBridge is only able to provide the above noted information on a best efforts basis.
- b) Please confirm the number, and the specific Hydro One delivery points that NextBridge is referring to in the above statement.
- c) Please confirm if the reporting on T-SAIDI and T-SAIFI, with respect to HONI delivery points, would be additional performance measures to those listed in Staff-59(a)?

RESPONSE

- a) To calculate the T-SAIDI and T-SAIFI metrics, NextBridge would need to have direct visibility into HONI's transmission system and customer delivery points. NextBridge does not currently have such visibility, but it is willing to use best efforts to work with HONI to calculate the T-SAIDI and T-SAIFI metrics if it is desired that such metrics be provided as they indirectly relate to the East-West Tie line.
- b) To clarify, as explained in Energy Probe #24, NextBridge has no customer delivery points, only HONI or other transmitters would have customer delivery points. The purpose of the statement in the Application was made in the spirit of working with HONI, which has customer delivery points, to calculate the T-SAIDI and T-SAIFI metrics as discussed in part a.
- c) NextBridge does not confirm that Transmission Reliability Indicators, such as T-SAIDI and T-SAIFI will be reported as part of the performance metrics. Rather,

NextBridge proposed to report Average System Availability as described in the response to Staff #59.

STAFF INTERROGATORY #63

INTERROGATORY

Reference: (1) Exhibit F / Tab 11 / Schedule 1 / pp.1-2
(2) EB-2019-0082 / Exhibit F / Tab 6 / Schedule 1 / Attachment 1 / p.14

Preamble:

In Reference 1, NextBridge states that:

As a new transmitter with a new asset, NextBridge applied the principles for useful life from the Foster Associates Inc. study used in support of HONI's 2020 to 2022 rate application (EB-2019-0082). The study forms the basis of supporting NextBridge's depreciation rates and expenses in this Application, as there is no need to maintain unique NextBridge depreciation rates as the Foster Associates Inc. study is representative; and therefore, another depreciation study is not needed.

NextBridge provides the depreciation rates as follows for the three categories of assets:

Land-Rights – 1.00%

Towers and Fixtures – 1.11%

Overhead Conductors and Devices – 1.54%

In Reference 2, which is the Foster Associates Inc.'s depreciation study, it shows the depreciation rates as below:

Account Description A	Current			Proposed			
	Rem. Life B	Net Salvage C	Accrual Rate D	Rem. Life E	Net Salvage F	Reserve Ratio G	Accrual Rate H
INTANGIBLE PLANT							
1610 Computer Software	← 10 Year Amortization →		9.49%	← 10 Year Amortization →			9.49%
Total Intangible Plant			9.49%	3.50		66.80%	9.49%
TRANSMISSION PLANT							
1705D Land - Depreciable	75.60		0.96%	71.60		31.50%	0.96%
1706 Land Rights	74.50		0.96%	70.84		32.31%	0.96%
1708 Buildings and Fixtures	29.81		1.82%	29.96		45.84%	1.81%
1715 Station Equipment	31.16		2.07%	31.40		34.52%	2.09%
1720 Towers and Fixtures	55.36		1.27%	55.00		29.78%	1.28%
1730 Overhead Conductors and Devices	43.16		1.44%	42.45		38.67%	1.44%
1735 Underground Conduit	32.19		1.64%	32.77		45.76%	1.66%
1740 Underground Conductors and Devices	48.99		1.79%	48.25		13.59%	1.79%
1745 Roads and Trails	30.50		1.79%	30.73		44.52%	1.81%
Total Transmission Plant			1.81%	35.72		34.76%	1.83%

OEB staff notes that there are differences between the depreciation rates used by NextBridge and the ones in the Foster Associates Inc's study, which are outlined below:

	Depreciation Rates Proposed by NextBridge	Depreciation Rates in Foster Associates Inc.'s Study
Land rights	1.00%	0.96%
Towers and fixtures	1.11%	1.28%
Overhead conductors and devices	1.54%	1.44%

Question(s):

- Please confirm the accuracy of the table prepared by OEB staff above.
- If confirmed, please explain the reasons for the differences or update the relevant schedules as necessary.

RESPONSE

- and b) NextBridge utilized the proposed useful life from Statement E of the Foster's study, shown in the below tables which indicates the life of a new asset. Statement A of the Foster's study (noted above as Reference 2) is the remaining life of the assets already in-service for HONI. Since the NextBridge assets are new, Statement E for new assets is more appropriate for NextBridge. Additionally, for "1730 overhead conductors and devices" NextBridge broke the account down to a more granular asset level, and weighted it based on expected gross book value to come up with the blended weighted rate for Account 1730 of 1.54%

	Depreciation Rates Proposed by NextBridge	Reference in Foster Associates Inc.'s study below
1706 Land rights	1.00%	A (100 Yrs)
1720 Towers and fixtures	1.11%	B (90 Yrs)
1730 Overhead conductors and devices	1.54%	(Weighted C, D, E)
1730 Insulators & Arresters	1.67%	C (60 Yrs)
1730 Overhead Conductor / Ground Wire	1.43%	D (70 Yrs)
1730 Optical Ground Wire	2.00%	E (50 Yrs)

HYDRO ONE NETWORKS INC. (BU 210)

Statement E

Asset Category Summary
December 31, 2016
Harmonic Weighting

Description A	Current P-Life		Proposed P-Life		Plant	
	USoA B	Category C	USoA D	Category E	USoA F	Category G
INTANGIBLE PLANT						
1610 Computer Software						
1657 GENRL -ADM & SERV-SYS SOFTWARE		10	10			\$ 1,654,200
Total USoA 1610	10 S6	10	10 S6	10	\$ 1,654,200	\$ 1,654,200
TRANSMISSION PLANT						
1705D Land - Depreciable						
1210 LAND PURCH & ACQUI (OLD CAP)		100	100			\$ 971,630
Total USoA 1705D	100 S6	100	100 S6	100	\$ 971,630	\$ 971,630
1706 Land Rights						
1111 RIGHTS & EASMENTS <LANDSCAPING>		100	100			\$ 2,811,500
1212 EASMENTS & RIGHTS		100	100			237,121,428
Total USoA 1706	100 S6	100	100 S6	A 100	\$ 239,932,927	\$ 239,932,927
1708 Buildings and Fixtures						
1120 STN BUILDINGS COMPONENTS		50	50			\$ 404,367,186
1121 CRANES&HOISTS IN BLDGS		50	50			4,865,443
1260 BLDG W U/G CABLE		50	50			31,325,308
1270 SERV STRUCTURES		50	50			25,538,801
Total USoA 1708	50 S6	50	50 S6	50	\$ 466,096,738	\$ 466,096,738

HYDRO ONE NETWORKS INC. (BU 210)

Statement E

Asset Category Summary
December 31, 2016
Harmonic Weighting

Description A	Current P-Life		Proposed P-Life		Plant	
	USoA B	Category C	USoA D	Category E	USoA F	Category G
1720 Towers and Fixtures						
1230 STEEL TWR, SUP&FTNG		90	B 90			\$ 1,588,032,050
1240 POLES INCL XARM,GUY,ANCHR		50	50			709,211,731
1245 STEEL POLES		90	90			100,967,337
1249 COMPOSITE POLES		80	80			8,037,793
Total USoA 1720	75 S2	73	75 S2	73	\$ 2,406,248,912	\$ 2,406,248,912
1730 Overhead Conductors and Devices						
1220 INSULATORS		60	C 60			\$ 329,068,237
1232 GROUNDING SYSTEM		50	50			152,956,518
1235 OPT GRND WIRE		50	E 50			60,659,868
1250 OVERHD CONDUCTOR ALL		70	D 70			1,081,139,761
1252 SWITCHES&DEVCE		60	60			41,394,209
1254 RETENSION COSTS		60	60			40,478,358
Total USoA 1730	65 S3	64	65 S3	64	\$ 1,705,696,951	\$ 1,705,696,951

STAFF INTERROGATORY #64

INTERROGATORY

Reference: (1) Exhibit F / Tab 13 / Schedule 1 / p.3
(2) 2006 Electricity Distribution Rate Handbook, May 11, 2005 / p.64

Preamble:

In Reference 1, NextBridge states that:

Ontario Corporate Minimum Tax

4. OCMT is designed to impose a minimum tax based on financial statement income calculated without most tax adjustments. The OCMT paid in the year can be applied to reduce taxes payable in a future year(s).¹³ The OCMT in the Test Year is calculated as part of NextBridge's detailed calculations of income tax found in Exhibit F, Tab 12, Schedule 1, Attachment 1. NextBridge will use OCMT expense incurred in the Test Year to reduce income tax expenses in the future years during the IR Term when there is a sufficient level of taxable income.

Reference 2 states that:

The 2006 regulatory tax calculation does not include the Ontario Corporate Minimum Tax. As this tax can be carried forward for ten years, it is expected that a distributor will recover this tax as it becomes taxable.

NextBridge explains in footnote 13 of the Reference 1 that "OCMT has a 20-year carry forward period and it will expire unutilized after 20-year period".

Question(s):

- a) Given the requirement for the PILs model provided in Reference 2, please explain the rationale of including the Ontario Minimum Tax in the revenue requirement.

RESPONSE

- a) NextBridge included Ontario Corporate Minimum Tax (OCMT) in the revenue requirement to recover tax expense from customers as it will be incurred and paid by NextBridge in the test year. In future years, the OCMT paid in historical year can be

applied to reduce taxes payable and therefore would reduce the income tax expense in the revenue requirement then and benefit customers. This is similar treatment to Bruce to Milton in EB-2019-0178, Exhibit F, Tab 6, Schedule 1, Page 3 of their Application.

STAFF INTERROGATORY #65

INTERROGATORY

Reference: (1) Exhibit G / Tab 1 / Schedule 1 / pp. 1-3

Preamble:

The total Cost of Capital Rate proposed by NextBridge is 5.32% with \$41.0 million revenue requirement from April 1, 2022 to December 31, 2022.

The 2021 Cost of Capital Parameters released by the OEB on November 9, 2020 for rates effective January 1, 2021 is 2.85 % for long-term debt, 1.75 % for short term debt and 8.34% for return on equity.

Staff Table – 2021 Cost of Capital Parameters

Test Year 12 Months				
Amount of Deemed			Cost Rate	Return
Return	(\$ Millions)	%	(%)	(\$ Millions)
Long-term debt	431.4	56	2.85	12.29
Short-term debt	30.8	4	1.75	0.54
Common Equity	308.2	40	8.34	25.20
Total	770.4		5.00%	38.5

Question(s):

- a) Based on the 2021 OEB Cost of Capital Parameters OEB Staff calculates a total cost of capital rate of 5.00% and revenue requirement of \$38.5 million for the test year for NextBridge. Please confirm if NextBridge agrees with this calculation.

RESPONSE

NextBridge agrees with the calculation shown in the Staff table. Please refer to Staff #70 part b.

STAFF INTERROGATORY #66

INTERROGATORY

Reference: (1) Exhibit G / Tab 1 / Schedule 1 / pp. 1-3
(2) Staff - 66Table

Preamble:

The total cost of capital rate proposed by NextBridge is 5.32% with \$41.0 million revenue requirement from April 1, 2022 to December 31, 2022. NextBridge will continue to complete an annual capital investment planning process to continually refine a plan that appropriately reflects operational needs, while minimizing rate impacts by not requesting these annual capital expenditures be added to rate base over the IR Term. This is NextBridge's proposal to mitigate any potential for significant earnings due to planned capital expenditures.

Based on Table 1 the revenue requirement for capital is \$2.5 million lower based on the 2021 OEB Cost of Capital Parameters instead of the 2020 OEB Cost of Capital Parameters.

Question(s):

- a) Please explain why NextBridge's proposed rate framework does not include any earning sharing mechanism?
- b) Will NextBridge support the inclusion of an Earnings Sharing Mechanism in its rate framework? Please explain.

RESPONSE

- a) NextBridge did not include an earning sharing mechanism, because:
 - a. It is unique as a single asset transmitter and has a unique IR Term of 9 years and 9 months.
 - b. There is already an OEB appointed trigger of 300 bps for over earning.
 - c. NextBridge will report earnings annually and the OEB will have visibility into any over earnings.
 - d. This is a new transmission line – there is exposure for unplanned expenses that may mitigate over earnings.
- b) See part a.

STAFF INTERROGATORY #67

INTERROGATORY

Reference: (1) Exhibit G / Tab 2 / Schedules 1-3

Preamble:

The forecast weighted average long-term debt rate used for the test year 2022 is calculated to be 3.21% (based on 2020 Cost of Capital Parameters released by the OEB on October 31, 2019, for rates effective January 1, 2020). To reflect the actual cost of long-term debt in the revenue requirement, NextBridge proposes a one-time update in 2023 of the cost of long-term debt (refer to the Debt Rate Variance Account explanation in Exhibit 8) after the first 12 months after in-service (April 1, 2022 to March 31, 2023). This update will reflect the actual market rate for project debt financing. This update is expected to occur only once in 2023 during the IR term.

To reflect the actual cost of short-term debt in the revenue requirement, NextBridge proposes a one-time update of the cost of short-term debt that aligns with the update to long term debt in the Debt Rate Variance Account.

The 2021 Cost of Capital Parameters released by the OEB on November 9, 2020 for rates effective January 1, 2021 is 2.85 % for long-term debt, 1.75 % for short term debt and 8.34% for return on equity.

Question(s):

- a) Please confirm if the revenue requirement for 2022 will be based on the 2022 Cost of Capital parameters to be issued by the OEB in 2021. If not, why not?
- b) What is the current expected long-term debt rate?
- c) Do you expect the long-term debt rate to be lower than the OEB approved long-term debt rate?
- d) Please confirm if the long-term debt rate will be based on actual annual rates for 2023 to 2031 or will it be a weighted average.
- e) Could you please confirm that the issuance of long-term debt will have a maturity after the IR term?

RESPONSE

- a) NextBridge will not update the 2022 revenue requirement with 2022 Cost of Capital parameters. As stated in Exhibit G, Tab 2, Schedule 4, NextBridge requests that the cost of capital be fixed for the IR term of nine years and nine months to allow for rate certainty to customers. As discussed in Staff #70, NextBridge expects fixing the ROE for the IR term of nine year and nine months will generate \$80 million of savings for

customers.

- b) NextBridge's application utilizes the OEB Cost of Capital for long-term debt, as the actual long-term debt rate is not known at this time. NextBridge has requested a debt rate variance account to record any differences in rates once rates are known.
- c) NextBridge cannot predict the rate of long-term debt for the time period when NextBridge will seek permanent financing.
- d) NextBridge expects to utilize a weighted average for the long-term debt rate.
- e) NextBridge does not know the maturity schedule as the long-term debt has not been issued yet; however, it is expected there will be maturities during and after the IR term. NextBridge expects the debt profile to closely align with the amortization of the regulated rate base to maintain the authorized capital structure.

STAFF INTERROGATORY #68

INTERROGATORY

Reference: (1) Exhibit G / Tab 2 / Schedule 1 / p. 1
(2) Exhibit G / Tab 2 / Schedule 2 / p. 1

Preamble:

In Reference 1, NextBridge states that:

NextBridge's deemed capital structure for rate-making purposes is 60% debt and 40% common equity of utility rate base, where the 60% debt component is comprised of 4% deemed short-term debt and 56% long-term debt. This structure is consistent with the OEB's report on the "Cost of Capital for Ontario's Regulated Utilities", dated December 11, 2009 (EB-2009-0084), and its subsequent Review of the Existing Methodology of the Cost of Capital for Ontario's Regulated Utilities, dated January 14, 2016.

In Reference 2, NextBridge states that "NextBridge will issue third-party debt to finance the East-West Tie line's long-term debt component of 56%. This financing transaction is estimated to occur in late 2021 or early 2022".

Question(s):

- a) Please confirm whether NextBridge, following issuance of its long-term debt, intends to bring, and maintain, its actual debt to equity ratio in line with the OEB's deemed ratio. If not, why not?

RESPONSE

- a) Confirmed.

STAFF INTERROGATORY #69

INTERROGATORY

Reference: (1) Exhibit G, Tab 2, Schedule 3, Page 1

Preamble:

To reflect the actual cost of short-term debt in the revenue requirement, NextBridge proposes a one-time update of the cost of short-term debt that aligns with the update to long term debt in the Debt Rate Variance Account.

Question(s):

- a) What is the current expected short-term debt rate?
- b) Do you expect the short-term debt rate to be lower than the OEB approved short-term debt rate?
- c) Please confirm if the short-term debt rate will be fixed for the duration of the IRM period and whether there will be any interaction with the DRVA.

RESPONSE

- a) NextBridge's application utilizes the OEB Cost of Capital for short term debt, as the actual short-term debt rate is not known at this time. NextBridge has requested a debt rate variance account to record any differences in rates once rates are known.
- b) NextBridge cannot predict the rate of short-term debt for the time period when NextBridge will seek permanent financing.
- c) When NextBridge executes the long-term debt for the East-West Tie line, NextBridge will determine how to structure the short-term debt. NextBridge expects to dispose of the DRVA balance in the second annual update following in-service.

STAFF INTERROGATORY #70

INTERROGATORY

Reference: (1) Exhibit A / Tab 3 / Schedule 1 / p. 17
(2) OEB's webpage for Cost of Capital Parameters Update
(3) Exhibit G / Tab 2 / Schedule 4

Preamble:

NextBridge's application Return on Equity (ROE) of 8.52% is based on the cost of capital parameters released by the OEB on October 31, 2019 for 2020 applications. NextBridge requests that the ROE be fixed at 8.52% for the 10-year IR Term to allow for rate certainty for customers. NextBridge states that fixing an 8.52% ROE for the entire IR Term will eliminate exposing ratepayers to increases in rates due to increasing ROEs prior to the end of the IR Term.

The 2021 Cost of Capital Parameters released by the OEB on November 9, 2020 for rates effective January 1, 2021 is 8.34% for return on equity.

Question(s):

- a) Could you please quantify the premium that customers are incurring for rate certainty by fixing the ROE?
- b) Please update NextBridge's application to reflect the 2021 OEB Cost of Capital Parameters for ROE.
- c) Is there any reason, in NextBridge's view, that it would not be appropriate to adjust the proposed fixed ROE to 8.34% based on the updated Cost of Capital parameters? Please explain.
- d) How will NextBridge ensure ratepayers are not adversely impacted if the OEB-approved ROE decreases?
- e) If the fixed ROE is greater than the annual OEB-approved transmitter ROE levels after the first 5 years of the IR Term, is NextBridge willing to have an off-ramp so that rates can be adjusted?
- f) If the fixed ROE is greater than the annual OEB-approved transmitter ROE levels after the first 5 years of the IR Term, is NextBridge willing to track any incremental revenue in a variance account?

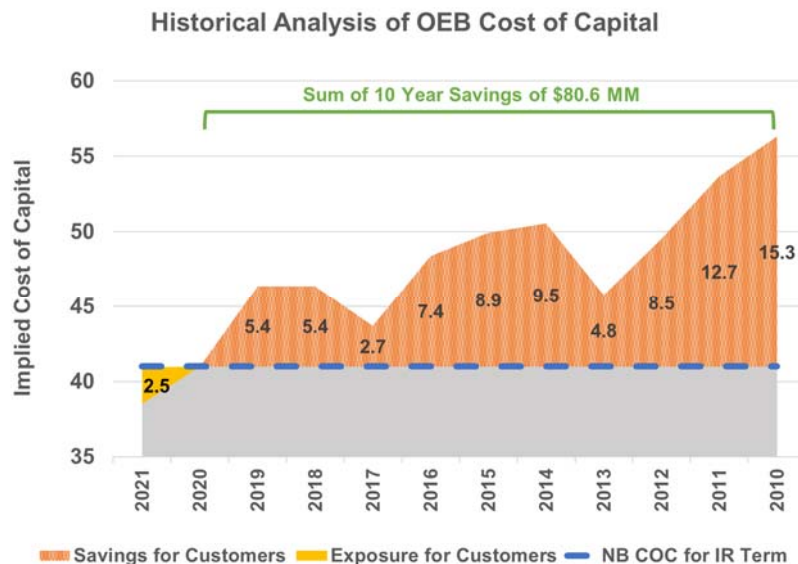
RESPONSE

- a) NextBridge disagrees with the inference that customers are expected to pay a premium for a fixed ROE. To the contrary, historical data suggests customers will receive a savings for fixing the ROE for the 9 year and 9 month IR term. NextBridge's application uses an ROE of 8.52% ROE which is lower than the prior 10 years of ROEs determined by the OEB due to interest rates being driven to historical lows.

Customers are more likely to benefit from securing a low ROE for the proposed IR term.

To quantify this savings for customers, the figure below is a historical analysis of the cost of capital impacts for the past 10 years. The analysis uses NextBridge's \$770.4 million project cost applied to historical OEB cost of capital parameters. It is then compared to the proposed cost of capital in NextBridge's application of \$41.0 million. For example, if the 2010 cost of capital parameters were in effect for a year, customers would pay \$56.3 million or \$15.3 million more in that year than the NextBridge's fixed cost of capital of \$41.0 million.

If the past 10 years of historical cost of capital were repeated in the future, the savings to customers for locking in the current cost of capital for almost 10 years would be \$80.6 million. Furthermore, interest rates are at all-time lows, so the probability that rates will increase in the future is far more likely than rates declining. In order to be considered a premium to customers, interest rates would need to stay at historic lows for 10 consecutive years.



For purposes of clarity, the following calculation demonstrates how the analysis was performed using 2010 data. When there were two deemed weighted average cost of capital for a single year, the average was used.

$$\begin{aligned}
 \text{NextBridge's Cost of Capital for IR Term} &= \$770.4 \text{ M} * 5.32\% = \$41.0 \text{ M} \\
 \text{2010 Implied Cost of Capital} &= \$770.4 * 7.31\% = \$56.3 \text{ M} \\
 \text{Potential 1 Year Savings for Customers} &= \$56.3 \text{ M} - \$41.0 \text{ M} = \$15.3 \text{ M}
 \end{aligned}$$

- b) NextBridge's Application's approach to the IR term appropriately uses the 2020 OEB Cost of Capital parameters, because the IR term approach was developed with the extended length of the IR term of 9 years and 9 months, in which NextBridge is foregoing any update on the cost of equity, and will only make a one-time update based on the actual cost of long-term debt. Further, as shown in the figure above, the savings to customers for the IR term offsets the small benefit of updating to the 2021 OEB Cost of Capital Parameters.
- c) See responses to (a) and (b) above. It is appropriate for NextBridge to remain at the ROE proposed in its application because of the extended period of the IR term offered by NextBridge which is historically low and favorable to customers.
- d) The OEB's Chapter 2 - Filing Requirements for Electricity Transmission Applications provides two possible application frameworks: Revenue Cap and Custom IR. NextBridge has applied under a Revenue Cap framework which requires a single test year cost of service application, followed by a formulaic adjustment to revenue requirement for the balance of the term. Applying the proposed RCI (I-X) to the base revenue requirement is consistent with the Revenue Cap framework. Updating the ROE during the IR term appears inconsistent with the Revenue Cap framework which requests a minimum of a five year term with a fixed ROE. Additionally, NextBridge's annual earnings filings will allow the OEB to monitor over earnings with the off ramp trigger of 300 bps in accordance with the Revenue Cap framework.
- e) Updating the ROE mid-term of the proposed IR period would be inconsistent with the proposed structure of the NextBridge application which seeks longer term rate certainty for both NextBridge and customers.
- f) See above response to (e).

STAFF INTERROGATORY #71

INTERROGATORY

Reference: (1) Filing Requirements for Electricity Transmission Applications / Chapter 2 / p.35
(2) Exhibit H / Tab 1 / Schedule 1 / p.1

Preamble:

Reference 1 states that:

In the event an applicant seeks an accounting order to establish a new deferral or variance account, the following eligibility criteria must be met:

- Causation - The forecasted expense must be clearly outside of the base upon which revenue requirement(s) were derived.
- Materiality – The forecasted amounts must exceed the OEB-defined materiality threshold and have a significant influence on the operation of the transmitter. Otherwise they must be expensed in the normal course and addressed through organizational productivity improvements.
- Prudence - The nature of the costs and forecasted quantum must be reasonably incurred, although the final determination of prudence will be made at the time of disposition. In terms of the quantum, this means that the applicant must provide evidence demonstrating why the option selected represents the cost-effective option (not necessarily least initial cost) for ratepayers.

In Reference 2, NextBridge states that it seeks the Board's approval to establish five new deferral/variance accounts:

- Taxes or Payments in Lieu of Taxes Variance Account, existing USofA account 1592
- Revenue Differential Variance Account
- Construction Cost Variance Account
- Debt Rate Variance Account
- Z Factor Treatment (Account 1572)

Question(s):

- a) Except for the existing accounts 1592 and 1572, please explain how the eligibility criteria (i.e. causation, materiality and prudence) for the three new variance accounts requested is expected to be satisfied.

RESPONSE

a. Materiality (explanation for all three accounts):

Several variance accounts were needed due to the unique, start-up circumstances of NextBridge including: 1) as a new transmitter, 2) applying a Revenue Cap framework in its first application, 3) not having existing operations or revenues by which to balance the potential financial exposure, and 4) building a large new infrastructure project. The combination of the minimum materiality applied to each account could materially impact the operations of the company. If all three accounts discussed below held the minimum materiality amount, NextBridge would be expensing approximately \$835,000 which would materially affect its operations. As reference, NextBridge calculated its materiality consistent with the Filing Requirements for Electricity Transmission Applications, Section 2.1.1. This equates to $\$55,700,000 \times 0.5\%$, or \$278,500.

As NextBridge's Application includes forecasted construction costs, all accounts are symmetrical which means the materiality is applied equally to customers as it is to NextBridge. NextBridge's Application request for recovery of \$737.1 is based on substantial evidence of the prudence of those costs, including that approximately 90 percent are known and fixed through executed contracts. NextBridge is also proposing a one-time update to its long-term debt costs such that it allows for a credit to customers if the costs of actual long-term debt decreases or increasing the cost of debt if actual long-term debt is higher than that proposed in the Application.

In the context of a recently settlement, in EB-2019-0261, Decision and Order (Nov. 19, 2020), the OEB accepted deferral accounts prior to knowing the expected balance including OEB's approval of Hydro Ottawa Limited's (Hydro Ottawa) sub-account "1508 – Subset of system access capital additions (net of contributions) revenue requirement differential variance account". Consistent with the Hydro Ottawa, NextBridge is proposing:

- Revenue Differential Variance Account (RDVA)
 - Causation: The RDVA will only be utilized if the in-service date is not March 31, 2022. Amounts included in this deferral account will be distinguished as outside of the base revenue as the application calculated the revenue requirement based on a March 31, 2022 in-service date.
 - Prudence: As determined by the IESO, the NextBridge project is developed to provide the least-cost solution to supply power to Northwestern Ontario and delivering the project in-service is cost effective for customers. While NextBridge currently projects the March 31, 2022 in-service date as achievable, unknown events, such as the ongoing COVID-

19 pandemic, may impact the in-service date. The costs associated with addressing unknown events, such as COVID-19, will be prudently incurred as required to bring the East-West Tie line in-service. Therefore, it is reasonable to establish a revenue tracking account for the potential that either the East-West Tie line is brought into service prior to or after the March 31, 2022 in-service date.

- Construction Cost Variance Account (CCVA)
 - Causation: The rate application is based on forecasted construction costs as the East-West Tie line is not yet in-service. Any amounts included in this variance account will be easily distinguishable as the revenue requirement included in the variance account will be calculated a new rate base than is different from the rate base in the Application. The costs included in this account will include costs necessary to complete the construction of the East-West Tie line.
 - Prudence: While NextBridge's forecasted costs for the East-West Tie line project are \$737.1 million, the project is not due to be in-service until March 31, 2022. This account would capture any currently unknown and prudently incurred costs beyond the \$737.1 for review and disposition at a later date. As any new and prudently incurred costs will be beyond the \$737.1 million. As the NextBridge Application sets forth forecasted construction cost, the final prudently incurred construction costs can be different than what was projected in the Application. This account will contain the revenue requirement difference between the forecasted East-West Tie line construction costs and actual prudently incurred construction costs. NextBridge will identify and track any new costs in a manner that shows they are not included in the \$737.1 million forecast.
- Debt Rate Variance Account (DRVA)
 - Causation: The Application is based on the OEB Cost of Capital Parameters and the long-term debt rate used in the application was 3.21%. NextBridge expects the long-term debt rate to be secured on financing closer to the in-service date and the debt rate used to ultimately finance the utility is not yet available. The revenue requirement difference due to the long-term debt rate will be easily distinguishable as the calculations will clearly outline the difference due to the actual cost of long-term debt rate as compared to 3.21% included in the application.
 - Prudence: Securing private debt placement for the project is prudent because it will ensure long-term financial viability of the company. Not securing long-term debt for the project would leave the project exposed to

short term interest rate volatility and weaken NextBridge's financial viability.

STAFF INTERROGATORY #72

INTERROGATORY

Reference: (1) Exhibit H / Tab 1 / Schedule 1 / p.1
(2) The OEB's letter dated July 25, 2019 re "Accounting Direction Regarding Bill C-97 and Other Changes in Regulatory or Legislated Tax Rules for Capital Cost Allowance"

Preamble:

In Reference 1, NextBridge requests a deferral account for Taxes or Payments in Lieu of Taxes Variance Account under the existing USofA account 1592. NextBridge proposes the disposition of the account at the end of the IR term through to the next rebasing application. OEB staff understands that the next rebasing application would be for 2032 rates.

In Reference 2, the OEB establishes Account 1592 - PILs and Tax Variances – CCA Changes specifically for the purposes of tracking the impact of changes in CCA rules.

Question(s):

- a) Please confirm that the impact of the change in the CCA rules is to be recorded in the sub-account CCA Changes, as established by the OEB in its July 25, 2019 letter.
- b) Please confirm that the balance in Account 1592 would likely be a debit balance given that there is only \$0.58 million of PILs expense embedded in the revenue requirement in this application. If not, please explain why.

RESPONSE

- a) Yes, changes in CCA rules would be recorded in the sub-account CCA Changes.
- b) Confirmed. If NextBridge were to be impacted by tax changes that warranted the use of Account 1592, it would likely be a debit balance since only \$0.58 million was included in the revenue requirement.

STAFF INTERROGATORY #73

INTERROGATORY

Reference: (1) Exhibit H / Tab 1 / Schedule 1 / p.2

In Reference 1, NextBridge requests a Revenue Differential Variance Account and it states that:

This account will track the revenue impact should there be a difference from the currently planned in-service date. Specifically, the account will record the difference between revenue earned by NextBridge as part of its share of the 2022 UTR revenue based on the forecasted in-service date and the revenue requirement that would have been calculated had rates been established based on the actual achieved in-service date (earlier or later).

NextBridge proposes disposing the account in the application for 2024 rates.

Question(s):

- a) Please provide a calculation of the balance in the account under these two scenarios:
 - i) The actual in-service date is February 28, 2022 which is one month earlier than the forecasted in-service date of March 31, 2022.
 - ii) The actual in-service date is April 30, 2022 which is one month later than the forecasted in-service date of March 31, 2022.

RESPONSE

- a) The NextBridge test year revenue requirement is \$55.7 million and was prorated based on the number of months in service. The 2022 expected revenue requirement after proration will be \$41.8 million, representing 9 of 12 months as calculated in Exhibit A, Tab 3, Schedule 1, Table 2.
 - a. If the actual in-service date is February 28, 2022, an additional month of revenue would make the balance in the account a debit of \$4.64 million, prior to applying carrying charges.
 - b. If the actual in-service date is April 30, 2022, a reduction of one month of revenue would make the balance in the account a credit of \$4.64 million, prior to applying carrying charges.

STAFF INTERROGATORY #74

INTERROGATORY

Reference: (1) Exhibit H / Tab 1 / Schedule 1 / pp.2-4
(2) Exhibit H / Tab 1 / Schedule 1 / Attachment 3

Preamble:

In Reference 1, NextBridge requests a Construction Cost Variance Account (CCVA) to track any difference in revenue requirement resulting from: difference between forecasted construction costs in this Application and the actual final project construction costs, including interest during construction.

In Reference 1, NextBridge states that “it is appropriate to continue to track the incremental construction work in progress and interest costs related to the COVID-19 emergency in a new subaccount of Account 2055” which it has proposed to the OEB in its letter dated June 11, 2020.

Per the draft accounting order in Reference 2, Next Bridge proposes that the CCVA is to be recorded in a sub account under Account 1508 and will include three components as below:

- The difference between the forecasted and actual construction costs
- COVID-19 related capital costs incurred during construction in excess of forecasted construction costs in this Application
- directly related costs associated with construction that extend past the in-service date such as environmental costs that are a result of commitments in the OBP and/or Amended EA for construction monitoring and mitigation programs that are not already accounted for in the construction costs (*i.e.*, environmental mitigation costs of \$1 million that were included but occur post in-service date because they were known and quantifiable amounts).

In Reference 1, NextBridge explains why the third component of post-dated environmental costs should be included in the CCVA:

As these costs are expected to decline each year after in service and are non-recurring, NextBridge proposes that the variance account method is best for customers instead of including in O&MA costs and potentially overstating O&MA costs for the following nine years of the revenue cap index.

NextBridge also provides an example in the table below to show the differences:

Table 1. Example of Cost Treatment Alternatives for Post Construction Environmental Costs

	Dollars					
	ISD¹⁴ + 1 Year	ISD + 2 Years	ISD + 3 Years	ISD + 4 Years	ISD + 5 Years	Total
O&MA if in Revenue Requirement	Estimate included in construction costs	\$972,000	\$972,000	\$972,000	\$972,000	\$3,888,000
Variance Account (as incurred)	Estimate included in construction costs	\$972,000	\$198,000	\$106,000	\$143,000	\$1,419,000

- After five years post in-service date, the costs are expected to be less than \$10,000 annually and are not included in this example, which is for illustrative purposes.

With respect to the disposition of the CCVA, NextBridge states that:

NextBridge proposes to seek initial disposition of the balance in this account in the second annual update following in-service. This update is expected to be filed in 2023 for inclusion in 2024 UTR rates. NextBridge seeks to leave the CCVA open for the remainder of the IR Term to account for activities that are a direct result of construction, such as environmental costs associated with the Overall Benefits Permit and Amended EA. The final disposition will take place at the end of the IR Term and in the next rebasing application for NextBridge.

Question(s):

- Please clarify the relationship between the COVID-related construction costs that are recorded in the sub-account under Account 2055 and the costs to be recorded in the CCVA (a sub-account under Account 1508).
- Please confirm that the \$1,419,000 estimated environmental costs post in-service date is accurate as of this date. If not, please provide a revised number.
- Please confirm that the nature of the environmental cost after the in-service date is OM&A, and not capital related.
- If c) is confirmed, would it be more appropriate to amortize the total \$1,419,000 over the IR term and include the amortized annual amount of \$141,900 into the

OM&A cost of the test year which is the approach used in the regulatory costs in a typical transmission/distribution rebasing application? Please provide NextBridge's position on this approach.

- e) Please confirm whether the primary reason for NextBridge's proposal to leave the CCVA open and dispose of the account on a final basis at the end of the IR term is to allow for recoveries of environmental costs in excess of the \$1,419,000 forecasted.
- f) In the event that the CCVA does not include environmental costs (instead these costs are included in the revenue requirement), please confirm whether NextBridge would agree to close the CCVA at the second annual update following the in-service date of operation.
- g) If e) is not confirmed, please specify any other costs that could be included in the CCVA post the in-service date of operation.
- h) With respect to the difference between the forecasted and actual project costs that is to be recorded in the CCVA, please confirm that this component could result in a debit balance to be collected from the ratepayers or a credit balance to be refunded to the ratepayers.

RESPONSE

- a) COVID-related construction costs that are recorded in the CWIP sub-account under Account 2055 are capital costs incurred during construction; while the associated revenue requirement for those costs are to be recorded in the CCVA.
- b) This estimate of \$1,419,000 is accurate as of this date.
- c) The environmental costs are a direct result of the capital construction of the line and were necessary requirements to secure permitting and construction of the line. Due to this, the costs are part of the capital project and the appropriate accounting treatment is as capital.
- d) In addition to the costs being capital costs, it is not appropriate to amortize the costs over the IR period because the \$1,419,000 is the expected spend of the first year post in-service. To collect that amount over 9 years and 9 months, while it was spent it in the first year of IR period, would leave NextBridge in a position of under collection for the entire IR term. Additionally, there would a loss due to the carrying cost associated with the \$1,419,000.
- e) Yes, the primary reason for leaving the CCVA open through the IR term is to capture environmental costs associated with remediating construction impacts.
- f) Yes, NextBridge would agree to close the CCVA with the approval of a Z-factor account if a material unplanned remediation cost occurred.
- g) N/A, (e) is confirmed
- h) Yes, the account could result in a debit or credit balance.

STAFF INTERROGATORY #75

INTERROGATORY

Reference: (1) Exhibit H / Tab 1 / Schedule 1 / p.5

Preamble:

NextBridge requests a Debt Rate Variance Account and states that:

This account will track the difference in the long-term and short-term debt rate used in the calculation of NextBridge's revenue requirement in this Application and the actual long-term and short-term debt rate secured by NextBridge to finance the project. NextBridge's actual cost of debt is not known and will not be known until closer to in-service date. Once the actual debt rate is known, this account will record the revenue requirement differential from in-service date up until the point where the actual cost of debt is reflected in NextBridge's revenue requirement that is included in the UTR.

NextBridge states that "NextBridge proposes to seek initial disposition of the balance in this account in the second annual update following in-service. This will allow for audited balances and to align with the Construction Cost Variance Account Disposition".

Question(s):

- a) Assuming that the actual debt is secured by February 2022, please explain when the actual cost of debt is anticipated to be reflected in NextBridge's revenue requirement?
- b) Please clarify whether the account is to be closed after the initial disposition in the second annual update application following the in-service date. If not, why not?

RESPONSE

- a) NextBridge proposes to seek initial disposition of the actual cost of long-term debt in the second annual update following in-service. The disposition will include what amount needs to be reflected in NextBridge's revenue requirement to reflect the actual cost of long-term debt for the remaining IR term. After the IR term, the actual cost of long-term debt will be incorporated into the revenue requirement rebasing.
- b) Yes, NextBridge would close the account after disposition.