The following table presents the changes in the fair value measurements in Level 3 of the fair value hierarchy for the year ended December 31, 2019:

	Fair Value Dec 31, 2018	Total Realized/ Unrealized Gains (Losses) Included in Net Investment Income	Transfers In (Out) [i]	Purchases	Sales [ii]	Fair Value Dec 31, 2019
Fixed Income	$ 7,588	$ (211)	$ —	$ 2,535	$ (1,466)	$ 8,446
Private Equity	19,064	(97)	—	5,038	(2,617)	21,388
Infrastructure	20,796	1,293	—	5,325	(2,122)	25,292
Real Estate	22,110	95	(21)	1,432	(3,119)	20,497
Total	$ 69,558	$ 1,080	$ (21)	$ 14,330	$ (9,324)	$ 75,623

The following table presents the changes in the fair value measurements in Level 3 of the fair value hierarchy for the year ended December 31, 2018:

	Fair Value Dec 31, 2017	Total Realized/ Unrealized Gains (Losses) Included in Net Investment Income	Transfers In (Out) [i]	Purchases	Sales [ii]	Fair Value Dec 31, 2018
Fixed Income	$ 5,700	$ 434	$ 116	$ 2,271	$ (933)	$ 7,588
Private Equity	14,050	2,972	(8)	5,535	(3,485)	19,064
Infrastructure	18,053	2,494	—	2,768	(2,519)	20,796
Real Estate	15,470	1,090	—	6,815	(1,265)	22,110
Total	$ 53,273	$ 6,990	$ 108	$ 17,389	$ (8,202)	$ 69,558

(i) Represents amounts transferred in(out) of Level 3, the net amount for the year ended December 31, 2019 was negative $21 (December 31, 2018: $108). This represents reclassification of debt and private investments that became publicly traded.

(ii) Includes return of realized foreign exchange gains and losses.

Fair Value Assumptions and Sensitivity

Level 3 financial instruments are valued using internal models and the resulting valuations are significantly affected by non-observable inputs. The significant input is the discount rate as the discount rate reflects both current interest rates as well as the uncertainty of future cash flows generated from the investment.

The discount rate is composed of two elements: a risk-free rate, which is the return that would be expected from a secure, liquid, virtually risk-free investment, such as a high quality government bond; plus a risk premium. The risk premium is estimated from, where observable, implied values of similar publicly traded investments or sales of similar investments (similar properties, in the case of real estate investments). If such information is not available, risk premium is estimated at a level that compensates for the incremental amount of risk associated with a particular investment. The selected discount rates are chosen to be consistent with the risk inherent in the stream of cash flows to which they are applied.

The following analysis illustrates the sensitivity of the Level 3 valuations to reasonably possible alternative discount rate assumptions for asset categories where such reasonably possible alternative assumptions would change the fair value significantly. These sensitivities are hypothetical and should be used with caution. The impact to the valuation from such changes to the discount rate has been calculated independently of the impact of changes in other key variables. In actual experience, a change in the discount rate may be the result of changes in a number of underlying assumptions which could amplify or reduce the impact on the valuation.

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As at December 31, 2019	Increase/Decrease in Discount Rate (basis points)	Decrease/Increase in Net Investment Assets
Private credit	25	$ 40
Private equity-direct investments	25	445
Infrastructure investments	25	140
Real estate investments	25	720
Total Impact on Net Investment Assets		$ 2,345

As at December 31, 2018	Increase/Decrease in Discount Rate (basis points)	Decrease/Increase in Net Investment Assets
Private credit	25	$ 47
Private equity-direct investments	25	355
Infrastructure investments	25	805
Real estate investments	25	770
Total Impact on Net Investment Assets		$ 1,977

The fair value of public market, private equity and real estate fund investments where AC does not have access to the underlying investment information is based on the value provided by the general partner or other external manager and therefore, in the absence of specific information to support deviating from this value, no other reasonably possible alternative assumptions could be applied.

Significant Investments

The OMERS Pension Plans held investments, each having a fair value or cost exceeding one per cent of the fair value or cost of net investment assets as follows:

	2019			2018		
	Number of Investment	Fair Value	Cost	Number of Investments	Fair Value	Cost
Public Investments	—	$ —	$ —	1	$ 1,049	$ 1,013
Private Investments	11	15,959	13,171	16	23,176	18,167
Total	11	$ 15,959	$ 13,171	17	$ 24,225	$ 19,180

Public investments where the individual issue has a cost or fair value exceeding one per cent of the cost or fair value of net investment assets include investments in foreign and Canadian government interest bearing securities.

Private investments having a cost or fair value exceeding one per cent of the cost or fair value of net investment assets include ownership interests in Bruce Power, Associated British Ports, Teranet, Oncor, National Veterinary Associates, Scotia Gas Networks, Epiq, Puget Energy, Ellevio, and LifeLabs; and real estate ownership interests in Yorkdale Shopping Centre.

The effective date of the most recent valuation for the above listed investments was December 31, 2019.

Investment Risk

AC's primary long-term investment risk is that the value of AC's assets and its capacity to generate cash is insufficient to meet pension obligations. AC's future obligation is used to establish the long-term investment objectives combined with an assessment of associated risks.

The AC Board of Directors, through its Investment Committee, determines the acceptable level of investment risk to be taken. This Committee reviews and recommends the long-term asset mix to the Board for approval. Primary accountability for managing risk, within the Board authorized parameters, is delegated by the Board to the CEO, who further delegates the responsibility to business leaders. The Chief Risk Officer (CRO) is responsible for implementing the Board-approved risk management mandate, including the development of associated policies and limits, and providing independent enterprise-wide

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oversight of business activities. The accountability for managing risks remains with the business units and functions responsible for making investment decisions.

AC's investments are diversified among major asset types. Investment teams within AC execute specific strategies that are designed to achieve return objectives that reflect both the opportunity and the risk associated with those asset classes. The methods and factors used in the measurement or assessment of investment risk are reviewed on an ongoing basis.

There are three major categories of investment risks that are managed by each business unit and at the AC level. They are: Market risk, Credit risk and Liquidity risk. A description of each investment risk category and how AC manages the risk is provided below.

a) Market Risk

Market risk is the risk that the fair value of an investment is impacted by changes in market prices such as foreign exchange rates, interest rates, equity, commodity prices and other price risks such as credit spreads. For derivative instruments, market risk arises from potential adverse changes in the value of derivative instruments as a result of changes in the underlying market variables. These underlying market variables may include the absolute and relative levels of interest rates, foreign exchange rates, equity, commodity and bond prices and their implied volatilities. To address market risk, investment teams execute various tactical actions and strategies designed to measure, manage and monitor the risks being assumed and to ensure the risks taken are commensurate with their expected returns. An explanation of the nature of each of these sources of market risk appears below.

Foreign Exchange Rates

AC pays pensions in Canadian dollars and manages a highly diversified portfolio of long-term investments, some of which are denominated in foreign currencies. Over time, the values of these investments expressed in Canadian dollars are impacted by changes in foreign exchange rates. These changes can be either positive or negative and over time can be significant given the volatility of foreign exchange rates. AC manages the exposures associated with our foreign currency-denominated investments using various tools such as forward contracts and futures. This approach reduces an investment's exposure to foreign exchange rate volatility over time. As illustrated in the table below, AC employs forward contracts and futures to hedge its exposure to foreign currency volatility for the majority of its non-Canadian dollar investments.

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The OMERS Pension Plans' net investment assets by currency before and after the impact of currency hedging and trading activities are as follows:

As at December 31,	2019				2018			
	Fair Value By Currency				Fair Value By Currency			
	Gross Exposure	Impact of Derivatives	Net Exposure	% of Total	Gross Exposure	Impact of Derivatives	Net Exposure	% of Total
Canada	**$ 40,236**	**$ 62,595**	**$ 102,831**	**92%**	$ 37,268	$ 58,089	$ 95,357	95%
United States	**45,414**	**(44,067)**	**1,347**	**1**	42,460	(41,726)	734	1
United Kingdom	**9,269**	**(7,924)**	**1,345**	**1**	9,375	(8,546)	829	1
Euro Countries	**7,697**	**(7,133)**	**564**	**1**	5,080	(4,918)	162	—
Other Europe	**2,286**	**(2,206)**	**80**	**—**	1,996	(1,300)	696	1
Australia	**1,830**	**(1,404)**	**426**	**—**	2,926	(2,750)	176	—
India	**1,669**	**72**	**1,741**	**2**	306	571	877	1
Hong Kong	**1,531**	**—**	**1,531**	**1**	288	185	473	1
China	**755**	**(4)**	**751**	**1**	85	—	85	—
Taiwan	**438**	**—**	**438**	**1**	134	80	214	—
Brazil	**291**	**1**	**292**	**—**	42	53	95	—
South Korea	**255**	**(3)**	**252**	**—**	114	77	191	—
Japan	**163**	**11**	**174**	**—**	(67)	136	69	—
Singapore	**143**	**—**	**143**	**—**	58	(51)	7	—
Indonesia	**95**	**56**	**151**	**—**	13	51	64	—
Other Asia-Pacific	**99**	**(50)**	**49**	**—**	193	39	232	—
Other	**69**	**56**	**125**	**—**	10	10	20	—
Total	**$ 112,240**	**$ —**	**$ 112,240**	**100%**	$ 100,281	$ —	$ 100,281	100%

Foreign Currency Sensitivity

After giving effect to the impact of hedging and trading activities and with all other variables and underlying values held constant, a five per cent increase/decrease in the value of the Canadian dollar against major foreign currencies would result in an approximate $471 (December 31, 2018: $247) decrease/increase in AC's net assets as shown below:

As at December 31,		2019		2018	
Currency	Change in value of Canadian Dollar	Unrealized gain/loss		Unrealized gain/loss	
United States	**+/- 5%**	**-/+**	**$ 67**	-/+	37
United Kingdom	**+/- 5%**	**-/+**	**67**	-/+	41
Euro Countries	**+/- 5%**	**-/+**	**28**	-/+	8
Other Europe	**+/- 5%**	**-/+**	**4**	-/+	35
Australia	**+/- 5%**	**-/+**	**21**	-/+	9
India	**+/- 5%**	**-/+**	**87**	-/+	44
Hong Kong	**+/- 5%**	**-/+**	**77**	-/+	24
China	**+/- 5%**	**-/+**	**38**	-/+	4
Taiwan	**+/- 5%**	**-/+**	**22**	-/+	11
Brazil	**+/- 5%**	**-/+**	**15**	-/+	5
South Korea	**+/- 5%**	**-/+**	**13**	-/+	10
Japan	**+/- 5%**	**-/+**	**9**	-/+	3
Singapore	**+/- 5%**	**-/+**	**7**	-/+	—
Indonesia	**+/- 5%**	**-/+**	**8**	-/+	3
Other Asia-Pacific	**+/- 5%**	**-/+**	**2**	-/+	12
Other	**+/- 5%**	**-/+**	**6**	-/+	1
Total		**-/+**	**$ 471**	-/+	$ 247

Interest Rate Risk

From an investment perspective, primary exposure to interest rates is a function of the capital deployed in fixed income products. For investments with fixed rates of interest, the exposure is to rising rates over time (i.e. rising interest rates decrease the market value of investments that have a fixed rate of interest). Interest rate risks include exposure to bonds and debentures, private debt and mortgages. In addition to these investments, AC holds a variety of other interest bearing investments in private portfolios that also have an exposure to rising interest rates. Lastly, AC also invests in short-term interest rate related securities primarily for the purpose of maintaining its ability to meet liquidity needs. The following tables illustrate how capital is allocated amongst the various types of interest bearing investments based upon the contractual maturity of the securities:

As at December 31,				**2019**
	Term to Maturity			
	Within 1 Year	**1 to 5 Years**	**Over 5 Years**	**Total**	**Average Effective Yield [i]**
Cash and short-term deposits	**$ 14,188**	**$ —**	**$ —**	**$ 14,188**	**1.9%**
Nominal bonds and debentures	**409**	**3,607**	**320**	**4,336**	**1.4**
Inflation-Linked bonds [ii]	**—**	**1,015**	**1,692**	**2,707**	**0.4**
Mortgages and private debt	**614**	**4,409**	**3,423**	**8,446**	**3.9**
Total	**$ 15,211**	**$ 9,031**	**$ 5,435**	**$ 29,677**	**2.3%**

As at December 31,				2018
	Term to Maturity			
	Within 1 Year	1 to 5 Years	Over 5 Years	Total	Average Effective Yield [i]
Cash and short-term deposits	$ 10,349	$ —	$ —	$ 10,349	2.1%
Nominal bonds and debentures	—	3,782	1,029	4,811	4.3
Inflation-Linked bonds [ii]	—	231	3,653	3,884	0.9
Mortgages and private debt	545	3,308	3,735	7,588	5.1
Total	$ 10,894	$ 7,321	$ 8,417	$ 26,632	3.2%

(i) Average effective yield represents the weighted average rate required to discount future contractual cash flows to current market value.

(ii) Inflation-linked bond yields are based on real interest rates. The ultimate yield will be impacted by inflation as it occurs.

Sensitivity to changes in interest rates

AC's sensitivity to changes in interest rates is significant in light of the allocation of capital to interest rate sensitive investments that are required to maintain AC's liquidity and ability to make significant investments in large scale private assets with relatively short notice.

After giving effect to derivative contracts (note 3B), debt liabilities, securities sold short and securities sold under repurchase agreements (note 4), a one per cent increase/decrease in nominal interest rates, with all other variables held constant, would result in an approximate decrease/increase in the value of fixed income investments and liabilities, and an unrealized (loss)/gain of $169 (December 31, 2018: $397). Similarly, a one per cent increase/decrease in real interest rates would result in an approximate decrease/increase in the value of inflation-linked bonds and an unrealized (loss)/gain of $180 (December 31, 2018: $340).

Equities

AC makes investments in both public (i.e. publicly traded) and private companies. Investments in publicly traded equities are managed to achieve income through dividends or capital gains or both over time. These investments are exposed to volatility due to changes in market sentiment. The investments in publicly traded equities are actively managed with due regard for risk and return objectives.

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In addition to the above, AC also invests directly in the equity of private companies. These "private equity" investments generate capital gain opportunities that are realized after a particular investment is sold. One of the key risks relating to private equity investments is the change in valuation. AC employs a comprehensive process to estimate the value of these investments on a regular basis. It should be noted that the risks and the returns associated with private equity are generally higher than publicly traded equities.

Commodities

AC has invested in commodity futures. The exposure to commodity derivatives is $1,620 (December 31, 2018: $2,138) with net fair value totaling negative $14 (December 31, 2018: negative $6) which is included in public equities.

Price Risk

Price risk is the risk that the fair value of a financial instrument will fluctuate because of changes in market prices (other than those arising from foreign currency risk or interest rate risk) whether those changes are caused by factors specific to the individual financial instrument, its issuer, or factors affecting all similar financial instruments traded in the market such as credit spreads. AC is subject to price risk through its public equity investments and in addition to geographic, industrial sector and entity specific analysis, uses strategies such as diversification and the use of derivative instruments to mitigate the overall impact of price risk.

AC's private investments including private equity, infrastructure, real estate and private debt and mortgages are also subject to price risk as they are impacted by many general and specific market variables. A 10% increase/decrease in the value of all public equity and private investments would result in an approximate increase/decrease in the value of public and private market exposure and an unrealized gain/loss of $8,962 (December 31, 2018: $8,166).

AC is also subject to price risk through changes in credit spreads on its fixed income investments. A credit spread is the difference between a debt instrument's yield and a benchmark instrument's yield. Benchmark instruments have high credit quality ratings, similar maturities and are often government bonds. A one basis point increase/decrease in the credit spreads would result in a decrease/increase in the value of interest-bearing fixed income investments of $16 (December 31, 2018: $23).

b) Credit Risk

Credit risk is defined as the financial loss that results from the failure of a counterparty (including counterparties to derivative financial instruments) to honour its contractual obligations to AC. AC is subject to credit risk in connection with issuers of securities held in the investment portfolio, debtors, structured securities, counterparties (including derivative, repurchase agreement and securities lending counterparties), other financial institutions, and other entities. To manage this risk, AC regularly performs financial analysis of counterparties and issuers it transacts with in addition to using external sources (e.g. credit rating agencies) to assess credit risk exposure. Where appropriate, AC requires collateral from its counterparties to help offset the perceived risk of an investment transaction. Limits are put into place in order to limit how much exposure AC has with its counterparties. Credit ratings for over-the-counter ("OTC") counterparties are provided by recognized credit agencies and have a minimum of A-. Credit risk exposure on derivative financial instruments is represented by the replacement cost receivable of contracts with counterparties, less any prepayment collateral or margin received, as at the reporting date. Credit risk on futures contracts is minimal as the counterparty is an exchange rather than a corporate entity and contracts are marked to market and margin receivables and payables are settled in cash daily.

The credit ratings of securities issued or guaranteed by governments are obtained from recognized credit rating agencies. For Corporate sector securities where no rating is available from the credit rating

agencies, ratings are determined using an internal rating process that monitors changes in the credit cycle annually when the necessary information is available. Unrated securities comprise of mortgages with a weighted average Loan-to-Value ratio no greater than 75%.

The credit quality of fixed income and short-term instruments, net of cash and demand deposits of $409 (December 31, 2018: $3,034) is set out in the table below:

As at December 31,					2019
Credit Quality	**Sovereign Governments**	**Provincial Governments**	**Corporate**	**Total**	**% of Total**
AAA	**$ 3,894**	**$ —**	**$ —**	**$ 3,894**	**13%**
AA	**586**	**349**	**13,151**	**14,086**	**48**
A	**31**	**220**	**464**	**715**	**3**
BBB	**521**	**—**	**2,339**	**2,860**	**10**
Below BBB	**112**	**—**	**4,566**	**4,678**	**16**
Unrated	**—**	**—**	**2,975**	**2,975**	**10**
Total	**$ 5,144**	**$ 569**	**$ 23,495**	**$ 29,208**	**100%**

As at December 31,					2018
Credit Quality	Sovereign Governments	Provincial Governments	Corporate	Total	% of Total
AAA	$ 4,175	$ —	$ 7	$ 4,182	18%
AA	719	337	6,526	7,582	32
A	—	209	614	823	4
BBB	—	—	3,676	3,676	15
Below BBB	305	—	4,951	5,256	22
Unrated	—	—	2,079	2,079	9
Total	$ 5,199	$ 546	$ 17,853	$ 23,598	100%

Right of Netting, Offset and Margin

During the normal course of business, AC is a counterparty to financial instruments that are subject to netting, offset and margin arrangements. In the case of OTC derivatives, with the majority of all counterparties collateral is collected from and pledged to counterparties according to the Credit Support Annex ("CSA") which forms part of International Swaps and Derivatives Association ("ISDA") master agreements. In the case of prime brokerage and other securities borrowing, collateral is provided to the full extent of the liability to the counterparty. In the case of repurchase transactions, under Global Master Repurchase Agreements ("GMRA"), AC (where selling the security) receives margin in return for securities sold, with an obligation to buy-back equivalent securities in the future. Following an event of default, bankruptcy or other early termination event in respect of the counterparty, AC is entitled to liquidate transactions under each of the above arrangements, to net all transactions, to liquidate the assets held as margin (where held by AC) and to offset against obligations to the same counterparty. AC may not be permitted to net and set-off upon the default of a clearer in respect of exchange traded derivatives and cleared OTC derivatives.

AC does not offset the financial instruments in its Consolidated Statement of Financial Position, as its rights of offset are conditional. The net amount in the following table represents the effect of the amounts that do not qualify for offsetting but are subject to conditional netting arrangements or similar arrangements. Similar arrangements include GMRAs, security lending agreements and any related rights to financial collateral.

Information for AC related to these arrangements as at December 31, 2019.

As at December 31,					2019
		Related amounts not set off in the Consolidated Statement of Financial Position			
	Nettable amount of Financial Instruments	Financial Instruments	Financial collateral (received) pledged	Securities sold under agreement to repurchase	Net amount
Financial Assets					
Derivative assets	$ 1,312	$ (463)	$ (506)	$ —	$ 343
Securities lending	38	—	(38)	—	—
Total Financial Assets	$ 1,350	$ (463)	$ (544)	$ —	$ 343
Financial Liabilities					
Derivative Liabilities	$ (539)	$ 463	$ —	$ —	$ (76)
Securities Borrowing	(92)	—	101	—	9
Repurchase agreements	(130)	—	—	130	—
Total Financial Liabilities	$ (761)	$ 463	$ 101	$ 130	$ (67)

As at December 31,					2018
		Related amounts not set off in the Consolidated Statement of Financial Position			
	Nettable amount of Financial Instruments	Financial Instruments	Financial collateral (received) pledged	Securities sold under agreement to repurchase	Net amount
Financial Assets					
Derivative assets	$ 284	$ (283)	$ —	$ —	$ 1
Securities lending	30	—	(31)	—	(1)
Total Financial Assets	$ 314	$ (283)	$ (31)	$ —	$ —
Financial Liabilities					
Derivative Liabilities	$ (2,676)	$ 283	$ 2,260	$ —	$ (133)
Securities Borrowing	(92)	—	97	—	5
Repurchase agreements	(137)	—	—	137	—
Total Financial liabilities	$ (2,905)	$ 283	$ 2,357	$ 137	$ (128)

c) Liquidity Risk

Liquidity risk is the risk that AC will encounter difficulty in meeting obligations associated with financial liabilities that are settled by delivering cash or another financial asset. AC has developed forward looking liquidity risk and cash-flow models which are used on a periodic basis to assess the impact of cash requirements and obligations on the liquidity of the OMERS Pension Plans. AC maintains a portfolio of highly marketable assets that can be sold or funded on a secured basis as protection against any unforeseen cash-flow needs such as to meet capital calls to fund investment commitments and to ensure that sufficient liquid assets are available to fund margin calls in the event of future losses.

In the normal course of business, AC incurs various financial obligations. AC's liabilities include the following:

- investment liabilities (note 4)
- amounts payable under contractual agreements (note 5)
- accrued pension obligation of the Primary Plan (note 6) and the RCA (note 7)
- contracts that give rise to commitments for future payments (note 15)

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Another liquidity risk is the ability of OMERS Finance Trust ("OFT") to cover its commercial paper issuance. OFT is authorized to issue a maximum of $5,000 (December 31, 2018: $5,000) in commercial paper of which $3,464 (December 31, 2018: $4,098) was drawn as at December 31, 2019. The commercial paper is highly rated and further supported by an undrawn $3,750 (December 31, 2018: $3,750) revolving credit facility with a syndicate of well capitalized banks to backstop the commercial paper program. OFT is also authorized to issue term notes, of which $2,672 (December 31, 2018: nil) is outstanding as at December 31, 2019.

B. Derivative Financial Instruments

The following summarizes the OMERS Pension Plans' derivative portfolio and related credit exposure:

As at December 31,	2019			2018		
		Fair Value			Fair Value	
	Notional Value [i]	**Assets [ii]**	**Liabilities**	Notional Value	Assets [ii]	Liabilities
Fixed Income						
Interest Rate Contracts						
Interest rate swap contracts	**$ 1,029**	**$ 2**	**$ —**	$ 1,559	$ 1	$ —
Bond index swap contracts	**545**	**18**	**(9)**	649	10	(19)
Inflation swaps	**337**	**398**	**(397)**	204	221	(220)
Interest rate swaptions	**12,244**	**50**	**(36)**	—	—	—
Bond futures	**1,030**	**1**	**—**	6,609	12	—
		469	**(442)**		244	(239)
Credit Default Contracts						
Credit default swaps	**3,440**	**92**	**(87)**	9,793	1,328	(1,323)
Credit default swaptions	**—**	**—**	**—**	1,571	—	(2)
		92	**(87)**		1,328	(1,325)
Foreign Exchange Contracts						
Currency options	**5,226**	**28**	**(8)**	8,704	28	—
Fixed Income - Foreign exchange forward contracts	**74,881**	**867**	**(280)**	68,821	270	(2,105)
		895	**(288)**		298	(2,105)
		1,456	**(817)**		1,870	(3,669)
Equities						
Equity Contracts						
Equity index futures contracts	**4,228**	**2**	**(14)**	10,185	49	(4)
Equity index swap contracts	**3,748**	**134**	**(65)**	2,233	73	(177)
Equity swap contracts	**4,206**	**87**	**(48)**	4,915	56	(177)
Equity options	**9,298**	**118**	**(23)**	5,767	107	(59)
		341	**(150)**		285	(417)
Commodity Contracts						
Commodity futures contracts	**1,620**	**1**	**(15)**	2,138	4	(10)
		1	**(15)**		4	(10)
Equities - Foreign exchange forward contracts	**8,110**	**100**	**(64)**	13,506	53	(367)
		100	**(64)**		53	(367)
		442	**(229)**		342	(794)
Total		**$ 1,898**	**$ (1,046)**		$ 2,212	$ (4,463)

(i) Notional value represents the contractual amount to which a rate or price is applied in order to calculate the exchange of cash flows and is therefore not recorded in the consolidated financial statements. Notional amounts do not necessarily indicate the amounts of future cash flows or the current fair value of the derivative contracts and, therefore, do not necessarily indicate the Plan's exposure to credit or market risks.

(ii) The fair value of derivative contracts recorded as an asset represents the credit risk replacement cost or the loss to which the OMERS Pension Plans are exposed should counterparties fail to perform under the derivative contracts. The amounts do not take into consideration legal contracts that permit offsetting of positions or any collateral which may be held.

The term to maturity based on notional value is as follows:

As at December 31,	2019				2018			
	Within 1 Year	**1 to 5 Years**	**Over 5 Years**	**Total**	Within 1 Year	1 to 5 Years	Over 5 Years	Total
Interest Rate Contracts	**$ 13,332**	**$ 1,209**	**$ 644**	**$ 15,185**	$ 7,492	$ 1,260	$ 268	$ 9,020
Credit Default Contracts	**362**	**3,065**	**13**	**3,440**	2,173	9,177	14	11,364
Equity Contracts	**19,480**	**2,000**	**—**	**21,480**	20,150	2,950	—	23,100
Commodity Contracts	**1,620**	**—**	**—**	**1,620**	2,138	—	—	2,138
Foreign Exchange Contracts	**88,217**	**—**	**—**	**88,217**	91,031	—	—	91,031
Total	**$ 123,011**	**$ 6,274**	**$ 657**	**$ 129,942**	$ 122,984	$ 13,387	$ 282	$ 136,653

The term to maturity based on the fair value is as follows:

As at December 31,	2019				2018			
	Within 1 Year	**1 to 5 Years**	**Over 5 Years**	**Total**	Within 1 Year	1 to 5 Years	Over 5 Years	Total
Interest Rate Contracts	**$ 22**	**$ 1**	**$ 4**	**$ 27**	$ 4	$ 1	$ —	$ 5
Credit Default Contracts	**1**	**4**	**—**	**5**	1	3	(1)	3
Equity Contracts	**170**	**21**	**—**	**191**	(46)	(85)	—	(131)
Commodity Contracts	**(14)**	**—**	**—**	**(14)**	(6)	—	—	(6)
Foreign Exchange Contracts	**643**	**—**	**—**	**643**	(2,122)	—	—	(2,122)
Total	**$ 822**	**$ 26**	**$ 4**	**$ 852**	$ (2,169)	$ (81)	$ (1)	$ (2,251)

NOTE 4

Investment Liabilities

The investment liabilities are as follows:

As at December 31,	**2019**	2018
Debt	**$ 7,034**	$ 5,345
Securities sold short	**76**	86
Securities sold under repurchase agreements	**130**	137
Payables and other liabilities	**842**	692
Total	**$ 8,082**	$ 6,260

The debt included in the table above is comprised of the following:

As at December 31,	2019			2018		
	Fair Value	**Cost**	**Weighted Average Interest Rate**	Fair Value	Cost	Weighted Average Interest Rate
Real Estate						
Credit facilities and debentures	**$ 645**	**645**	**1.39%**	$ 1,247	$ 1,247	2.27%
Infrastructure						
Secured debt	**253**	**257**	**3.15**	—	—	—
OMERS Finance Trust						
Commercial paper [(i)]	**3,464**	**3,464**	**1.92**	4,098	4,098	2.38
Term notes:						
2.50% due May 2, 2024 [(ii)]	**1,657**	**1,680**	**2.50**	—	—	—
2.60% due May 14, 2029 [(iii)]	**1,015**	**1,002**	**2.60**	—	—	—
Total	**$ 7,034**	**7,048**	**2.15%**	$ 5,345	$ 5,345	2.35%

(i) Commercial paper outstanding has maturities from January 3, 2020 to March 19, 2020 with interest rates ranging from 1.83% to 2.08%.

(ii) USD $1.25 billion term notes issued May 2, 2019. Interest is payable semi-annually in May and November of each year.

(iii) CAD $1.00 billion term notes issued May 14, 2019. Interest is payable semi-annually in May and November of each year.

Scheduled undiscounted principal and interest repayments on debt excluding commercial paper for the five subsequent years and thereafter are as follows:

As at December 31,	2019
2020	$ 721
2021	73
2022	320
2023	67
2024	1,667
Thereafter	1,117
	$ 3,965

As at December 31,	2018
2019	$ 471
2020	816
2021	—
2022	—
2023	—
Thereafter	—
	$ 1,287

NOTE 5

Amounts Payable Under Contractual Agreements

Under contractual agreements, AC invests funds on behalf of The Board of Trustees of Ryerson University and the Transit Windsor Fund (collectively, the Administered Funds). AC is authorized under the terms of the various agreements to recover expenses for administering such funds. The amounts due to Administered Funds are adjusted for income/(loss) based upon their proportionate share of the Plan's return.

AC, through its subsidiary OMERS Investment Management (OIM), establishes investment arrangements (OMERS Return Agreements) that provide eligible clients with access to the performance of all or parts of the annual investment return of the Primary Plan. The amounts due to OMERS Return Agreements are adjusted for income/(loss) based upon a contractual agreement that provides a return on investment equal to part of the Primary Plan return.

Amounts payable under contractual agreements are comprised of the following:

As at December 31,	2019	2018
Administered Funds	$ 1,567	$ 1,410
OMERS Return Agreements	1,918	1,837
Amounts payable under contractual agreements	$ 3,485	$ 3,247

NOTE 6

OMERS Primary Pension Plan

A summary of the financial statements of the Primary Plan is as follows:

Statement of Financial Position

As at December 31,		2019		2018
Net Assets Available for Benefits	**$**	**109,218**	$	97,291
Accrued Pension Obligation and Surplus/(Deficit)				
Defined benefit component				
Accrued pension obligation	**$**	**106,443**	$	99,058
Surplus/(Deficit)				
Funding surplus/(deficit)		**(3,397)**		(4,191)
Actuarial value adjustment of net assets		**4,928**		1,401
		1,531		(2,790)
Additional Voluntary Contributions component pension obligation		**1,244**		1,023
Total Primary Plan Accrued Pension Obligation and Surplus/(Deficit)	**$**	**109,218**	$	97,291

Statement of Changes in Net Assets Available for Benefits

For the year ended December 31,		2019		2018
Statement of Changes in Net Assets				
Net investment income	**$**	**11,438**	$	2,206
Contributions		**4,328**		4,352
Assumption of City of Toronto Pension Plans		**973**		36
Benefits		**(4,623)**		(4,247)
Pension administrative expenses		**(189)**		(92)
Total Increase		**11,927**		2,255
Net Assets Available for Benefits, Beginning of Year		**97,291**		95,036
Net Assets Available for Benefits, End of Year	**$**	**109,218**	$	97,291

Accrued Pension Obligation of the Defined Benefit Component

The accrued pension obligation is the actuarial present value of pension obligations of the Primary Plan in respect of benefits accrued to date for all active and inactive members. This obligation is measured using the same actuarial assumptions and methods adopted by AC for determining the Primary Plan's minimum funding requirements as set out under the PBA. As the experience of the Primary Plan unfolds, and as underlying conditions change over time, the actual value of accrued benefits payable in the future could be materially different than the actuarial present value.

The Projected Benefit Method Prorated On Services is used for the actuarial valuation.

The following are the primary economic actuarial assumptions which have been used in the actuarial valuation of the Primary Plan as at December 31:

Actuarial Assumptions	**2019**	2018
Assumed rate of inflation	**2.00%**	2.00%
Real rate of return assumed on Primary Plan assets	**3.90**	4.00
Discount rate	**5.90%**	6.00%

In addition, demographic assumptions are used to estimate when future benefits are payable to members and beneficiaries, including assumptions about mortality rates, termination rates and patterns of early retirement. Each of these assumptions is updated periodically, based on a detailed review of the experience of the Primary Plan and on the expectations for future trends. The AC external actuaries have provided their opinion that assumptions adopted are appropriate for valuing the Primary Plan's accrued pension obligation.

The retirement assumption is an age-based scale and reflects a possibility of retirement after normal retirement age. The mortality assumption is based on Primary Plan experience and includes a projection for longevity improvements in the future.

The assumed increases in the real rate of pensionable earnings (i.e., increase in excess of the assumed inflation rate) were last updated in 2018 to reflect recent experience of the Plan and current expectations for future years and are as follows:

	2019				2018			
	NRA60 (i)		**NRA65 (i)**		NRA60 (i)		NRA65 (i)	
	Before 2023	**After 2022**	**Before 2023**	**After 2022**	Before 2023	After 2022	Before 2023	After 2022
Assumed real rate of pensionable earnings increases (weighted average of a table of age-related increases)	**1.8%**	**1.9%**	**1.1%**	**1.2%**	1.8%	1.9%	1.1%	1.2%
Rate of pensionable earnings increases (assumed rate of inflation plus real rate of pensionable earnings increases)	**3.8%**	**3.9%**	**3.1%**	**3.2%**	3.8%	3.9%	3.1%	3.2%

(i) Normal Retirement Age of 60 and 65 years of age respectively.

The accrued pension obligation as at December 31, 2019 takes account of known changes in the Primary Plan membership up to October 31, 2019, actual inflationary increases to pension payments and deferred pension payments to be implemented as at January 1, 2020, and estimated pensionable earnings and credited service accruals in 2019.

The actuarial valuation of the Primary Plan was performed by Towers Watson Canada Inc. Under the PBA, an actuarial valuation report prepared by an independent external actuarial firm must be filed with FSRA at least once every three years. The Primary Plan valuation report was last filed for the December 31, 2018 year-end.

Summary of the Primary Plan's financial position is as follows:

As of December 31,		**2019**		2018
Primary Plan fair value of net assets available for benefits	**$**	**109,218**	$	97,291
Less Additional Voluntary Contribution net assets		**1,244**		1,023
Defined benefit net assets available for benefits		**107,974**		96,268
Actuarial value adjustment		**(4,928)**		(1,401)
Actuarial value of net assets available for benefits		**103,046**		94,867
Less Defined Benefit accrued pension obligation		**106,443**		99,058
Funding surplus/(deficit) of actuarial value of net assets available for benefits over accrued pension obligation		**(3,397)**		(4,191)
Reversal of actuarial value adjustment		**4,928**		1,401
Surplus/(Deficit) of net assets available for benefits over accrued pension obligation	**$**	**1,531**	$	(2,790)

Actuarial Value of Net Assets of the Defined Benefit Component

The change in the actuarial value adjustment is as follows:

For the year ended December 31,		2019		2018
Expected interest on beginning actuarial value adjustment [i]	$	**84**	$	359
Current year returns in excess of/(below) the funding rate not recognized in the year [i]		**4,437**		(2,771)
Prior years' returns (above)/below the funding rate recognized in the year		**(994)**		(2,195)
Increase/(Decrease) in actuarial value adjustment		**3,527**		(4,607)
Actuarial value adjustment, beginning of year		**1,401**		6,008
Actuarial value adjustment, end of year	$	**4,928**	$	1,401

(i) Based on the funding rate in effect during the year, 2019: 5.90% (2018: 6.00%).

The present value of unrecognized net investment returns by initial year they were established and the amounts to be recognized from 2020 through 2023, after application of the long-term rate of return assumption, are as follows:

Initial Year Earned		**Actuarial Value Adjustment as at Dec. 31, 2019[i]**	Unrecognized Investment Returns to be Recognized in 2020	2021	2022	2023	Actuarial Value Adjustment as at Dec. 31, 2018[i]
2015	$	**—**	$ —	$ —	$ —	$ —	$ 21
2016		**717**	760	—	—	—	1,352
2017		**1,978**	1,048	1,112	—	—	2,799
2018		**(2,204)**	(779)	(826)	(875)	—	(2,771)
2019		**4,437**	1,174	1,243	1,320	1,395	—
	$	**4,928**	$ 2,203	$ 1,529	$ 445	$ 1,395	$ 1,401

(i) For each initial year, amounts in the actuarial value adjustment are escalated annually by the long-term return assumption. Amounts are recognized in actuarial assets based on the number of years remaining in the five-year smoothing period.

The following table provides the potential sensitivity of the accrued pension obligation to changes in the assumed real rate of pensionable earnings increases and the assumed real rate of return on Primary Plan assets. A 50 basis point change in the following assumptions (with no change in other assumptions) would have the following approximate effects on the accrued pension obligation:

50 Basis Point Change		**Approximate Effect on Accrued Pension Obligation**		
As at December 31,		**2019**		2018
Real rate of pensionable earnings increases				
Decrease in assumption	$	**(1,800)**	$	(1,700)
Increase in assumption		**1,900**		1,800
Real return on Primary Plan assets and discount rate				
Decrease in assumption		**8,100**		7,600
Increase in assumption	$	**(7,200)**	$	(6,800)

NOTE 7

Retirement Compensation Arrangement

As the RCA is not a Registered Pension Plan, a 50 per cent refundable tax is levied on all contributions made to the RCA as well as on net investment income received and net realized investment gains. The refundable tax earns no investment income for the RCA; it is refunded on the basis of one dollar for every two dollars of realized losses or benefits paid out.

The pension benefits provided by the RCA are not fully funded but are funded on a modified pay-as-you-go basis in order to minimize the impact of the 50 per cent refundable tax applicable to all retirement compensation arrangement plans under the ITA. Contributions to the RCA are based on the top-tier Primary Plan contribution rates applied to contributory earnings over a defined earnings threshold, which was $172,698 for 2019 (2018: $175,223). The defined earnings threshold is actively managed and monitored in such a way that current and future contributions to the RCA, together with the existing RCA Fund and future investment earnings, are expected to be sufficient to provide for projected benefit payments and expenses over the 20-year period following each annual valuation date. Benefits in excess of the maximum amounts payable from the Primary Plan as allowed by the ITA are paid from the RCA.

A summary of the financial statements for the RCA is as follows:

Statement of Financial Position

As at December 31,		2019		2018
Net Assets Available for Benefits	**$**	**162**	$	148
Accrued Pension Obligation and Surplus/(Deficit)				
Accrued pension obligation	**$**	**928**	$	851
Surplus/(Deficit)		**(766)**		(703)
Accrued Pension Obligation and Surplus/(Deficit)	**$**	**162**	$	148

Statement of Changes in Net Assets Available for Benefits

For the year ended December 31,		2019		2018
Net investment income/(loss)	**$**	**17**	$	(1)
Contributions		**21**		18
Benefits		**(23)**		(30)
Administrative expenses		**(1)**		(1)
Total Increase		**14**		(14)
Net assets available for benefits, beginning of year		**148**		162
Net assets available for benefits, end of year	**$**	**162**	$	148

The actuarial assumptions used for the RCA are consistent with those used for the Primary Plan except that the RCA discount rate as at December 31, 2019 is 3.15% (December 31, 2018: 3.15%), which reflects the long-term asset mix of the RCA including the effect of the 50 per cent refundable tax. A 50 basis point change in the assumed rate (with no change in other assumptions) before reflecting the 50 per cent refundable tax would have the following approximate effect on the accrued pension obligation:

50 Basis Point Change	**Approximate Effect on Accrued Pension Obligation**	
As at December 31,	**2019**	2018
Assumed discount rate		
Decrease in assumption	**40**	37
Increase in assumption	**(38)**	(35)

NOTE 8

Net Investment Income/(Loss)

The OMERS Pension Plans' investment income/(loss) by asset class is as follows:

For the year ended December 31,					2019
	Investment Income [ii]	Net Gain/(Loss) on Investment Assets, Liabilities [iii]	Total Investment Income/(Loss) [i]	Investment Management Expenses (note 12)	Net Investment Income /(Loss)
Fixed Income					
Inflation-linked bonds	$ 66	$ 169	$ 235	$ (7)	$ 228
Nominal bonds and debentures	150	1,155	1,305	(14)	1,291
Private debt and mortgages	493	(109)	384	(68)	316
	709	1,215	1,924	(89)	1,835
Equities					
Canadian public equities	362	1,692	2,054		
Non-Canadian public equities	391	3,442	3,833		
	753	5,134	5,887	(96)	5,791
Canadian private equities [iv]	14	(28)	(14)		
Non-Canadian private equities [iv]	537	342	879		
	551	314	865	(226)	639
	1,304	5,448	6,752	(322)	6,430
Real Assets					
Infrastructure	1,858	149	2,007	(148)	1,859
Real estate [v]	827	649	1,476	(17)	1,459
	2,685	798	3,483	(165)	3,318
Short-Term Instruments					
Cash and short-term deposits	223	(20)	203	(5)	198
Total Investment Income	$ 4,921	$ 7,441	$ 12,362	$ (581)	$ 11,781
Income credited under contractual agreements					(326)
Net Investment Income/(Loss)					$ 11,455

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Exhibit A
Tab 5
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For the year ended December 31, 2018

	Investment Income [ii]	Net Gain/(Loss) on Investment Assets, Liabilities [iii]	Total Investment Income/(Loss) [i]	Investment Management Expenses (note 12)	Net Investment Income/(Loss)
Fixed Income					
Inflation-linked bonds	$ 87	$ (94)	$ (7)	$ (6)	$ (13)
Nominal bonds and debentures	252	(1,319)	(1,067)	(15)	(1,082)
Private debt and mortgages	445	291	736	(52)	684
	784	(1,122)	(338)	(73)	(411)
Equities					
Canadian public equities	390	(1,414)	(1,024)		
Non-Canadian public equities [vi]	462	(2,033)	(1,571)		
	852	(3,447)	(2,595)	(89)	(2,684)
Canadian private equities [iv]	3	124	127		
Non-Canadian private equities [iv][vi]	262	2,174	2,436		
	265	2,298	2,563	(273)	2,290
	1,117	(1,149)	(32)	(362)	(394)
Real Assets					
Infrastructure	1,438	445	1,883	(89)	1,794
Real estate [v]	696	597	1,293	(11)	1,282
	2,134	1,042	3,176	(100)	3,076
Short-Term Instruments					
Cash and short-term deposits	184	(33)	151	(5)	146
Total Investment Income	$ 4,219	$ (1,262)	$ 2,957	$ (540)	$ 2,417
Income credited under contractual agreements					(212)
Net Investment Income/(Loss)					$ 2,205

(i) Investment income includes interest, dividends and real estate operating income accrued or received net of interest expense on liabilities incurred in investment related activities. Investment income is net of external manager performance and pooled fund fees of $111 (December 31, 2018: $99).

(ii) Interest on investment related activities includes interest expense on real estate investment liabilities of $542 (December 31, 2018: $436) and interest on infrastructure investment liabilities of $124 (December 31, 2018: $17).

(iii) Includes net realized gain of $5,479 (December 31, 2018: loss of $628) and is net of transaction and pursuit costs of $150 (December 31, 2018: $269).

(iv) Includes loss from funds of $32 (December 31, 2018: income of $665) where the underlying assets are credit investments.

(v) Real estate investment income includes Oxford Properties Group's operating expenses (net of property management income) of $77 (December 31, 2018: $46). The total audit costs are $3 (December 31, 2018: $3).

(vi) Total investment income previously classified from Non-Canadian public equities of $256, was reclassified to Non-Canadian private equities.

NOTE 9

Investment Returns

AC investment returns are calculated using a time-weighted rate of return formula in accordance with the industry standard methods, based upon the following principles:

a. Returns are calculated as the percentage of business unit income to the weighted average fair value of the business unit net assets during the period.
b. Fair value is determined as described in notes 2 and 3.
c. Income is determined as described in notes 2 and 8.
d. The OMERS Primary Pension Plan return includes all business unit returns.

The percentage returns for the years ended December 31 are as follows:

For the year ended December 31,	**2019**	2018
OMERS Primary Pension Plan		
Total Gross Return	**12.53%**	3.00%
Gross Returns applicable to OMERS Return Agreements		
OMERS Infrastructure	**9.63%**	11.11%
Oxford Properties	**8.39%**	9.68%

The above gross returns are before the impact of base and performance fees paid to external fund managers and investment management expenses. The Primary Plan net return after all investment costs for the year ended December 31, 2019 was 11.9% (December 31, 2018: 2.3%).

NOTE 10

Contributions

For the year ended December 31,		**2019**		2018
Current year required contributions [(i)]				
Employers	**$**	**2,027**	$	1,994
Members		**2,027**		1,994
		4,054		3,988
Transfers from other pension plans		**59**		70
Past service contributions from members		**97**		93
Past service contributions from employers		**12**		12
Defined benefit contributions received		**4,222**		4,163
AVC contributions received		**127**		207
Total Contributions Received [(ii)]	**$**	**4,349**	$	4,370

(i) Current year service contributions are funded equally by employers and members. For NRA 65 members, the 2019 contribution rate was 9.0% (2018: 9.0%) of earnings up to $57,400 (2018: $55,900) and 14.6% (2018: 14.6%) of earnings above that level. For NRA 60 members, the 2019 contribution rate was 9.2% (2018: 9.2%) of earnings up to $57,400 (2018: $55,900) and 15.8% (2018: 15.8%) of earnings above that level.

(ii) OMERS, with 1,000 employers, has an appropriate reconciliation process which reconciles contributions for each employer on a member by member basis. This detailed process ensures that contributions are consistent with member information supplied by the employers.

NOTE 11

Benefits

For the year ended December 31,		2019		2018
Retirement benefits	$	3,882	$	3,546
Disability benefits		28		28
Death benefits		109		131
Transfers to other pension plans		58		50
Commuted value payments		535		500
Defined benefits paid		4,612		4,255
AVC benefits paid		34		22
Total Benefits Paid	$	4,646	$	4,277

NOTE 12

Pension Administrative and Investment Management Expenses

(a) Pension administrative expenses

For the year ended December 31,		2019		2018
Salaries and benefits	$	58	$	53
System development and other purchased services		109		18
Premises and equipment		6		4
Professional services [(i)]		10		9
Travel and communication		7		9
Total Pension Administrative Expenses	$	190	$	93

(b) Investment management expenses

For the year ended December 31,		2019		2018
Salaries and benefits [(ii)]	$	427	$	405
System development and other purchased services		36		28
Premises and equipment		24		21
Professional services [(i)]		39		35
Travel and communication		23		17
Investment management services		30		25
Other		2		9
Total Investment Management Expenses	$	581	$	540

(i) Total professional services expenses include independent actuarial costs of $0.8 (December 31, 2018: $0.9) and external audit costs of $2.8 (December 31, 2018: $2.4).

(ii) Net of management fees of $35.5 (December 31, 2018: $36.1) earned from portfolio investments.

NOTE 13

Related Party Disclosures

AC's related parties include employers whose employees are members of the Primary Plan, the SC, key management personnel (defined below) and investments where AC has a controlling interest. Transactions with related parties include the following:

- AC through Oxford Properties Group paid property taxes to municipal employers of $157 (December 31, 2018: $158) and utility payments to utility employers of $33 (December 31, 2018: $33). The amounts of property taxes paid were based on normal levies by the individual municipal employers and were consistent with those that would be paid by a non-related party. The utility payments made to utility companies which are AC employer entities were based on normal usage and rates that would be paid by a non-related party.
- AC through Oxford Properties Group earned rental revenue from investee entities of $20 (December 31, 2018: $18). The amounts of rental revenue earned were based on normal levies by the individual entities and were consistent with those that would be paid by a non-related party.
- AC through Oxford Properties Group entered into a lease arrangement with an agency of a municipal employer, whose employees are members of the Plan. The terms of the lease are at fair market value and consistent with those that would be paid by a non-related party.

Key Management Personnel Compensation

Key management personnel consist of members of the AC's Board of Directors and those senior executives responsible for planning and directing the activities of the AC.

For the year ended December 31,		2019		2018
Salaries, short-term employee benefits & termination benefits	$	17	$	18
Post-employment benefits		1		1
Other long-term benefits		8		7
Total	$	26	$	26

Other than the above, AC had no other transactions with key management personnel during the year.

NOTE 14

Capital

AC defines its capital as the funded status (surplus/(deficit)) of each of the OMERS Pension Plans. The funded status of the OMERS Pension Plans is discussed in note 6 and note 7.

AC's objective is to ensure that the Primary Plan's defined benefit component is fully funded over the long-term through the management of investments, contribution rates and benefits. Investments (note 3), the use of derivatives (note 3 B) and leverage (note 4) are based on asset mix and risk management policies and procedures. In 2018, a revised risk framework was approved by the Board of Directors, that describes overall risk-management governance and details the structure for categorizing risks to which the organization is exposed. This complements policies such as Statement of Investment Beliefs, Statement of Investment Authorities and Statement of Investment Policies & Procedures (SIP&P). As the Primary Plan's administrator, AC has adopted a SIP&P for the Primary Plan which sets investment objectives, guidelines and benchmarks used in investing the Primary Plan's assets, permitted categories of investments, asset-mix diversification and rate of return expectations. The SIP&P was originally established in 1989 and is reviewed annually by the AC Board. The SIP&P effective for the year ending December 31, 2019 was amended on December 28, 2018.

The SIP&P establishes long-term strategic asset mix ranges and targets by asset class. The actual asset mix at December 31, 2019 was within the long-term asset mix ranges.

The RCA investments are based on an asset mix and SIP&P separate from those of the Primary Plan. The RCA SIP&P was originally established in 2007 and is reviewed annually by the AC Board. The SIP&P effective for the year ending December 31, 2019 was last amended on December 28, 2018. The changes included in this amendment are not considered significant.

The Primary Plan's AVC component accrued pension obligation is based on AVC contributions net of withdrawals and administration fee plus net investment rate of return of the defined benefit component of the Primary Plan and as such does not have a surplus/(deficit) position. The Supplemental Plan has no members, net assets or accrued pension obligations. The Supplemental Plan SIP&P was last amended on December 28, 2018. The changes included in this amendment are not considered significant.

NOTE 15

Guarantees, Commitments and Contingencies

As part of normal business operations, AC enters into guarantees, commitments and contingencies.

Guarantees are provided to third parties with respect to certain investments. The maximum amount payable under guarantees, standby letters of credit and contingent amounts payable provided as part of investment transactions was $2.4 billion as at December 31, 2019 (December 31, 2018: $2.2 billion).

Future commitments and contingencies include those relating to the acquisition of investments which are expected to close in 2020 of $0.6 billion (December 31, 2018: $4.1 billion), and long term commitments of $16.2 billion (December 31, 2018: $16.8 billion) related to funds managed by third parties, the development of real estate projects, and the refurbishment of a major infrastructure asset.

AC, in the normal course of business, indemnifies its directors, officers, employees, its business units and certain others in connection with proceedings against them to the extent that these individuals are not covered under another arrangement. In addition, AC may in certain circumstances in the course of investment activities agree to indemnify a counterparty. Under the terms of such arrangements, AC may be required to compensate these parties for costs incurred as a result of various contingencies such as changes in laws and regulations or legal claims. The contingent nature of the liabilities in such agreements and the range of indemnification prevent AC from making a reasonable estimate of the maximum amount that would be required to pay such indemnifications.

As at December 31, 2019, AC was involved in certain litigation and claims. The outcome of such litigation and claims is inherently difficult to predict; however, in the opinion of Management, any liability that may arise from such contingencies would not have a material adverse effect on the consolidated financial statements of AC.

05

REPORT OF THE HUMAN RESOURCES COMMITTEE AND COMPENSATION DISCUSSION & ANALYSIS

Members in 2019	
Monty Baker (Chair)	Darcie Beggs
Bill Aziz	David Tsubouchi
David Beatty	George Cooke (ex officio)

Our Human Resources Committee (HR Committee) assists the AC Board in meeting its fiduciary oversight and related obligations by: (i) attracting, engaging and retaining excellent leadership at the senior executive level who are committed to the AC Mission Statement, Core Values and Leadership Principles; (ii) overseeing a robust succession management process for the position of Chief Executive Officer (CEO) and the C-Suite executives; and (iii) overseeing CEO performance, compensation and compensation policies.

In 2019, the HR Committee's work included:

- oversight of an annual performance assessment process for the CEO;
- making recommendations to the AC Board on compensation for the CEO;
- reviewing the candidates for CEO and C-Suite executives' succession as part of the succession management process, including discussion of development plans;
- successful advancement of the CEO succession plan;
- reviewing compensation awards for the C-Suite executives;
- reviewing performance assessments for the C-Suite executives;
- reviewing the talent management strategy;
- reviewing compensation plans to ensure appropriate strategic linkages and risk mitigation;
- approving compensation-related disclosure in public documents; and
- continued focus on HR governance matters, including compensation reporting.

Independent Compensation Adviser

The HR Committee engages an independent compensation adviser to provide advice and assistance in executing its responsibilities. Hugessen Consulting (Hugessen) is directly retained and instructed by, and reports directly to, the HR Committee. All work is pre-approved by the HR Committee, and Hugessen did not provide any non-Board-approved services to the organization during 2019.

During 2019, the independent adviser's scope of services included the following:

i. supporting the HR Committee in reviewing CEO pay and performance outcomes;
ii. providing independent executive compensation advice pertaining to the CEO and C-Suite executives (i.e., compensation philosophy, comparator groups, competitive pay positioning and pay mix);
iii. ensuring the HR Committee understood and was comfortable with the current compensation program for the CEO and C-Suite executives;
iv. providing counsel to the HR Committee on any recommendations made by Management;
v. reviewing proposals for new compensation plan designs; and
vi. assisting with any other items that the HR Committee requested.

The HR Committee has sole authority to approve the amount of the independent compensation adviser's fees. Executive compensation-related fees paid to our adviser in 2019 reflect the services as described above. The following table outlines the fees paid for services provided in 2019 and 2018:

Adviser	Executive Compensation-Related Fees		All Other Fees	
	2019	2018	2019	2018
Hugessen Consulting	$116,432	$196,215	Nil	Nil

HR Committee Composition and Meetings

Members of the HR Committee are appointed by the AC Board from among the Board's members and are independent of Management. Collectively, HR Committee members have skills, knowledge and experience in investment management, pensions, economics and public policy, executive leadership and strategy, risk management, talent management, and executive compensation. The HR Committee had four regular meetings and two special meetings during 2019 to review key items according to its mandate and annual work plan. At the invitation of the Chair of the HR Committee, members of Management, including the CEO, and the HR Committee's independent adviser, attended the meetings. At each meeting, there was an *in camera* session without Management present.

Chair of the Human Resources Committee Letter to Plan Members

2019 Year in Review

In our 2020 Strategy, one of the four pillars is centered on evolving our capabilities, which includes ensuring that we attract, engage, develop, retain and reward top talent. In 2019, we continued to do that in various ways, including:

- development programs with a global focus;
- development of a senior leadership pipeline;
- focus on succession management processes, with identification and development of leaders for key positions;
- focus on high-performance culture;
- increasing focus on inclusion and diversity; and
- advancement of our compensation philosophy and our pay-for-performance culture.

Compensation Governance and Risk

Our compensation plans are designed to align with business objectives, while ensuring we deliver competitive compensation that rewards for performance and differentiates across markets. We ensure our plans also continue to reflect leading governance principles by incorporating risk considerations. This allows the HR Committee to appropriately reward behaviours consistent with our desired risk culture. Our aim is to achieve a balance between risk and reward so that employees are aligned with the long-term investment strategy of OMERS.

Furthermore, to ensure compensation and risk outcomes are symmetrical, the AC Board has the discretion to withhold awards to reflect significant unexpected or unusual events. It also has the ability to clawback any variable compensation awarded in the event of a material misrepresentation of results in the prior three years. To align executive interests with those of Plan members, and to motivate the creation of long-term value, a significant portion of total compensation is deferred and aligned with enterprise-wide performance measures over the deferral period.

Compensation Highlights

The following factors influenced year-end compensation awards:

- Our compensation plans are based on three-year returns to ensure alignment with achievement of long-term returns. The 2019 Primary Plan net return of 11.9% was above our absolute Primary Plan return target of 7.0%. The Primary Plan net absolute return of 8.5% for the three-year period 2017 to 2019 exceeded the three-year absolute return target of 7.3%, primarily due to strong results in Capital Markets. This resulted in a 2019 business performance factor above the target level.
- In addition, our risk assessments concluded that business risk was being managed consistently with our desired risk culture, resulting in neutral (0%) compensation plan risk adjustments across all our compensation plans.

We review our Total Rewards programs regularly to ensure they remain relevant.

Conclusion

We continue to dedicate significant attention to talent management, ensuring that we have the right people in the right roles to deliver long-term value for Plan members. We are confident that our approach to compensation attracts and engages a talented workforce through strong governance practices, while achieving the appropriate balance of protecting against incenting excessive risk-taking, and paying for performance.

Our HR Committee remains committed to a pay-for-performance approach, being a leader in compensation governance, and providing clear and transparent disclosure to Plan members, employers, sponsors and other stakeholders.

Monty Baker
2019 Chair of the Human Resources Committee

COMPENSATION DISCUSSION AND ANALYSIS

This Compensation Discussion and Analysis section describes our executive compensation program and awards for the Named Executive Officers. The Named Executive Officers include the CEO, Chief Financial Officer (CFO) and the three highest-paid C-Suite executives.

Approach to Compensation

OMERS is committed to a pay-for-performance approach for all employees. To achieve this, the compensation programs are designed to incent the right behaviour in the delivery of our business objectives within the appropriate risk parameters.

Compensation Principles

The executive compensation program is based on the following principles:

- Align with the interests of Plan members: Align employee and executive interests with Plan member interests through effective compensation plan design.
- Align with OMERS Strategy: Focus employee efforts on critical performance targets and reward for performance results.
- Pay for performance: Promote a pay-for-performance culture where there are clear relationships between pay and performance, ensuring differentiated pay to the reward.
- Effective risk management: Ensure compensation plan design does not incent excessive risk-taking and review plans regularly to ensure they are operating as intended.
- Pay competitively: Reward employees in a manner consistent with competitive market practice to ensure the organization's ability to attract, engage and retain high-performing talent. For total compensation, target-level performance is benchmarked to the 50th percentile, and superior level performance is benchmarked to the 75th percentile in the marketplace.
- Good corporate governance: Strive to be a leader in governance, continually reviewing and incorporating industry-leading compensation practices that align with our governance model.

Elements of Executive Compensation

Executive compensation for 2019 consists of the following elements:

- base salary;
- variable compensation - comprising short-term incentives (STIP) and long-term incentives (LTIP); and
- benefit and retirement programs.

Compensation Element	Description	Compensation Type
Base Salary	Based on market benchmarking and reviewed annually.	Fixed
Short-Term Incentives (STIP)	Based on business and individual performance against pre-established objectives.	Variable (At-Risk)
Long-Term Incentives (LTIP)	Based on business and individual performance against pre-established objectives. LTIP awards are deferred and paid out 26 months after the end of the year in which they are awarded.	Variable (At-Risk)
Benefits and Retirement Programs	Includes vacation, life and disability insurance, health and dental benefits, and retirement programs.	Fixed

Design of the Executive Compensation Plan

The CEO, CFO and other Named Executive Officers participate in the Executive Compensation Plan. There are four key steps in determining annual variable compensation awards under the Executive Compensation Plan:

Step 1	Establish target total compensation
Step 2	Establish balanced scorecards
Step 3	Evaluate performance
Step 4	Determine compensation awards

The first two steps take place at the beginning of the plan year and establish the foundation through setting target compensation and performance objectives. Steps three and four occur at the end of the year when performance is measured against objectives, and final awards are determined.

Step 1	**Establish target total compensation**

Target total compensation is determined at the beginning of the year or upon hire, or with changes in roles or responsibilities.

				Risk-Adjusted Variable Compensation				
Total Compensation	=	Base Salary	+	Annual Cash Compensation (STIP)	+	Long-Term Compensation (LTIP)	+	Benefit and Retirement Programs

For all executives, target total compensation is reviewed annually, as well as at the time of any material change in roles. Our philosophy is to set target total compensation to reflect the median of the competitive market, on average. Targets for an individual executive may be positioned above or below the median to reflect experience, potential, performance or other factors specific to the executive or role.

The HR Committee, with the advice from its independent adviser, reviews target total compensation for C-Suite executives, while the AC Board of Directors approves the CEO's total compensation, based on the HR Committee's recommendation.

Step 2	**Establish balanced scorecards**

At the beginning of the year, a balanced scorecard is established for each participant, made up of their key objectives, and is used to assess performance at the end of the year. The balanced scorecard includes performance against net absolute returns and other key priorities.

The table below outlines the rationale for the inclusion of each performance measure.

Performance Measure	Rationale	2019 Weighting				
		CEO	Chief Investment Officer	Chief Risk Officer	Chief Financial Officer	Other Senior Executives
Investment Returns	Net absolute returns aligning executives with the interests of Plan members.	40%	60%	20%	40%	40%
Key Strategy Execution and Leadership Objectives	Strategic & leadership initiatives based on enterprise and business priorities.	60%	40%	80%	60%	60%

The CEO approves the objectives for each member of the C-Suite which are reviewed by the HR Committee. The HR Committee will recommend the annual balanced scorecard for the CEO to the AC Board of Directors for approval.

Step 3	**Evaluate performance**

Following the end of the year, performance is assessed for each member of the C-Suite which determines each individual's balanced scorecard factor within a range of 0% to 200%. The AC Board of Directors evaluates the performance of the CEO. Commentary on 2019 performance for the CEO is discussed in the section **Compensation of the CEO**.

Step 4	**Determine compensation awards**

At the end of the year, individual risk-adjusted variable compensation awards are determined as outlined below:

Risk-Adjusted Variable Compensation Award	=	**Variable Compensation Target**	x	**Balanced Scorecard Factor**	+/-	**Risk Adjustment**
		STIP + LTIP		0% - 200%		+/- 15%

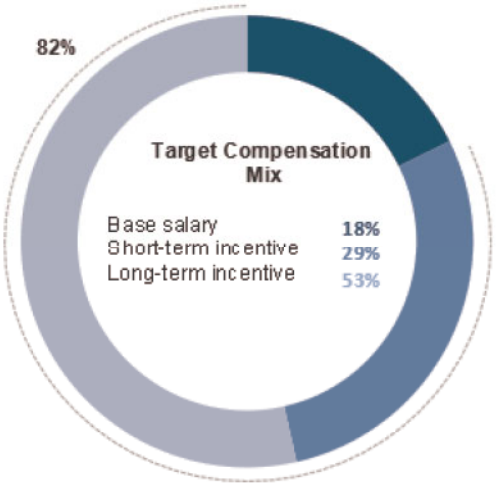
Final awards may range between 0% and 200% of target. The HR Committee, with advice from its independent adviser, reviews all variable compensation awards for the C-Suite executives, while the AC Board of Directors approves the CEO's annual awards based on the HR Committee's recommendation. Once a participant's variable compensation awards are determined, 35% is paid in cash (STIP), and 65% is deferred (LTIP).

Target Compensation Mix

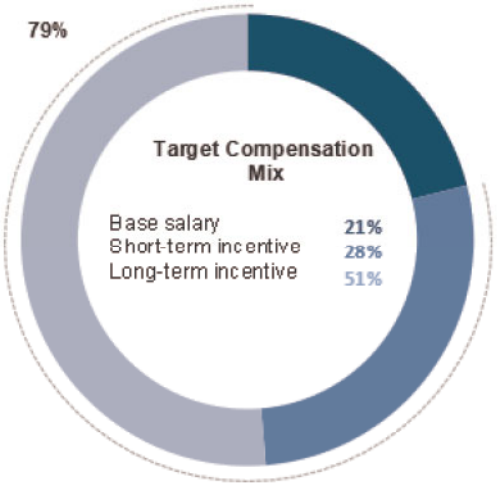
Aligned with OMERS pay-for-performance approach, total compensation for C-Suite executives is comprised primarily of variable compensation tied to investment and individual performance.

The majority of compensation for the CEO and the Named Executive Officer positions is variable as outlined in the following charts.

CEO



Other Named Executive Officers (Average)



Comparator Groups Used to Set Competitive Pay

OMERS has identified comparator groups for its various businesses in setting competitive compensation to closely reflect the marketplace. The comparator groups are reviewed on a regular basis by the HR Committee.

Typical considerations include other organizations that compete for similar talent, industry-specific organizations, or organizations with similar objectives. OMERS reviews compensation levels of comparable positions, and assesses relative performance, size, geographical scope and complexity.

Compensation Governance

This section outlines key governance-related features to help ensure that compensation aligns with the short and long-term interests of our Plan members.

OMERS Features	Description
Risk Adjustment	The HR Committee has the ability to modify awards based on how well risk was managed during the year. The adjustment is determined annually and approved by the HR Committee.
Board Discretion	The AC Board may make the decision to withhold awards of any variable compensation, including the short-term and long-term incentive payments to reflect significant unexpected or unusual events as defined by OMERS at its sole discretion.
Clawback	All variable compensation awards, whether paid or unpaid, are subject to a clawback in the event of a material misrepresentation or financial restatement of results, within a 36-month look-back period. In the event of a material misrepresentation or financial restatement, the HR Committee will determine the extent of the clawback (i.e., who, on an individual or plan basis, will be impacted and to what extent) based on the specific circumstances.

Filed: 2020-11-04
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Exhibit A
Tab 5
Schedule 1
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Alignment to Financial Stability Board Principles for Effective Governance of Compensation

The HR Committee has taken steps to further strengthen our approach to compensation, including incorporating the Financial Stability Board (FSB) Principles for Sound Compensation Practices and the associated Implementation Standards. These principles and standards, established in 2009, are intended to ensure effective governance of compensation, alignment of compensation with prudent risk-taking, effective supervisory oversight, and stakeholder engagement in compensation. OMERS continues to adhere to these FSB principles and will continue to review our adherence on an annual basis.

Compensation of the CEO

This section examines the 2019 performance and resulting compensation for the CEO.

Michael Latimer

Chief Executive Officer

OMERS Administration Corporation

2019 Performance

A balanced scorecard was established for Mr. Latimer based on performance achieved against the Primary Plan net absolute return (40%) and key strategy execution, and leadership objectives (60%). The AC Board assessed Mr. Latimer's 2019 performance against the following key individual objectives:

- 2020 and 2025 Strategy and Implementation;
- 2030 Strategy planning;
- Technology and cyber security;
- Talent management, leadership development, succession and performance management; and
- Effectively managing overall cost effectiveness of OMERS.

Total Compensation Awards

When determining compensation awards, the HR Committee aims to ensure there is a strong link between compensation and performance achieved. In determining Mr. Latimer's annual variable compensation awards for 2019, the AC Board assessed his performance against specific objectives that were agreed upon by the AC Board at the beginning of the year. Given the three-year (2017-2019) Primary Plan results and his individual performance, the AC Board approved the variable compensation performance factor of 169% which resulted in the actual awards shown below.

Compensation Element	Target	Award
2019 Salary	$565,000	$565,000
2019 Short-Term Incentive	$922,250	$1,562,292
2019 Long-Term Incentive	$1,712,750	$2,901,399
Total	**$3,200,000**	**$5,028,691**

Summary Compensation Table

The table below represents disclosure of the compensation paid to or earned by each Named Executive Officer during the three most recently completed financial years.

Name and Principal Position	Year	Salary	Non-Equity Incentive Compensation		Pension Contribution[ii]	All Other Compensation	Total
			Short-Term Incentive Plan (STIP)	Long-Term Incentive Plan (LTIP)[i]			
Michael Latimer CEO	**2019**	**565,000**	**1,562,292**	**2,901,399**	**55,448**	**58,830**	**5,142,970**
	2018	565,000	1,206,887	2,242,113	53,999	58,632	4,126,632
	2017	565,000	1,626,755	3,021,120	53,420	58,518	5,324,813
Jonathan Simmons Chief Financial Officer	**2019**	**450,000**	**681,345**	**1,265,355**	**55,448**	**1,307**	**2,453,455**
	2018	450,000	479,400	895,600	53,999	1,129	1,880,128
	2017	450,000	565,250	1,049,750	53,420	1,026	2,119,446
Blake Hutcheson President and Chief Pension Officer	**2019**	**500,000**	**1,318,800**	**2,449,200**	**55,448**	**86,986**	**4,410,435**
	2018	500,000	1,133,038	2,106,962	53,999	53,706	3,847,706
	2017	500,000	1,197,677	2,079,823	53,420	53,592	3,884,512
Michael Rolland President and Chief Operating Officer, Asia-Pacific	**2019**	**500,000**	**1,297,800**	**2,410,200**	**55,448**	**19,707**	**4,283,155**
	2018	500,000	1,201,316	2,038,684	53,999	19,509	3,813,508
	2017	500,000	1,147,125	2,130,375	53,420	19,395	3,850,315
Satish Rai Chief Investment Officer	**2019**	**500,000**	**1,461,600**	**2,714,400**	**55,448**	**1,452**	**4,732,900**
	2018	500,000	1,039,000	1,931,000	53,999	1,254	3,525,253
	2017	500,000	1,147,125	2,130,375	53,420	1,140	3,832,060

Notes:
(i) 2017, 2018 and 2019 amounts shown represent the LTIP awards reflecting business and individual performance for the calendar year.
(ii) Reflects matching pension contributions that OMERS makes on behalf of employees. Pension contributions are based on capped pensionable earnings, as described in the Pension Plan Benefits table later in this report.

Incentive Plan Awards Table

The following table presents the target value, award value and payout value for outstanding long-term incentives for each Named Executive Officer. LTIP is granted at target value on January 1 of the year. The target value is adjusted to an LTIP award based on the Balanced Scorecard at the end of the same year. The LTIP award vests over a 36-month period from the grant date. The LTIP awards are then adjusted by a performance factor based on the OMERS Primary Plan's net return. For 2019 awards, the performance factor is based on the two-year net returns following the year of the award. The 2018 and 2017 performance factors are based on the three-year net returns starting from the grant date subject to a performance hurdle. The performance hurdle is the cumulative three-year Primary Plan threshold return, which aligns to our funding discount rate.

Payout values for 2018 and 2019 were determined using a Primary Plan performance factor of 105% and 114% respectively. The payout value for 2017 is based on a Primary Plan performance factor of 109%.

The 2017 long-term incentive awards finished vesting on December 31, 2019 and were paid out, leaving the 2018 and 2019 long-term incentive awards outstanding.

Name	Year	Target Value	Award Value	Vesting Date	Payout Value
Michael Latimer CEO	2019	$1,712,750	$2,901,399	December 31, 2021	$3,307,595
	2018	$1,590,063	$2,242,113	December 31, 2020	$2,354,219
	2017	$1,590,063	$3,021,120	December 31, 2019	$3,293,021
Jonathan Simmons Chief Financial Officer	2019	$682,500	$1,265,355	December 31, 2021	$1,442,505
	2018	$552,500	$895,600	December 31, 2020	$940,380
	2017	$552,500	$1,049,750	December 31, 2019	$1,144,228
Blake Hutcheson President and Chief Pension Officer	2019	$1,300,000	$2,449,200	December 31, 2021	$2,792,088
	2018	$1,300,000	$2,106,962	December 31, 2020	$2,212,310
	2017	$1,121,250	$2,079,823	December 31, 2019	$2,267,007
Michael Rolland President and Chief Operating Officer, Asia-Pacific	2019	$1,300,000	$2,410,200	December 31, 2021	$2,747,628
	2018	$1,300,000	$2,038,684	December 31, 2020	$2,140,618
	2017	$1,121,250	$2,130,375	December 31, 2019	$2,322,109
Satish Rai Chief Investment Officer	2019	$1,462,500	$2,714,400	December 31, 2021	$3,094,416
	2018	$1,300,000	$1,931,000	December 31, 2020	$2,027,550
	2017	$1,121,250	$2,130,375	December 31, 2019	$2,322,109

Pension Plan Benefits

The following section describes the OMERS Pension Plans in which the Named Executive Officers participate:

Pension Formula	2% of "best five" earnings multiplied by years of credited service (maximum of 35 years) less 0.675% of "best five" earnings capped at the five-year average YMPE (Year's Maximum Pensionable Earnings, as set by the Canada Pension Plan).
"Best five" Earnings	The highest average of five consecutive years of contributory earnings. Contributory earnings are capped, as follows: • Cap on incentive pay: Post-2010 earnings are capped at 150% of contributory earnings calculated before incentive pay. • 7X YMPE Cap: Total contributory earnings are limited to seven times the YMPE (applies to all earnings if the member enrolled on/after January 1, 2014, and to post-2015 earnings if the member enrolled before January 1, 2014).
Normal Retirement Age	65
Early Retirement	Plan members are eligible to retire early when they reach age 55. Each member's unreduced date is the earliest of the date the member attains their 90 Factor (age and qualifying service), attains 30 years of qualifying service, or turns age 65. If a member retires before their unreduced date, there is a 5% reduction factor per year short of their unreduced date.
Form of Pension	The pension is paid monthly for the life of the member, with 66 $^{2}/_{3}$% of the member's pension amount continuing to a surviving spouse after the member's death.

Termination Benefits

The treatment under each of the termination scenarios is governed by the terms of the 2019 Executive Compensation Plan, which are summarized in the following table:

	Short-Term Incentive Plan	Long-Term Incentive Plan
Resignation	Forfeited	Forfeited
Retirement (as defined by the compensation plan)	Entitled to a partial award, pro-rated to reflect the period of active employment	Outstanding awards will continue to mature in normal course
Termination without Cause	Entitled to a partial award, pro-rated to reflect the period of active employment	Entitled to a partial award, pro-rated to reflect the period of active employment
Termination with Cause	Forfeited	Forfeited

06

FINANCIAL STATEMENTS: OMERS SPONSORS CORPORATION

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of OMERS Sponsors Corporation

Opinion

We have audited the financial statements of OMERS Sponsors Corporation (the "SC"), which comprise the statement of financial position as at December 31, 2019, and the statements of operations and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the SC as at December 31, 2019, and its results of operations and its cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the SC in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis of our audit opinion.

Emphasis of Matter - Restated Comparative Information

We draw attention to Note 6 to the financial statements, which explains that certain comparative information presented for the year ended December 31, 2018 has been restated. The financial statements for the year ended December 31, 2018 (prior to the adjustments that were applied to restate certain comparative information explained in Note 6) were audited by another auditor who expressed an unqualified opinion on those financial statements on February 15, 2019. Our opinion is not modified in respect of this matter.

Other Information

Management is responsible for other information. The other information comprises the information, other than the financial statements and our auditor's report thereon, included in the OMERS 2019 Annual Report.

Our opinion on the financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or other appears to be materially misstated.

The OMERS 2019 Annual Report is expected to be made available to us after the date of the auditor's report. If, based on the work we will perform on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact to those charged with governance.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian accounting standards for not-for-profit organizations, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the SC's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the SC or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the SC's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Organization's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the SC's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the SC to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

BDO Canada LLP

Chartered Professional Accountants, Licensed Public Accountants

Burlington, Ontario
February 13, 2020

STATEMENT OF FINANCIAL POSITION

As at December 31,		2019		2018 Restated (Note 6)
Assets				
Current				
Cash	**$**	**11,267**	$	11,547
AC receivable (note 3)		**205,964**		224,117
Prepaid expenses and other assets		**59,635**		64,681
	$	**276,866**	$	300,345
Liabilities				
Current				
Accounts payable and accrued liabilities	**$**	**216,655**	$	242,517
Deferred revenue		**59,188**		56,805
		275,843		299,322
Net Assets				
Excess/(deficit) of revenues over expenses from operations				
Balance at beginning of year		**1,023**		1,023
Current year		**—**		—
Balance at end of year		**1,023**		1,023
	$	**276,866**	$	300,345

The accompanying notes are an integral part of these financial statements.

Signed on behalf of the Board of OMERS Sponsors Corporation

Barry Brown
SC Board Co-Chair

Frank Ramagnano
SC Board Co-Chair

Peter Derochie
Chair, Audit Committee

STATEMENT OF OPERATIONS

For the year ended December 31,	2019	2018 Restated (Note 6)
Revenues		
AC expense reimbursement (note 3)	**$ 2,286,546**	$ 2,752,308
Expenses		
Contract and administrative salaries	**1,023,168**	1,066,395
Legal	**102,292**	31,209
Audit	**9,323**	10,735
Actuarial	**34,838**	—
Professional advisors	**31,632**	494,502
Other administrative	**95,442**	165,369
Insurance	**81,000**	81,000
Board remuneration (note 4)	**690,625**	686,168
Board expenses (note 4)	**218,226**	216,930
	2,286,546	2,752,308
Excess/(Deficit) of Revenues Over Expenses from Operations	**$ —**	$ —

The accompanying notes are an integral part of these financial statements.

STATEMENT OF CASH FLOWS

For the year ended December 31,		2019		2018 Restated (Note 6)
Cash was provided by (used in):				
Operating Activities				
Excess/(deficit) of revenues over expenses	**$**	**—**	$	—
Changes in non-cash working capital accounts				
AC receivable		**18,153**		168,745
Prepaid expenses and other assets		**5,046**		(63,651)
Accounts payable and accrued liabilities		**(25,862)**		(162,411)
Deferred revenue		**2,383**		56,805
Increase/(Decrease) in cash		**(280)**		(512)
Cash - Beginning of Year		**11,547**		12,059
Cash - End of Year	**$**	**11,267**	$	11,547

The accompanying notes are an integral part of these financial statements.

NOTES TO FINANCIAL STATEMENTS

December 31, 2019

NATURE OF OPERATIONS

The OMERS Sponsors Corporation (SC) is a corporation without share capital under the *Ontario Municipal Employees Retirement System Act, 2006* (OMERS Act). The SC is the sponsor of the OMERS Pension Plans (OMERS Pension Plans or Plans) as defined in the OMERS Act. The OMERS Pension Plans are administered by OMERS Administration Corporation (AC) and include the OMERS Primary Pension Plan (Primary Plan) and the Retirement Compensation Arrangement (RCA) associated with the Plans and the OMERS Supplemental Pension Plan for Police, Firefighters and Paramedics (Supplemental Plan). The SC is responsible for making decisions about the design of the Plan, the RCA, and the Supplemental Plan, amendments to those plans, setting contribution rates, and deciding whether to file actuarial valuations more frequently than is required under the *Pension Benefits Act* (Ontario) (PBA).

NOTE 1

Significant Accounting Policies

a) Basis of Accounting

These financial statements have been prepared in accordance with Canadian Accounting Standards for Not-for-Profit Organizations (ASNPO).

b) Revenue Recognition

AC expense reimbursement is recorded as revenue as the expenses are incurred in accordance with the joint SC/AC protocol. Amounts received in advance of revenue recognition are treated as deferred revenue.

c) Use of Estimates

The preparation of financial statements is in conformity with Canadian ASNPO which require management to make estimates and assumptions that affect the reported values of assets and liabilities, income and expenses, and related disclosures. Actual results could differ from these estimates.

d) Financial Instruments

Measure of Financial Instruments

The SC initially measures its financial assets and liabilities at fair value and subsequently measures all its financial assets and liabilities at cost or amortized cost less impairment.

Financial assets measured at amortized cost are cash and AC receivable. Financial liabilities measured at amortized cost are accounts payable and accrued liabilities.

The SC has no financial assets measured at their fair value and has not elected to carry any financial assets or liabilities at fair value.

Impairment

Financial assets are tested for impairment when events or circumstances indicate possible impairment. Write-downs, if any, are recognized in excess (deficit) of revenues over expenses and may be subsequently reversed to the extent that the net effect after the reversal is the same as if there had been no write-down. There are no impairment indicators in the current year.

e) Income Tax Status

The SC is tax exempt under the Income Tax Act.

NOTE 2

Bank Operating Facility

The SC maintains an unsecured, uncommitted overdraft facility (demand Operating Overdraft Facility) with a major bank in the amount of $1,000,000; advances would bear interest at the Prime Rate per annum. Access to the overdraft facility was not required in 2019.

NOTE 3

Related Party Transactions

During the year, the SC received expense reimbursements of $2,286,546 (2018 - $2,752,308) from the AC of which $205,964 (2018 - 224,117) was receivable at year-end.

The transactions are in the normal course of operations and are measured at the exchange amount.

The amounts due from related parties are non-interest bearing, unsecured and have no specific terms of repayment.

NOTE 4

Board Remuneration and Expenses

Board remuneration and board expenses are in accordance with SC By-law # 6.

NOTE 5

Financial Instruments

The SC is exposed to various risks through its financial instruments. The following provides a summary of the SC's exposure to risk as at December 31, 2019:

a) Credit Risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The SC is exposed to credit risk resulting from the possibility that a customer or counterparty to a financial instrument defaults on their financial obligations; if there is a concentration of transactions carried out with the same counterparty; or of financial obligations which have similar economic characteristics such that they could be similarly affected by changes in economic conditions. The SC's main credit risk relates to its AC receivable. The AC receivable is due from an organization with a high-quality credit rating and therefore there is limited credit risk associated with this financial instrument. There have not been any changes in this risk from the prior year.

b) Liquidity Risk

Liquidity risk is the risk that the SC will encounter difficulties in meeting its obligations associated with financial liabilities. Liquidity risk includes the risk that, as a result of operational liquidity requirements, the SC will not have sufficient funds to settle a transaction on the due date; will be forced to sell financial assets at a value, which is less than what they are worth; or may be unable to settle or recover a financial asset. The SC is exposed to this risk mainly in respect to its accounts payable and accrued liabilities. The SC manages this risk by managing its working capital, ensuring that sufficient credit is available. There have not been any changes in this risk from the prior year.

c) Market Risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: currency risk, interest rate risk, and price risk. The SC is not exposed to significant market risk. There have not been any changes in these risks from the prior year.

NOTE 6

Comparative Figures

The prior year financial statements have been restated to reflect prepaid expenses which were not previously recorded. The result of this correction to the prior year is as follows:

	Increase	2018 Original Balance	2018 Restated Balance
Prepaid expenses and other assets	$ 56,805	$ 7,876	$ 64,681
Deferred revenue	$ 56,805	$ —	$ 56,805

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REFERENCE

OMERS SPONSORS CORPORATION BOARD REMUNERATION AND EXPENSES

	2019		2018	
	Remuneration [i]	**Expenses [ii]**	Remuneration	Expenses
Brown, Barry (Co-Chair)	**$ 80,000**	**$ 13,683**	$ 38,500	$ 10,065
Ramagnano, Frank (Co-Chair)	**80,000**	**14,102**	80,000	10,212
Axford, Dan[iii]	**45,000**	**19,481**	38,500	14,580
Bailey, Paul	**38,500**	**10,626**	45,000	10,481
Biro, Frederick [iii]	**45,000**	**13,347**	45,000	16,345
Chan, Jason	**38,500**	**1,481**	28,875	11,409
Clarke, Diana [iv]	**—**	**689**	38,500	16,780
Derochie, Peter [iii]	**45,000**	**27,363**	45,000	29,574
Love, Marianne[iii]	**45,000**	**19,848**	80,000	22,893
Macaluso, Charlie	**38,500**	**875**	38,500	2,431
Maguire, Tim [iv]	**—**	**—**	9,625	655
McConville, Mary	**38,500**	**9,727**	38,500	4,018
Pennachetti, Joe	**38,500**	**4,482**	38,500	8,679
Richards, Jennifer [iv] [v]	**32,014**	**22,318**	—	—
Sahli, Sandra [iii]	**45,000**	**23,962**	45,000	21,297
Volpe, Giulia [iv] [v]	**6,486**	**—**	—	—
Weatherup, John	**38,500**	**2,736**	38,500	—
Other Expenses [vi]	**36,125**	**33,507**	38,168	37,511
Total	**$ 690,625**	**$ 218,227**	$ 686,168	$ 216,930

(i) Remuneration is in accordance with By-law No. 6.

(ii) Includes reimbursement for normal out-of-pocket business expenses including education, meeting and communication expenses incurred in conducting SC business. These expenses are reviewed by the Audit Committee on a quarterly basis.

(iii) Committee Chairs

Peter Derochie - Audit Committee
Dan Axford - Human Resources & Compensation Committee
Marianne Love - Risk Oversight Committee
Sandra Sahli - Corporate Governance Committee
Frederick Biro - Plan Design Committee

(iv) Member Changes:

Jennifer Richards, Board Member from January 1, 2019 to October 30, 2019
Giulia Volpe, New Board Member as of October 31, 2019
Tim Maguire, Retired from Board as of April 08, 2018
Diana Clarke, Retired from Board as of December 31, 2018

(v) In accordance with By-Law No. 6, the Board Member has directed their compensation to their appointing organization.

(vi) Other expenses include Board meeting expenses not allocated by individual and benefits (CPP & EHT).

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2019 OMERS SPONSORS CORPORATION BOARD/COMMITTEE MEETINGS

Director	SC Board Meetings (i) (11)		Audit Committee (6)	Corporate Governance Committee (15)	Human Resources and Compensation Committee (5)	Plan Design Committee (9)	Risk Oversight Committee (10)	Committees (Total)		All Meetings		Other Events and Meetings (ii)	All Events and Meetings	Education Days (iv)
	Attended	%	Attended	Attended	Attended	Attended	Attended	Attended /Eligible	%	Attended /Eligible	%			
Brown, Barry (Co-Chair) (iii)	11	100%	5	12	5	9	8	39/45	87	50/56	89	4	54	—
Ramagnano, Frank (Co-Chair) (iii)	11	100%	6	15	5	9	10	45/45	100	56/56	100	4	60	4
Axford, Dan	11	100%		15	5	9		29/29	100	40/40	100	7	47	7
Bailey, Paul	10	91%			4	8	9	21/24	88	31/35	89	2	33	4
Biro, Frederick	11	100%		15	5	9		29/29	100	40/40	100	7	47	3
Chan, Jason	11	100%	6		4	9		19/20	95	30/31	97	4	34	—
Derochie, Peter	11	100%	6			9	10	25/25	100	36/36	100	4	40	9
Love, Marianne	10	91%		10	4	8	10	32/39	82	42/50	84	4	46	5
Macaluso, Charlie	10	91%				8		8/9	89	18/20	90	3	21	—
McConville, Mary	10	91%		15	5	8		28/29	97	38/40	95	3	41	—
Pennachetti, Joe	10	91%	6			9	10	25/25	100	35/36	97	4	39	—
Richards, Jennifer	9	100%	4			7	9	20/20	100	29/29	100	3	32	3
Sahli, Sandra	11	100%		15		9	10	34/34	100	45/45	100	6	51	2
Volpe, Giulia	2	100%				2	1	3/3	100	5/5	100	2	7	—
Weatherup, John	10	91%		13		7		20/24	83	30/35	86	3	33	—
Overall Attendance		**96%**	**97%**	**92%**	**93%**	**95%**	**96%**		**95%**		**95%**			**37**

(i) Board meetings consisted of nine regularly scheduled meetings and two strategic planning session/days, all of which SC Board Members were expected to attend.

(ii) Members attended up to one to seven additional 'Other' meetings and events, such as the Spring Information Meeting, joint education sessions with the OAC, new board and committee member orientation, in-house education sessions, ad hoc meetings of special committees and attendance at committee meetings of which they are not members. Many Members also attended educational programs or pension/governance conferences ranging from two to nine days, exclusive of travel time.

(iii) In addition to chairing the SC Board meetings, Co-Chairs are ex-officio members of all committees; not all of their other obligations are tracked for attendance purposes.

(iv) Education days refer to the actual number of days Members spent at education programs or pension-related conferences and exclude travel time.

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OMERS ADMINISTRATION CORPORATION BOARD REMUNERATION AND EXPENSES

	2019		2018	
	Remuneration [i] [iii]	**Expenses [ii]**	Remuneration	Expenses
Cooke, George (Chair)	**$ 167,000**	**$ 4,608**	$ 167,000	$ 6,456
Aziz, Bill	**82,000**	**21,881**	82,000	—
Baker, Monty	**82,000**	**2,144**	82,000	3,177
Beatty, David	**67,000**	**146**	67,000	30
Beggs, Darcie	**67,000**	**11,247**	68,500	20,648
Butt, William (Bill)	**82,000**	**33,100**	82,000	—
Elliott, Paul	**67,000**	**7,204**	67,000	8,615
Fenn, Michael	**69,500**	**1,116**	82,000	5,831
Hutchinson, Laurie	**65,000**	**2,176**	65,000	3,136
Inskip, Cliff	**67,000**	**1,252**	67,000	5,955
Mueller, Charlene	**67,000**	**1,667**	67,000	2,415
Phillips, James	**82,000**	**11,889**	82,000	16,078
Somerville, Penny	**82,000**	**—**	82,000	1,032
Tsubouchi, David	**67,000**	**6,213**	68,500	12,313
Wu, Yung[iv]	**67,000**	**—**	67,000	—
Swimmer, Eugene[iv]	**—**	**—**	2,000	2,400
Other Expenses [v]	**—**	**41,378**	—	48,638
Total	**$ 1,180,500**	**$ 146,021**	$ 1,198,000	$ 136,724

(i) Remuneration of the Directors of the AC Board is in accordance with the Director Remuneration Policy effective January 1, 2017.

(ii) Includes reimbursement for normal out-of-pocket business expenses including education, travel for meetings, and communication expenses incurred on behalf of AC. These Board expenses by Directors are reported to the Audit & Actuarial Committee annually.

(iii) All Directors (except Laurie Hutchinson) are paid an annual technology allowance in the amount of $2,000 to cover all equipment and line charges required to review electronic board materials.

(iv) Member Changes:

- Y. Wu appointed to the Board effective January 1, 2018
- E. Swimmer reached maximum term limit on the Board on December 31, 2017

(v) Other expenses include meeting accommodations/meals/catering for OMERS Board meetings and AC/SC Joint Sessions.

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2019 OMERS ADMINISTRATION CORPORATION BOARD/COMMITTEE MEETINGS

Director [i]	AC Board Meetings (8)		Audit & Actuarial Committee (6)	Governance Committee (6)	Human Resources Committee (7)	Investment Committee (12)	Appeals Committee (1)	Technology Committee (1) [iii]	Risk Oversight Committee (7)	Joint Council (8)	Overall Attendance Committees (Total)		All Meetings		Scheduled Meetings [ii]	
	Attended		Attended	Attended	Attended	Attended	Attended	Attended	Attended	Attended	Attended /Eligible	%	Attended /Eligible	%	Attended /Eligible	%
Aziz, Bill	5	63			7	12					19/19	100	24/27	89	14/15	93
Baker, Monty	8	100	6		7			1			14/14	100	22/22	100	17/17	100
Beatty, David	8	100			5	10					15/19	79	23/27	85	14/15	93
Beggs, Darcie	8	100		6	7		1		7		21/21	100	29/29	100	15/15	100
Butt, William (Bill)	6	75	6			9					15/18	83	21/26	81	15/15	100
Cooke, George (Chair) [iv]	8	100	6	6	7	12	1	1	6	8	47/48	98	55/56	98	27/27	100
Elliott, Paul	8	100	6			11	1				18/19	95	26/27	96	16/16	100
Fenn, Michael	7	88	4[iii]	6				1			11/11	100	18/19	95	13/13	100
Hutchinson, Laurie	8	100	6					1	7		14/14	100	22/22	100	11/11	100
Inskip, Cliff	7	88	6			11			7		24/25	96	31/33	94	15/15	100
Phillips, James	8	100		6			1	1		6	14/16	88	22/24	92	10/10	100
Mueller, Charlene	8	100	6	5[iii]				1			12/12	100	20/20	100	14/14	100
Somerville, Penny	8	100		6		12			7	4	29/29	100	37/37	100	13/13	100
Tsubouchi, David	8	100		6	7		1				14/14	100	22/22	100	16/16	100
Wu, Yung	7	88		5[iii]		11		1			17/18	94	24/26	92	12/13	92
Overall Attendance		**93%**	**100%**	**100%**	**95%**	**92%**	**100%**	**100%**	**97%**	**90%**		**96%**		**95%**		**99%**

(i) AC Directors also attended other discretionary meetings such as the Annual Meeting, Joint Education Sessions with the SC, New Board and Committee Member Orientation Sessions and in house education sessions.

(ii) Scheduled meetings are regularly scheduled Board and Committee meetings which exclude special meetings and meetings called on short notice.

(iii) The Technology Committee was merged with the Governance Committee effective March 1, 2019. Technology Committee members were appointed to the Audit & Actuarial Committee the Governance Committee effective March 1, 2019.

(iv) Board Chair is ex officio member of the Appeals, Audit & Actuarial, Governance, Human Resources, Investment, Risk Oversight and Technology Committees.

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TEN-YEAR FINANCIAL REVIEW

As at December 31, (millions of Canadian dollars)	**2019**	2018	2017	2016 [iv]	2015	2014	2013	2012	2011	2010 [i]
Net Assets available for benefits										
Public markets	**50,757**	45,272	56,870	49,572	43,631	47,300	41,709	37,472	32,154	34,123
Private equity	**22,561**	20,246	10,759	10,981	11,482	8,767	9,208	7,465	7,753	6,633
Infrastructure	**25,292**	20,796	18,053	17,443	16,349	14,401	13,533	11,572	9,635	9,593
Real estate	**20,497**	22,110	15,470	15,084	27,642	22,253	17,603	15,846	14,516	12,599
	119,107	108,424	101,152	93,080	99,104	92,721	82,053	72,355	64,058	62,948
Other investment assets	**2,411**	2,780	3,978	5,063	1,062	1,017	744	853	707	645
Investment liabilities	**(9,278)**	(10,923)	(7,175)	(10,254)	(20,534)	(19,490)	(16,463)	(11,741)	(9,063)	(9,628)
Net investment assets	**112,240**	100,281	97,955	87,889	79,632	74,248	66,334	61,467	55,702	53,965
Non investment assets/(liabilities)										
Amounts payable under contractual agreements	**(3,485)**	(3,247)	(3,138)	(2,896)	(2,719)	(2,397)	(1,524)	(905)	(828)	(809)
Other assets	**625**	405	381	367	332	245	271	205	209	193
Net Assets Available for Benefits	**109,380**	97,439	95,198	85,360	77,245	72,096	65,081	60,767	55,083	53,349
Accrued Benefit Obligation and Surplus/(Deficit)										
Primary Plan										
Defined benefit component										
Accrued pension obligation	**106,443**	99,058	93,614	86,959	81,924	76,924	73,004	69,122	64,548	60,035
Funding Surplus/(Deficit)	**(3,397)**	(4,191)	(5,403)	(5,720)	(6,977)	(7,078)	(8,641)	(9,924)	(7,290)	(4,467)
Actuarial value adjustment of net assets available for benefits	**4,928**	1,401	6,008	3,379	1,718	1,771	341	1,321	(2,337)	(2,278)
	1,531	(2,790)	605	(2,341)	(5,259)	(5,307)	(8,300)	(8,603)	(9,627)	(6,745)
Additional Voluntary Contributions Component pension obligation	**1,244**	1,023	817	595	445	360	276	170	94	
Accrued Pension Obligation and Deficit - Primary Plan	**109,218**	97,291	95,036	85,213	77,110	71,977	64,980	60,689	55,015	53,290
Retirement Compensation Arrangement										
Accrued pension obligation	**928**	851	813	739	679	619	614	555	504	468
(Deficit)	**(766)**	(703)	(651)	(592)	(544)	(500)	(513)	(477)	(436)	(409)
Accrued Pension Obligation and Deficit - Retirement Compensation Arrangement	**162**	148	162	147	135	119	101	78	68	59
Accrued Pension Obligation and Deficit	**109,380**	97,439	95,198	85,360	77,245	72,096	65,081	60,767	55,083	53,349

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For the year ended December 31, (millions of Canadian dollars)	2019	2018	2017	2016 [iv]	2015	2014	2013	2012	2011	2010 [i]
Changes in Net Assets Available for Benefits										
Net assets available for benefits, beginning of the year	**97,439**	95,198	85,360	77,245	72,096	65,081	60,767	55,083	53,349	47,832
Changes due to Investment Activities										
Total investment income [ii]	**12,362**	2,957	10,477	8,575	5,441	7,082	4,000	5,544	1,648	5,735
Investment management expenses [ii]	**(581)**	(540)	(409)	(427)	(351)	(384)	(266)	(265)	(264)	(268)
	11,781	2,417	10,068	8,148	5,090	6,698	3,734	5,279	1,384	5,467
Income credited under contractual agreements	**(326)**	(212)	(333)	(292)	(306)	(222)	(97)	(79)	(21)	(83)
Net Investment Income/(loss)	**11,455**	2,205	9,735	7,856	4,784	6,476	3,637	5,200	1,363	5,384
Changes due to Pension Activities										
Contributions										
Current year required contributions	**4,054**	3,988	3,858	3,690	3,650	3,515	3,434	3,026	2,618	2,227
Other contributions	**295**	382	335	275	230	171	210	184	195	86
Total Contributions Received	**4,349**	4,370	4,193	3,965	3,880	3,686	3,644	3,210	2,813	2,313
Benefits										
Benefits paid	**(3,910)**	(3,574)	(3,293)	(3,041)	(2,826)	(2,616)	(2,437)	(2,256)	(2,047)	(1,890)
Transfers, commuted value and other benefit payments	**(736)**	(703)	(712)	(585)	(621)	(450)	(473)	(414)	(336)	(236)
Total Benefits Paid	**(4,646)**	(4,277)	(4,005)	(3,626)	(3,447)	(3,066)	(2,910)	(2,670)	(2,383)	(2,126)
Assumption of City of Toronto Pension Plans	**973**	36	—	—	—	—	—	—	—	—
Pension administrative expenses	**(190)**	(93)	(85)	(80)	(68)	(81)	(57)	(56)	(59)	(54)
Net assets available for benefits, end of year	**109,380**	97,439	95,198	85,360	77,245	72,096	65,081	60,767	55,083	53,349
Net Return										
Primary Plan										
Defined Benefit Component										
Time weighted return on market value	11.9%	2.3 %	11.5%	10.3%	6.7%	10.0%	6.0%	9.5%	2.6 %	11.4%
Absolute return target	7.5%	7.3 %	7.3%	7.9%	7.8%	7.7%	7.5%	7.2%	7.5 %	7.3%
Additional Voluntary Contribution Component										
Time weighted return on market value	11.9%	2.3 %	11.5%	10.3%	6.7%	10.0%	6.0%	9.5%		
Retirement Compensation Arrangement Investment Fund [iii]										
Time weighted return on market value	20.9%	(1.6)%	13.1%	7.8%	12.5%	14.5%	28.5%	10.5%	(4.1)%	7.7%
Benchmark	21.5%	0.1 %	12.8%	8.7%	12.2%	14.6%	30.2%	12.2%	(2.4)%	10.1%

(i) In preparing financial statements in accordance with CPA Canada Handbook Section 4600 - Pension Plans and IFRS starting in 2011, AC has adjusted amounts for 2010 (were previously reported in accordance with CICA Handbook Section 4100) for comparative purposes.

(ii) In preparing financial statements in 2012, AC has reclassified pursuit costs from investment management expenses to total investment income. 2011 balances were adjusted to reflect this reclassification.

(iii) Excludes the RCA refundable tax balance with the Canada Revenue Agency.

(iv) AC has changed the presentation of debt related to real estate. Effective January 1, 2017 real estate investment assets are presented net of related debt. 2016 comparatives have been restated.

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ACCOUNTING STANDARDS

1. On November 20, 2014, in Docket No. EB-2014-0282, the Board approved NextBridge's request to use United States Generally Accepted Accounting Principles ("**US GAAP**") rather than Modified International Financial Reporting Standards for regulatory purposes. The OEB amended Schedule 3 of Upper Canada Transmission License (ET-2011-0222) to recognize the use by NextBridge of US GAAP for regulatory purposes. Therefore, NextBridge will use US GAAP accounting for purposes of this Application. By way of further explanation NextBridge does not engage in any non-utility businesses and therefore segregated accounting treatment is not required or applicable.

RATING AGENCY REPORTS

1. Typically for large infrastructure projects final debt placement is normally secured close to the in-service date of the project and at that time a credit rating from at least one rating agency will be required for the company on a standalone basis.

2. During the construction of the project NextBridge has used partner capital contributions instead of securing external financing. NextBridge plans to finance the project close to the in-service date which will also allow BLP time to obtain necessary financing to become part owner and the change in corporate structure will affect financing. NextBridge will seek private placement debt offering which will be structured so that the debt achieves an investment grade credit rating.

3. Once the rating agency reports are received by NextBridge they will be submitted to the OEB as an update to the Application. 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.

4. NextBridge has already engaged lenders to ensure a competitive process for the permanent debt issuance. NextBridge has agreements in place with four major Canadian banks to participate in providing financing to the East-West Tie line project. NextBridge expects this level of participation will lead to competitive financing rates for customers.

CORPORATE STRUCTURE

Overview of the Utility and Description of Partnership

1. The Applicant, UCT operating as NextBridge, is a New Brunswick corporation established for the purpose of developing, owning, and operating transmission facilities in Ontario known as the East-West Tie line in its capacity as the general partner, acting for and on behalf of the limited partnership, NextBridge Infrastructure LP.

2. On August 7, 2013, UCT was designated as the electricity transmitter to undertake development work for a new electricity transmission line running between just northeast of Thunder Bay to Wawa, Ontario (Docket No. EB-2011-0140). On January 30, 2019, the Minister of Energy, Northern Development and Mines, issued through Order in Council 52/2019 a directive to the OEB to grant the Leave to Construct ("**LTC**") the East-West Tie line to NextBridge. On February 11, 2019, the OEB granted the leave to construct the East-West Tie line to NextBridge, as well as an amended NextBridge Transmission Licence to require NextBridge to construct, expand or reinforce the East-West Tie line. The East-West Tie line consists of approximately 450 km of new double circuit 230 kV overhead electricity transmission line on a new ROW between Thunder Bay to Wawa in northwestern Ontario.

NextBridge's Role as General Partner and Identity of the Limited Partners

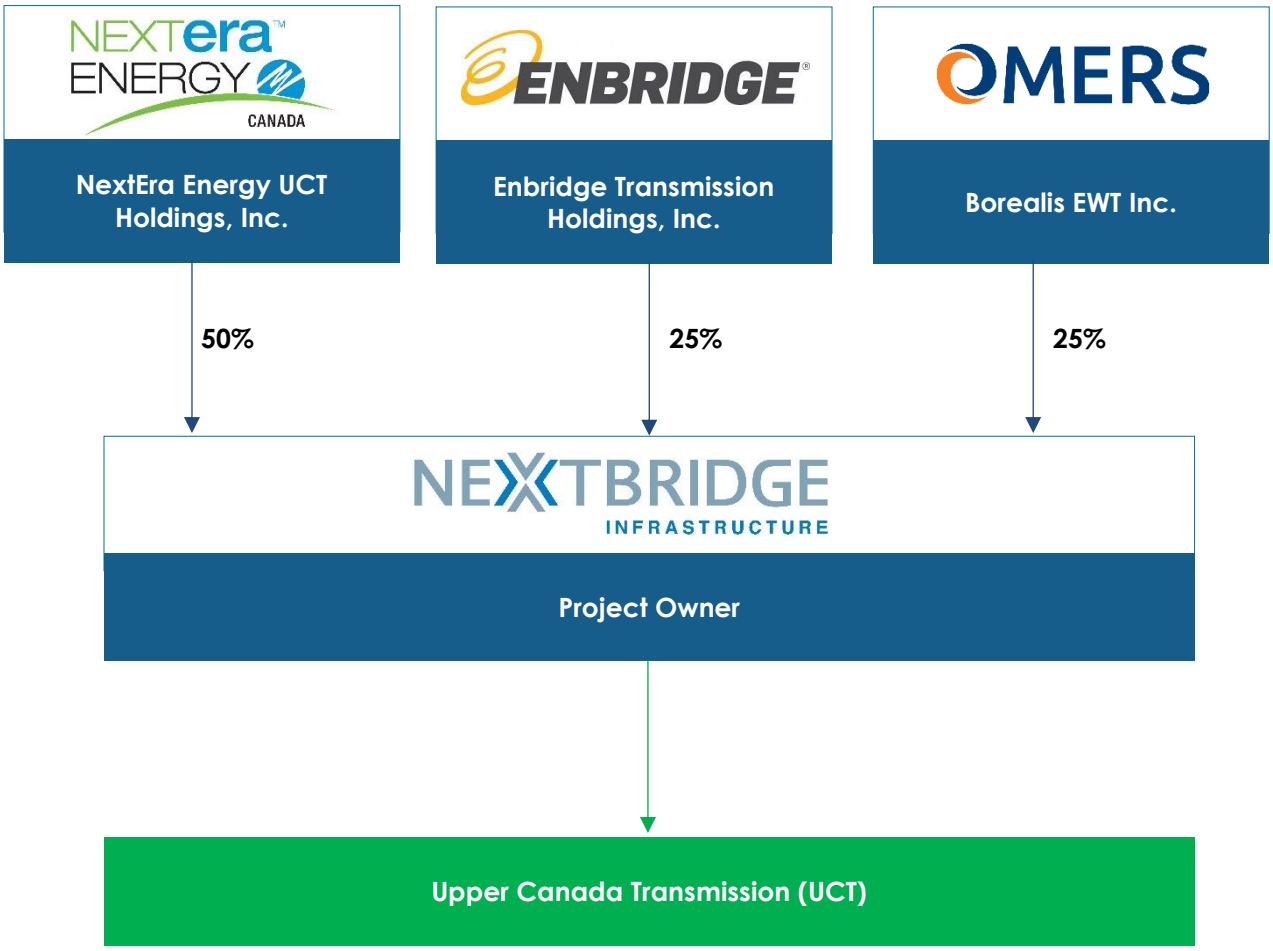
3. NextBridge is currently comprised of three limited partners and one general partner. The limited partners are: (A) NextEra Energy NextBridge Holding, ULC, a British Columbia unlimited liability company; (B) Enbridge Inc., a Canadian corporation and (C) Borealis NB Holdings Inc., an Ontario corporation. NextEra, Enbridge, and OMERS hold 50%, 25% and 25% of NextBridge's issued and outstanding limited partnership units respectively. The general partner of NextBridge is UCT, a New Brunswick corporation. UCT has three shareholders: (A) NextEra Energy UCT Holding, Inc. ("**NextEra Shareholder**"), a New

Brunswick corporation; (B) Enbridge Transmission Holdings Inc. ("**Enbridge Shareholder**"), a Canadian corporation and (C) Borealis EWT Inc. ("**OMERS Shareholder**"), an Ontario corporation. NextEra Shareholder, Enbridge Shareholder, and OMERS Shareholder hold 50%, 25% and 25% of UCT's issued and outstanding shares respectively. At the time of commercial operations, NextBridge will be owned 40% by NextEra Energy NextBridge Holding ULC, 20% by Enbridge Transmission Holdings Inc., 20% by Borealis NB Holdings Inc., and 20% by Bamkushwada, LP a corporation made up of six First Nations.

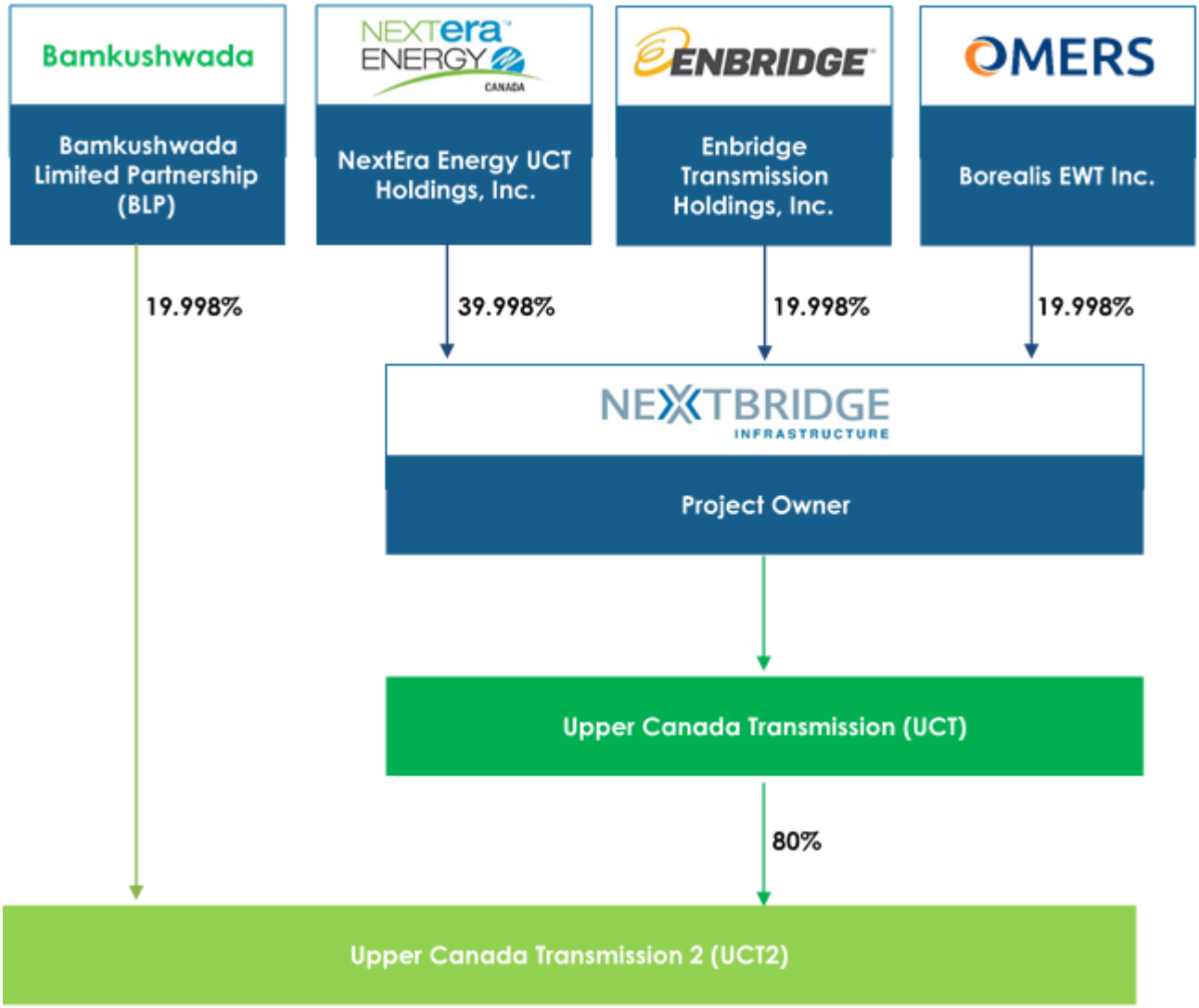
4. Each of NextEra LP and NextEra Shareholder are indirect subsidiaries of NextEra, Energy, Inc., a Florida corporation that is listed on the New York Stock Exchange. Enbridge is the ultimate parent entity of the Enbridge group of companies, and is listed on the Toronto Stock Exchange and Enbridge Shareholder is an indirect subsidiary of Enbridge. Each of OMERS and OMERS Shareholder are indirect subsidiaries of OMERS Administration Corporation, the administrator of the OMERS defined benefit pension plan for over 500,000 active, deferred, and retired employees from nearly 1,000 municipalities, school boards, libraries, police and fire departments, and other local agencies in communities across the Province of Ontario.

5. The current corporate organization chart for the NextBridge ownership structure is presented next, followed by a corporate organization chart representing the ownership structure following the in-service date and once Bamkushwada, LP becomes a part owner. In order for Bamkushwada LP, a corporation made up of six First Nations, to obtain financing, lenders will need to know the revenue for the East-West Tie line. Additionally, Bamkushwada LP intends to apply to the Aboriginal Loan Guarantee Program through the Ontario Financing Authority. A requirement for eligibility for this program is "…regulatory approvals in the case of transmission projects": https://www.ofina.on.ca/algp/program/eligibility.htm

Current Corporate Shareholder Structure



Post COD Corporate Shareholder Structure



Licence and Ownership Upon Reaching Operational Status

6. UCT holds Board licence number ET-2011-0222. Under the licence, UCT is authorized to own and operate a transmission system consisting of the facilities described in Schedule 1 of the license, which consists of an approximately 450 km of 230 kV double circuit transmission line that runs from the Lakehead TS to the Wawa TS, with the understanding that the East-West Tie line interconnects through dead-ends outside of the Lakehead TS, Marathon TS, and Wawa TS. The licence also authorizes UCT to transmit electricity over the East-West Tie line.

7. UTC 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.

ASSET SUMMARY

1. The major components of the East-West Tie line include steel support transmission towers and foundations, overhead conductors, insulators, connecting hardware, and grounding systems. NextBridge possesses the necessary property rights to construction, maintain, and operate the East-West Tie line.[2] Table 1 provides a summary of NextBridge's East-West Tie line key assets:

Table 1. Asset Summary

NextBridge's Assets	
Fixed Assets (Average Net Book Value)	$770.4 million*
Transmission System Voltages	230 kV
Overhead Transmission Lines	892 circuit km
Steel Support Structures	1228 Structures
Line Insulators	7368 Insulators

**Forecasted average for test year documented in Exhibit C, Tab 2, Schedule 4.*

[2] The quantities of overheard transmission lines, steel support structures, and line insulators are forecasted figures.

Figure 1. NextBridge Transmission System Map

NOTICE AND FORM OF HEARING REQUESTED

1. NextBridge will operate a transmission line in Ontario that benefits customers across the province. Notice of this application should be published so as to reach the largest number of customers across Ontario in an efficient manner.

2. The persons affected by this application are the ratepayers of the transmission system in Ontario. It is impractical to set out their names and addresses because they are too numerous.

3. The application may be viewed online at www.nextbridge.ca

4. This application may be heard by way of written hearing, as may be required by the OEB.

PROPOSED EFFECTIVE DATE

1. 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 RDVA 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.

REQUESTS TO THE OEB

1. NextBridge is requesting from the OEB pursuant to section 78 of the Act an order or orders approving the following:

   - Accounting orders establishing the following:
     - Taxes or Payments in Lieu of Taxes Variance Account;
     - Revenue Differential Variance Account;
     - Construction Cost Variance Account; and
     - Debt Rate Variance Account.
   - An effective date of April 1, 2022 for the Test Year rates;
   - An order for transmission rates for the period 2022-2031 set by custom IR formula; and
   - Approval of the Application results in a Test Year revenue requirement of $55.7 million ($41.8 million of which will be included in the 2022 UTR representing being in service for nine months of the Test Year), with an annual increase of 2.0% in the revenue requirements from January 1, 2023 to December 31, 2031, as discussed in Exhibit C.
   - Other approvals that may be requested during the course of the proceeding.

2. The increase to rates via revenue requirement will result in an average impact on a total bill of less than 0.32% (35 cents per month) for a typical Residential (R1) customer consuming 750 kW per month and, similarly, a total bill impact of less than 0.00% (75 cents per month) for a typical energy-billed General Service (GS < 50 kW) customer consuming 2,000 kWh per month. The NextBridge customer bill impact is summarized below in Tables 1 through 4 below.

Table 1. Estimated Transmission Cost as a Percentage of Total Electricity Market

Bill Component	¢/kWh	Source
Commodity	12.58	IESO Monthly Market Report December 2019
Wholesale Market Service Charges	0.39	IESO Monthly Market Report December 2019
Wholesale Transmission Charges	1.06	IESO Monthly Market Report December 2019
Distribution Service Charges	3.02	2019 Yearbook of Electricity Distributors
Total Cost	**17.05**	
Transmission as % of Total Cost for Dx-connected customers	*6.2%*	
Transmission as % of Total Cost for Tx-connected customers	*7.6%*	

Table 2. Average Bill Impacts on Transmission and Distribution-Connected Customers (Test Year)

Category	2022
Rates Revenue Requirement ($ Millions)	$55.7
% Increase in Rates Revenue Requirement over prior year	N/A
% Impact of load forecast change	N/A
NB Rates Revenue Requirement as a % of all transmitters	3.31%
Net Impact on Average Transmission Rates	**3.31%**
Transmission as a % of Tx-connected customer's Total Bill	7.6%
Estimated Average Bill impact	**0.25%**
Transmission as a % of Dx-connected customer's Total Bill	6.2%

Table 3. Average Bill Impacts on Transmission and Distribution-Connected Customers (IR Term)

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Rates Revenue Requirement ($M)	55.7	56.8	58.0	59.1	60.3	61.5	62.8	64.0	65.3	66.6
% Increase in Rates Revenue Requirement over prior year	N/A	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
% Impact of load forecast change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Net Impact on Transmission Revenue Requirement	3.31%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.08%	0.08%
Transmission as a % of Tx-connected customer's Total Bill	7.56%	7.56%	7.56%	7.56%	7.56%	7.56%	7.56%	7.56%	7.56%	7.56%
Estimated Bill impact TX Connected customers	0.25%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
Transmission as a % of Dx-connected customer's Total Bill	6.22%	6.22%	6.22%	6.22%	6.22%	6.22%	6.22%	6.22%	6.22%	6.22%
Estimated Bill impact DX connected customers	0.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Table 4. 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
Estimated 2022 Monthly RTSR	$12.62	$26.61
2022 increase in Monthly Bill	**$0.35**	**$0.75**
2022 increase as a % of total bill	*0.32%*	$0.00

SUMMARY OF OEB DIRECTIVES AND UNDERTAKINGS FROM PREVIOUS PROCEEDINGS

1. NextBridge is a new transmitter and this is its first revenue requirement Application. Consequently, there are no OEB directives or undertakings from any previous NextBridge cost of service proceedings in respect of this Application.

2. However, as a result of being granted leave by the OEB to construct the East-West Tie line (EB-2017-0182), UCT's electricity transmission licence was ordered to be amended to require to include the following conditions (EB-2011-0222):

"13.1 The Licensee shall develop, seek approvals in respect of, and proceed with immediacy to construct, expand or reinforce the electricity transmission network in the area between Wawa and Thunder Bay composed of the high-voltage circuits connecting Wawa TS and Lakehead TS.

13.2 For greater certainty, paragraph 13.1 in no way limits the obligation of the Licensee to obtain all necessary approvals for the transmission project referred to in that paragraph.

13.3 Without limiting the generality of paragraph 14.1, the Licensee shall maintain records of and provide to the Board, in the manner and form determined by the Board, such information as the Board may from time to time require in relation to the transmission project referred to in paragraph 13.1.

13.4 The Licensee shall maintain and provide to the IESO, in the manner and form determined by the IESO, such information as the IESO may from time to time require in relation to the progress, timeliness, and cost-effectiveness of the construction, expansion or reinforcement activities pertaining to the transmission project referred to in paragraph 13.1 until such date as that project comes into service."

3. Additionally, in the OEB Order EB-2019-0088, NextBridge was also required to:

   - Provide such reporting to the OEB and the IESO in relation to the East-West Tie line project

4. NextBridge has satisfied the directives in the LTC by proceeding with the construction of the East-West Tie line and reporting on a quarterly basis the construction progress. The quarterly reports can be found at this link to the OEB site: http://www.rds.oeb.ca/HPECMWebDrawer/Record?q=CaseNumber=EB-2017-0182&sortBy=recRegisteredOn-&pageSize=400

DRAFT ISSUES LIST

1. General

   - Has NextBridge responded appropriately to all relevant OEB directions from previous proceedings?
   - Are all elements of the proposed revenue requirement and their associated total bill impacts reasonable?

2. Revenue Cap Application

   - Is the proposed Incentive Rate Methodology consistent with the OEB's *Rate Handbook*?
   - Are the proposed industry-specific inflation factor and the proposed productivity factor appropriate?
   - Are the proposed annual updates appropriate?

3. Transmission System Plan

   - Has the investment planning process been appropriately considered? Does it adequately address the condition of the transmission system assets?

4. Performance

   - Is the proposed monitoring and reporting of performance adequate?

5. Operations, Maintenance, & Administration Costs

   - Are the proposed spending levels for OM&A in 2022 appropriate, including consideration of factors such as system reliability and asset condition?
   - Are the amounts proposed to be included in the revenue requirement for income taxes appropriate?

- Is the proposed depreciation expense appropriate?

6. Rate Base & Cost of Capital

   - Are the amounts proposed for rate base and capital structure reasonable?
   - Is the forecast of long-term debt appropriate?
   - Is the 2023 update of the cost of long-term debt appropriate?

7. Deferral/Variance Accounts

   - Are the proposed amounts, disposition, and continuance of existing deferral and variance accounts appropriate?
   - Are the proposed new deferral and variance accounts appropriate?

8. Cost Allocation

   - Is the proposed cost allocation appropriate?

WITNESS LIST

1. To be filed behind this tab if the OEB determines that an oral hearing is required.

CURRICULA VITAE

1. Curricula Vitae information will be filed prior to the oral hearing as required.

CONTACT INFORMATION

1. NextBridge requests that a copy of all documents filed with the Board by OEB Staff and each party to this proceeding be served on the Applicant and the Applicant's counsel as follows:

A. For the Applicant:

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Managing Attorney, NextEra Energy Resources, LLC

For personal service:

NextEra Energy Resources, LLC

JB/LAW

Juno Beach, FL 33408

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Telephone: (561) 694-3814

Fax: (561) 691-7135

Electronic access: Brian.J.Murphy@nexteraenergy.com

Jennifer Tidmarsh

President, NextEra Energy Transmission Canada, LLC

Mailing Address: Use Applicant's counsel address

Telephone: (416) 895-6632

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B. The Applicant's counsel

George Vegh

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TRANSMISSION SYSTEM PLAN

NEXTBRIDGE'S TRANSMISSION SYSTEM PLAN

IR Term 2022-2031

NEXTBRIDGE INFRASTRUCTURE

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1.0 INTRODUCTION

1. NextBridge prepared this 2022 to 2031 TSP for the consideration of the OEB and the interveners in accordance with Chapter 2 of the *Transmission Filing Requirements*, with further guidance from Chapters 3 and 5 of the *Distribution Filing Requirements*.

2. The planning tools, processes, and investments outlined in this TSP represent the current state of the assets being constructed by NextBridge, and this TSP is submitted to provide informational support to the ratepayers and stakeholders of Ontario. NextBridge submits that this TSP is distinct from most transmission and distribution system plans submitted to the OEB. As a new line, it is expected the capital expenditures and increases in OM&A will be managed over the IR Term to ensure minimal impact to ratepayers as the challenges to increased capital expenditures (outlined in Exhibit A) will be absorbed by NextBridge. The information included in the TSP is current as of the filing of this Application.

1.2 Projected In-service Date

3. The emergence of health threats associated COVID-19, caused unforeseeable delays in current construction activities. As a result of these issues, NextBridge contacted the IESO on July 22, 2020 and requested that the IESO confirm that no unacceptable risk to reliability would be created if the projected in-service date for the East-West Tie line was shifted to on or before March 31, 2022. The IESO has confirmed that the new in-service date does not present any such risk. A copy of the IESO's letter confirming same is attached as Exhibit B, Tab 1, Schedule 1, Attachment 1. 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 NextBridge has successfully restarted construction, taking special precautions to protect local communities while also continuing progress on this important infrastructure project At the time of filing, NextBridge has erected 299 structures and strung 53 km of line despite the shutdown of the project

for approximately six weeks. 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.

IESO LETTER – IN SERVICE DATE CHANGE

Independent Electricity System Operator
1600-120 Adelaide Street West
Toronto, ON M5H 1T1
t 416.967.7474
www.ieso.ca

August 28, 2020

Jennifer Tidmarsh
President NextEra Energy Transmission Canada
NextEra Energy Canada, LP
Suite 1720, 390 Bay Street
Toronto, Ontario
M5H 2Y2

Dear Ms. Tidmarsh:

Re: NextBridge July 22, 2020 letter to the IESO on the In Service Date for the East West Tie Project

On July 23, 2020, the IESO received a letter from NextBridge Infrastructure LP ("NextBridge") requesting that the IESO advise on the risk to reliability if the in service date of the East-West Tie Line Project is delayed from Oct. 28, 2021 to March 31, 2022. This letter provides the IESO's perspective on the reliability risks associated with an in-service date of March 31, 2022.

Background

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.

IESO Perspective on Reliability Risk

In its June 2018 Addendum to the 2017 Updated Assessment for the Need for the East-West Tie Expansion, as filed in EB-2017-0182, the IESO continued to recommend an in-service date of 2020 for the East-West Tie Line Project, based on applicable planning and reliability criteria. As part of this assessment, the IESO considered a number of potential options for interim measures to address an in-service date beyond 2020 and indicated that it does not support delaying the in-service date beyond the end of 2022 as the increased risk to system reliability and cost uncertainties associated with interim measures are unacceptable beyond this timeframe. An in-service date of March 31, 2022, as described in NextBridge's July 23, 2020 letter, is prior to that date when the IESO would consider a delay to be unacceptable.

Further, the IESO noted in its 2017 Updated Assessment for the Need for the East-West Tie Expansion, as filed in EB-2017-0182, that water conditions have a strong impact on overall supply availability in the Northwest region and the associated capacity need. Specifically, the reliability risk in the Northwest exists when the region is experiencing drought conditions and higher than expected electricity demand. Based on the time of year when drought conditions in the Northwest are likely to occur, the IESO does not expect a significant increase to system reliability risk, or costs for managing such risks, by extending the in-service date of the East-West Tie Line Project from October 28, 2021 to March 31, 2022.

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.

The IESO understands that the Ontario Energy Board will ultimately make the decision on project expenditures and in-service date. From the IESO's perspective, there should be a high degree of confidence that additional delays are unlikely before accepting a March 31, 2022 in-service date. The IESO also recommends that NextBridge confirm any scheduling and cost impacts associated with the Hydro One Station Upgrade Project in light of a possible extension to the in-service date of March 31, 2022.

Yours truly,

Ahmed Maria
Director, Transmission Planning
Independent Electricity System Operator (IESO)

cc: Robert Reinmuller, Hydro One Networks
Chuck Farmer, IESO
Devon Huber, IESO
Leonard Kula, IESO
IESO Records

2.0 TRANSMISSION PLAN OVERVIEW (*OEB FILING REQ. 5.2.)*

1. The existing Hydro One East-West Tie Line ("**Hydro One EWT Line**") provides the main connection between the northwest and the rest of Ontario's electricity system. The existing Hydro One EWT Line is composed of one double circuit 230 kV line, beginning as circuits W21M and W22M running east-west from Wawa TS to Marathon TS, then continuing as circuits M23L and M24L from Marathon TS and terminating at Lakehead TS in the Thunder Bay area. The existing Hydro One EWT Line is a source of firm supply to Northwestern Ontario. Particularly in low water years and during periods of peak demand, the northwest relies on this firm supply to meet its needs. This reliance will continue to increase under the forecast load ROW conditions in the northwest.

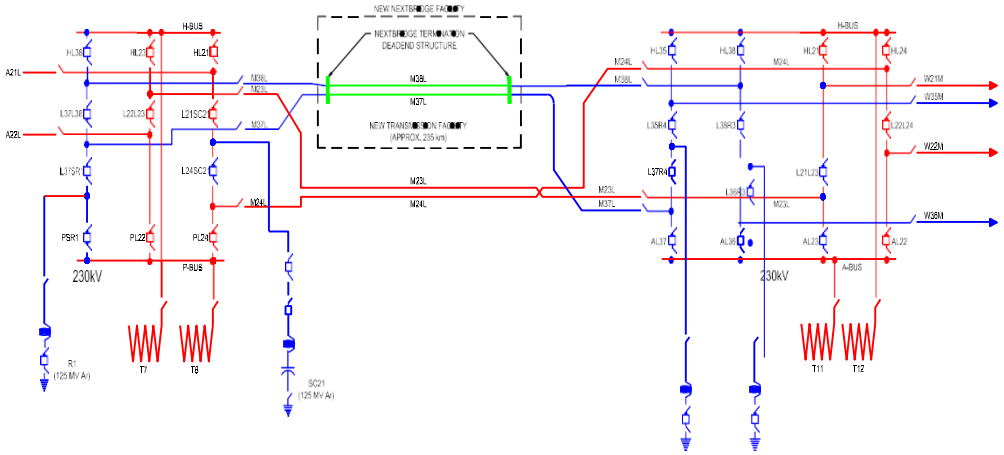
2. From Marathon TS to Lakehead TS, there is a parallel 115 kV transmission path which also provides an east-west connection. Circuit T1M/A1B/A5A runs east-west from Marathon TS to Alexander switching station. Following the loss of the existing Hydro One EWT double circuit line between Marathon TS and Lakehead TS, this parallel 115 kV transmission path becomes limiting under certain ambient temperature conditions, limiting the maximum transfer across the existing Hydro One EWT Line to 175 megawatts ("**MW**") during the winter and 155 MW during the summer.

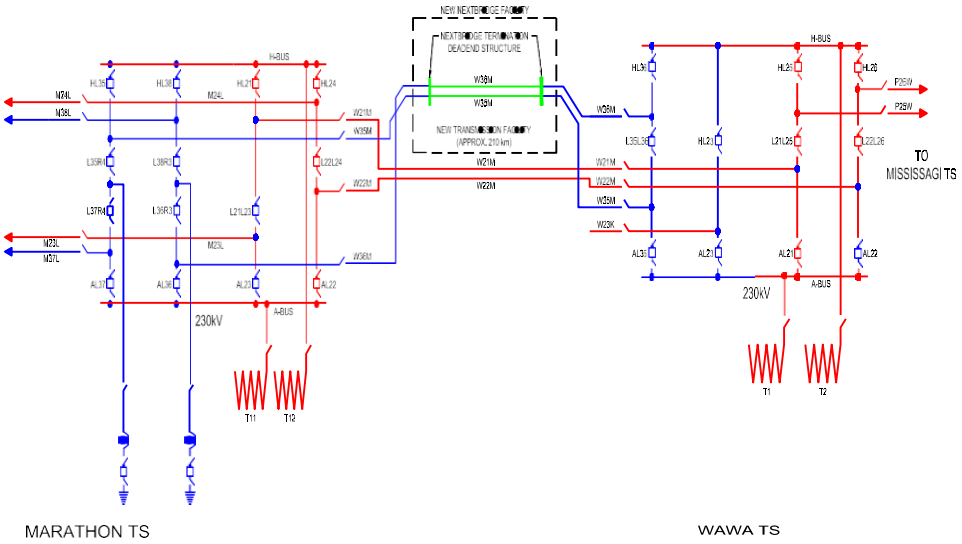
3. However, the existing Hydro One EWT Line planning limit relies on support from Manitoba following contingencies on the Hydro One EWT Line, which cannot be counted on for more than 30 minutes. As a result, there must be sufficient capacity in the Northwest to not only adequately supply the expected demand in the Northwest while staying under this planning limit, but also to reduce flows on the Manitoba and Minnesota ties to zero (or the scheduled transfer level) within 30 minutes. For example, following the loss of the Hydro One EWT Line from Wawa TS to Marathon TS, the Northwest will be separated from the rest of Ontario and power will automatically flow from Manitoba and Minnesota to supply the Northwest. Action must then be taken to re-dispatch resources within the Northwest to return to scheduled flow levels and there must be sufficient capacity in the Northwest

to do so. Further, these interconnections cannot be fully utilized at the same time as they are limited to a combined import capability of 570 MW under normal operating conditions and this can only be achieved when there is sufficient reserve generation on standby in the northwest system.

4. To address these capacity and reliability shortcomings, NextBridge and its partners will construct, own, and operate the East-West Tie line, a new double circuit 230 kV overhead transmission line that will generally parallel existing Hydro One transmission facilities between Thunder Bay and Wawa.

5. A single line diagram of existing transmission infrastructure and NextBridge's East-West Tie line is provided below.




NEW NEXTBRIDGE FACILITY
NEXTBRIDGE TERMINATION
DEADEND STRUCTURE
W38M
W39M
NEW TRANSMISSION FACILITY
(APPROX. 210 km)
W21M
W22M
H-BUS
M24L
M38L
M23L
M37L
W21M
W39M
W22M
W38M
230kV
A-BUS
T11
T12
W28M
W21M
W22M
W39M
W23K
H-BUS
P25W
P25W
TO
MISSISSAGI TS
230kV
A-BUS
T1
T2
MARATHON TS
WAWA TS

3.0 STRATEGIC PLAN

1. This section provides an overview of NextBridge's business activities and values utilized in the development of an overall strategy for the East-West Tie line. The section also outlines NextBridge's strategic goals and vision that drives its plan over the IR Term as presented in this Application.

3.1 Strategic Objectives

2. NextBridge's strategic objectives consist of the following:

- Foster positive and constructive relationships with Indigenous and non-Indigenous communities;
- Maintain a reliable, cost-effective transmission system;
- Protect and sustain the environment for future generations; and,
- Maintain a commercial culture that increases value for its owners.

3. The vision associated with NextBridge's strategic objectives is shown in Table 1. In managing its transmission assets, NextBridge is committed to meeting the Board's RRFE by aligning NextBridge's strategic objectives to the RRFE outcomes.

Table 1. NextBridge's Strategic Objectives

RRFE Outcomes	Strategic Objectives	Ten-Year Vision
Community Focus	Foster Relationships with Indigenous and Non-Indigenous Communities Where We Operate	Maintain positive relationships with local Indigenous and Non-Indigenous communities by providing communications, community contributions, and sustainable benefits.
Operational Effectiveness	Injury-Free Workplace	The protection of people and the environment is the number one priority of NextBridge. NextBridge will ensure operations and management services are executed in accordance with good utility practice for personnel and public safety.
	Reliable Transmission	Continue to maintain a reliable transmission system in accordance with good utility practice.
	Cost Control	Strive to minimize costs and pass savings on to the customers of the province by adhering to good utility and procurement practices.
Public Policy Responsiveness	Protecting the Environment	The protection of people and the environment is a key priority for NextBridge. Sustainably and safely managing NextBridge's assets to minimize the environmental impact.
Financial Performance	Owner's Value	Maintain the financial integrity needed for an utility to achieve acceptable credit ratings needed to provide low cost service debt and therefore rates for customers

4. In the implementation of these strategic objectives, during both the construction and operations periods, NextBridge works directly with its stakeholders and contractors, to review the above objectives incorporating maintenance programs and work plans for

efficiency, reliability, and safety. The financial performance and integrity of NextBridge is closely monitored and actively managed as outlined below in "Overview of Cost Management Practices". Furthermore, NextBridge is proposing to track its performance by utilizing a set of outcome measures as documented in Exhibit 6 to ensure that NextBridge satisfies its plan.

3.2 Meeting the Needs of Customers and Overall Policy Objectives

Meeting Policy Objectives

5. The East-West Tie line is a 230 kV double circuit transmission line which is part of Ontario's bulk electric system. In its Decision and Order dated February 11, 2019 (EB-2017-0182), the OEB found that the East-West Tie line was acceptable from a reliability and quality of electricity service perspective to address the long-term reliability needs of northwestern Ontario. With respect generally to the load in northwestern Ontario, the IESO has presented three assessments to confirm the need for the East-West Tie line. The IESO reports are outlined in the section below entitled "Regional considerations", and are provided in full at Exhibit B, Tab 1, Schedule 5, Attachments 1, 2 and 3.

6. On November 23, 2010 the Ontario government published the Long-Term Energy Plan – *Building Our Clean Energy Future* (the "**2010 LTEP**"). The 2010 LTEP identified the East-West Tie line as one of five priority transmission projects, based on advice provided by IESO.

7. Additionally in its 2013 Long Term Energy Plan – *Achieving Balance* (the "**2013 LTEP**"), the Province of Ontario recognized that First Nation and Métis communities have an interest in participating in the economic benefits from future transmission projects crossing through their traditional territories, and that there are a number of ways in which such communities could participate in such projects including via opportunities in training and skills upgrading, local material supply, provision of services, employment, and potential

commercial investment. NextBridge is committed to ensuring that the objectives of the 2013 LTEP would be met in regards to First Nation and Métis economic participation. NextBridge's activities to meet these objectives can be found in Exhibit C.

8. The Ontario Ministry of Energy notified the OEB, by letter dated March 10, 2016, that the Lieutenant Governor in Council made an order pursuant to Section 96.1 of the *Ontario Energy Board Act*, 1998 declaring that the construction of the East-West Tie line is needed as a priority project (Exhibit B, Tab 1, Schedule 3, Attachment 1) The order states:

"Ontario considers it necessary to expand Ontario's transmission system in order to maintain a reliable and cost-effective supply of electricity in the Province's Northwest, increase operational flexibility, reduce congestion payments and remove a barrier to resource development in the region"

9. On August 4, 2017 the Minister of Energy requested that the IESO update the need assessment for the East-West Tie transmission project, consistent with the scope of previous need assessments requested by the OEB, to be delivered to the Ministry of Energy by December 1, 2017.

10. On December 1, 2017, the IESO submitted to the Minister of Energy an updated need assessment for the East-West Tie line expansion project. That report confirms the rationale for the project based on updated information and study results. The East-West Tie line continues to be the IESO's recommended option to maintain a reliable and cost-effective supply of electricity to the Northwest for the long term.

11. On January 30, 2019, the Minister of Energy, Northern Development and Mines, issued a letter to the OEB, stating that the Lieutenant Governor in Council made an order to amend NextBridge's electricity transmission licence to include a requirement that it develops and constructs the East-West Tie line. The directive also requires the OEB to amend conditions of NextBridge's transmission licence to require regular reporting of construction schedule, costs and risks to the OEB and the IESO.

12. The OEB issued its Decision and Order on February 11, 2019, as per the Directive, granting NextBridge leave to construct the East-West Tie line.

Meeting Customer Needs

13. NextBridge has no delivery points, and, therefore, has no customers that it directly serves. NextBridge, however, from the development of the project to the time of this Application has conducted customer outreach to keep communities in Northwest Ontario informed on the progress of the East-West Tie line. In developing the project, NextBridge identified a variety of forums which could be used to provide and receive information related to the project and address potential local impacts and concerns. Outreach activities to date have included multiple rounds of public open houses, various town hall meetings, newsletter mailings, update letters, emails, numerous meetings, local newspaper advertisements, radio advertisements and individual phone calls to municipal and Indigenous leaders, local organizations interested in the project, landowners, and businesses. In order to ensure easy public access to NextBridge representatives, a project website, a toll-free phone number, and an email address were established and advertised in project materials. Information and feedback collected during meetings and other outreach activities is recorded in the Environmental Assessment consultation record which is located on the NextBridge website, http://www.nextbridge.ca/home.

14. During this outreach, NextBridge heard from electricity ratepayers and their communities that they wanted reliable electric service, and supported the East-West Tie line. The cost of the East-West Tie line was also discussed, and general acceptance of the costs needed to provide an increase in reliability was apparent that comes with the East-West Tie line. Letters of support from local communities can be found in NextBridge's LTC proceeding in Staff Interrogatory #53 included here as Exhibit A, Tab 4, Schedule 1, Attachment 2.

LETTER FROM GOVERNMENT – PRIORITY PROJECT

Ministry of Energy

Office of the Minister

4th Floor, Hearst Block
900 Bay Street
Toronto ON M7A 2E1
Tel.: 416-327-6758
Fax: 416-327-6754

Ministère de l'Énergie

Bureau du ministre

4e étage, édifice Hearst
900, rue Bay
Toronto ON M7A 2E1
Tél. : 416 327-6758
Téléc. : 416 327-6754

Ontario

MC-2016-569

MAR 1 0 2016

Ms Rosemarie LeClair
Chair and Chief Executive Officer
Ontario Energy Board
PO Box 2319
2300 Yonge Street
Toronto ON M4P 1E4

Dear Ms LeClair:

The East-West Tie, identified as a priority project in the 2013 Long-Term Energy Plan, is a cornerstone of this government's policy to support expansion of transmission infrastructure in northwestern Ontario. The East-West Tie continues to be the Independent Electricity System Operator's recommended alternative to maintain a reliable and cost-effective supply of electricity to northwestern Ontario for the long term.

Under the authority of section 96.1(1) of the *Ontario Energy Board Act, 1998*, ("the Act") the Lieutenant Governor in Council made an order declaring that the construction of the East-West Tie transmission line is needed as a priority project. The Order in Council took effect on March 4, 2016 and is attached to this letter.

Please do not hesitate to contact my office with any questions.

Sincerely,

Bob Chiarelli
Minister

Ontario
Executive Council
Conseil des ministres

Order in Council
Décret

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and concurrence of the Executive Council, orders that:

Sur la recommandation du soussigné, le lieutenant-gouverneur, sur l'avis et avec le consentement du Conseil des ministres, décrète ce qui suit:

WHEREAS Ontario considers it necessary to expand Ontario's transmission system in order to maintain a reliable and cost-effective supply of electricity in the Province's Northwest, increase operational flexibility, reduce congestion payments and remove a barrier to resource development in the region;

AND WHEREAS Ontario considers the expansion or reinforcement of the electricity transmission network in the area between Wawa and Thunder Bay composed of the high-voltage circuits connecting Wawa TS with Lakehead TS (the "East-West Tie Line Project"), with an in service date of 2020, to be a priority;

AND WHEREAS the Lieutenant Governor in Council may make an order under section 96.1 of the *Ontario Energy Board Act, 1998* (the "Act") declaring that the construction, expansion or reinforcement of an electricity transmission line specified in the order is needed as a priority project;

AND WHEREAS an order under section 96.1 of the Act requires the Ontario Energy Board, in considering an application under section 92 of the Act in respect of the electricity transmission line specified in the order, to accept that the construction, expansion or reinforcement is needed when forming its opinion under section 96 of the Act;

NOW THEREFORE it is hereby declared pursuant to section 96.1 of the Act that the construction of the East-West Tie Line Project is needed as a priority project, and that the present order shall take effect on the day that section 96.1 of the Act comes into force.

Recommended: _____
Minister of Energy

Concurred: _____
Chair of Cabinet

Approved and Ordered: MAR 0 2 2016
Date

_____
Administrator of the Government

O.C./Décret 326/2016

4.0 ASSET MANAGEMENT PLAN

1. NextBridge prioritized the asset management in an optimal way throughout the life cycle of its assets. To achieve this goal, NextBridge by way of an agreement with its partner affiliate, NEET, will undertake a strategic and methodical asset management planning process adhering to relevant national and international standards such as the Canadian Standards Association, the Institute of Electrical and Electronic Engineers, the International Electrotechnical Commission, and NERC's Standard FAC-003-04. The NEET Agreement is being finalized and will be filed as an update to the Application when available.

2. Affiliates of NEET develop and operate transmission assets across North America. Collectively, its asset companies own more than 14,000 km of transmission lines and nearly 830 substations in North America as of December 31, 2019, while delivering some of the best electric service reliability in the United States. Since 2007, NEET and its affiliates have obtained significant experience in managing and overseeing the development, design, construction, financing, and operation of high-voltage transmission lines, including lines operating at 345 kV and above. NEET owns operating transmission assets in Texas (531 km transmission line), California (82 km underwater cable), and New England (substation interconnecting three major 345 kV lines).

3. NextBridge will draw upon the extensive expertise and experience of NEET and its affiliates to monitor its transmission system assets, identify and define needs, and determine the optimal timing for investment and maintenance activities. The use of these entities will ensure cost-effectiveness by drawing on already developed and field-tested operations and maintenance policies and procedures instead of creating new materials.

NextBridge Field Personnel

4. 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. Additionally, another focus of these personnel would be as a local presence and liaison to local municipalities, property owners, and Indigenous communities. The East-West Tie line passes through the traditional territories of 18 Indigenous communities, directly through two First Nation reserves, through 9 organized and unorganized municipalities, and has secured agreements on 191 land parcels to accommodate the Project. NextBridge is committed to being a "good neighbor" in the region and having two dedicated field personnel onsite to be available at any time to local residents and community members is vital to this objective. These two individuals are also needed to oversee and schedule maintenance services provided by HONI in the HONI SLA. The roles of these two dedicated field personnel compared to the activities performed by HONI can be found Table 1 below. Additional experienced NEET personnel will be available to supplement staffing on an as-needed basis, instead of hiring and training full time employees. Additionally, NEET's network of suppliers throughout North America will ensure cost-effective procurement of materials. In working with these companies, NextBridge strives to ensure that it can continue to deliver, over the long term, a level of transmission service that is responsive to operational and local needs, while also minimizing rate impacts and risks in support of the company's strategic objectives.

Table 1. Summary of Roles and Responsibilities to Support Operations and Maintenance Activities

Role	Responsibility	
	NextBridge Field Personnel	**HONI**
Coordinate and monitor maintenance services provider to support the safety and reliability of the East-West Tie line	x	
Coordinate and supervise HONI crews and other support personnel to support the safety and reliability of the transmission lines		x
Directs planning, budgeting, and execution of work	x	
Perform detailed visual inspection of one third of the transmission line on an annual basis		x
Perform inspection of obvious and critical issues on remaining two thirds of the transmission line on an annual basis		x
Initial review of detailed inspection by subject matter experts[3]		x
Follow-up review of service provider's detailed inspection findings and recommendations by subject matter experts from NEET or NEET affiliates	x	
Provide 24/7 event response and trouble-shooting of unplanned outages, and support restoration in coordination with the system control center and technical staff	x	x
Initial material storage yard supplier for large items such as structures		x

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

Role	Responsibility	
	NextBridge Field Personnel	**HONI**
Storage for small maintenance spare parts (such as lighting components) will be provided at the Operations office	x	
Management of maintenance files, spot audits for adequacy of performed services and complaint investigations	x	
Ensuring opportunities for Indigenous economic benefits (such as employment and contracting)	x	x
Ensure appropriate tools, equipment, materials, and vehicles necessary to efficiently and economically perform work are available	x	x
Perform compliance related maintenance according to operating standards, specifications, and procedures to NERC and NPCC		x
Ensure the compliance of maintenance operating standards, specifications, and procedures to NERC and NPCC	x	
Promote activities for protecting the safety of personnel, equipment, and the general public in compliance with internal safety policies and OHSA safety standards	x	x

4.2 Asset Management Process Overview (*OEB Filing Req. 5.3.1*)

5. NextBridge seeks to identify and prioritize asset maintenance and capital investments in an optimal way throughout the life cycle of its assets. To achieve this goal, NextBridge will work with NEET in the future to undertake a strategic and methodical asset management process, drawing upon NEET's extensive expertise and experience to

monitor its transmission system assets, identify and define needs, and determine the optimal timing for investment and maintenance activities in the future. In doing so, NextBridge strives to ensure that it can deliver a level of transmission service that is responsive to operational needs, while also minimizing the rate impacts and risks to electricity ratepayers of Ontario in support of NextBridge's strategic objectives**.**

6. This section summarizes the detailed characteristics and data on the assets covered by the asset management process, including service area, system configuration, asset condition, and asset utilization.

Features of the Service Area

7. The NextBridge East-West Tie line is a 230 kV double circuit transmission line which is located in northwestern Ontario. The East-West Tie line traverses the Thunder Bay and Algoma Districts along the north shore of Lake Superior. The Line begins at a dead-end structure outside of the HONI Lakehead TS, crosses or travels close by the municipalities/townships of Thunder Bay, Shuniah, Dorion, Red Rock, Nipigon, Schreiber, Terrace Bay, and Marathon, and the Pays Plat First Nation Reserve, before dead-ending at a structure outside of the Marathon TS located in Marathon. From a dead-end structure at Marathon TS, the transmission crosses the areas within the boundaries of the Town of Marathon, Township of White River, Municipality of Wawa (formerly known as the Township of Michipicoten), and Michipicoten First Nation Reserve, and terminates at dead-end structures outside of Wawa TS. The East-West Tie line route is illustrated in Figure 1 at Exhibit A above. These are primarily rural areas that generally allow for easy access to perform maintenance activities. However, the climate in these areas varies by season and is susceptible to a variety of extreme weather conditions, such as blizzards, hail, ice storms, lightning, thunderstorms, extreme heat, and tornadoes.

4.3 Overview of assets managed *(OEB Filing Req. 5.3.2)*

8. The East-West Tie line, consists of an approximately 450 km of 230 kV double circuit transmission line that runs from the HONI Lakehead TS to the HONI Wawa TS, with the understanding that the East-West Tie line dead-ends and interconnects outside of the HONI Lakehead TS, Marathon TS, and Wawa TS. This asset is part of the bulk transmission system as defined by applicable NERC standards.

9. The demarcation points for each of NextBridge's circuits from Hydro One's transmission stations are:

- Circuits M37L & M38L: terminating at the north end of the Lakehead TS at tower A001, inclusive, and at the west end at the Marathon TS at tower C279, inclusive; and
- Circuits W35L & W36L: terminating at the east end of Marathon TS at tower D001, inclusive, and W36M at the west end at the Wawa TS at tower F233, inclusive, and W35M at the north end at the Wawa TS at tower F235.

10. Additionally, HONI owns from the structure vangs and optical ground wire ("**OPGW**") splice boxes at the terminating structures outside of Lakehead TS, Marathon TS, & Wawa TS.

11. The major components of the East-West Tie line include steel support transmission towers and foundations, overhead conductors, insulators, connecting hardware, and grounding systems. NextBridge possesses the necessary property rights to construction, maintain, and operate the East-West Tie line.

12. Table 2 provides a high-level description and quantity of major transmission assets associated with the East-West Tie line.[4]

[4] The quantities of conductor, steel towers, and line insulators are forecasted figures.

Table 2. Quantity of Major Transmission Assets

Asset Type	Description	Quantity
Conductor	The conductor of an overhead transmission line is the asset responsible for transporting electricity between system nodes.	892 circuit km
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
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

13. 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.

4.4 Asset Condition

14. 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.

15. The asset condition is noted in Table 3 below. Asset condition assessments are conducted for each asset as they reach an individual age threshold, which varies depending on asset type. Condition assessment results are categorized as:

- Low risk: assets have condition test results that indicate “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 into this category
- Fair risk: assets have condition test results that indicate minor deterioration but have not yet reached EOL. These assets will be scheduled for reassessment at a later date, depending on the level of deterioration indicated by the test results
- High risk: assets have condition test results that indicate EOL and in need of replacement within the plan period

16. The term EOL is defined as the likelihood of failure, or loss of an asset’s ability to provide the intended functionality, wherein the failure or loss of functionality would cause unacceptable consequences. Therefore, while assets may be operating beyond ESL, they may not be at EOL. At the same time, as the primary driver of replacement decisions, asset condition will be verified prior to work being undertaken.

Table 3. Asset Condition Summary

Asset Type	Quantity	High Risk	Fair Risk	Low Risk
Conductor	892 circuit km	0%	0%	100%
Steel Towers	1228 Structures	0%	0%	100%
Insulators	7368 Insulators	0%	0%	100%

4.5 Asset Utilization

17. NextBridge's East-West Tie line circuits will have a westbound transfer capability of approximately 450 MW. The East-West Tie line's 230 kV double circuit transmission line is part of the bulk system and is operated by the IESO and in accordance with the planning criteria as part of the IESO-controlled grid. The adequacy of the bulk system is assessed by the IESO as part of the bulk system planning processes in accordance with applicable NERC and NPCC Standards, including the IESO's *Ontario Resource Transmission Assessment Criteria*. The bulk system is within acceptable capacity levels.

4.6 Asset Lifecycle Optimization Policies and Practices (*OEB Filing Req. 5.3.3*)

18. 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. The NEET asset owning companies have developed and implemented asset strategies for various components of the transmission system. The following sections provide an overview of the specific operations and maintenance activities and replacement strategy applicable to the East-West Tie line.

4.7 Routine Operations and Maintenance

19. 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 HONI SLA.

Operating services (provided by NextBridge and/or its partners)

20. Operating services include the monitoring and control of the transmission system in accordance with the requirements of UCT's transmission licence and all services required to fulfill all of NextBridge's obligations under its Connection Agreement and the IESO-NextBridge operating requirements. These services include, but are not limited to, the following:

- Alarm/asset monitoring, and physical control at dead-end structures
- Emergency response to system events impacting East-West Tie line
- Outage processing
- Crew dispatching
- Record maintenance

Maintenance Services (majority provided by HONI/Supercom)

21. 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. Further details are outlined below.

- Overhead transmission lines

  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. As assets age, separate detailed assessments are also performed on individual conductor and structure assets to monitor their condition and determine when replacement is required based upon assessed condition.

- Transmission ROW

  The strip of land that is occupied by a transmission line is referred to as a ROW or a corridor. As contracted by NextBridge, HONI will perform regular maintenance to maintain clearance distances between the energized circuits and the vegetation located on and adjacent to the transmission ROW. In Northwestern Ontario, vegetation maintenance is performed on clearing cycles of six years. Cycle lengths have been set to ensure that ROW are in good condition and maintain a sustainable level of reliability between maintenance cycles. NextBridge's East-West Tie line is subject to compliance with NERC Reliability Standard FAC-003-4, and any subsequent revisions which, among other things, requires NextBridge to report all sustained outages caused by vegetation on East-West Tie line. If vegetation management issues arise mid-cycle, NextBridge will undertake corrective action to resolve reliability and safety problems.

  A summary of the planned maintenance activities and frequency of maintenance can be found in Table 4.

Table 4. Summary of Planned Maintenance Activities

Asset	Maintenance	Frequency	Description
Overhead Transmission Lines	Helicopter Patrol	Annually	High-speed patrol to identify major deficiencies on overhead transmission line assets.
	Detailed Aerial Patrol	Annually for 1/3 of the line	More detailed aerial patrol to identify deficiencies on overhead transmission line assets. With the current technology, NextBridge believes this to be a better and more efficient use of resources rather than the traditional ground patrol.
	Thermovision	As needed based on patrols	Identifies deficient transmission line components by detecting their heat signature using infrared cameras. NextBridge may adjust this plan to an annual requirement if deficiencies are found.
Transmission ROW	Line Clearing	Based on annual patrols	Consists of trimming tree branches and removing any unhealthy trees on the edge of or adjacent to the ROW that have the potential to exceed NextBridge's clearances to the overhead transmission lines. NextBridge believes this to be a sound practice to perform all vegetation maintenance on an as needed basis, rather than on a prescriptive cycle.
	Brush Control	Based on annual patrols	To manage vegetation growth on the ROW to ensure adequate clearances and access to NextBridge's overhead transmission lines.

Asset	Maintenance	Frequency	Description
	Condition Patrol	Annually	To identify and mitigate any vegetation requiring maintenance. This allows NextBridge to perform condition based vegetation maintenance.
	Property Owner Notifications	As needed	Prior to the execution of ROW vegetation maintenance, NextBridge contacts all required adjacent property owners and external stakeholders to communicate maintenance plans.
	Annual Vegetation Patrol	Annually	In accordance with NERC Reliability Standard FAC-003-4, NextBridge is required to annually inspect all 230kV circuits.

22. A summary of the roles and responsibilities to support operations and maintenance activities are found in Table 1. For clarity, two NextBridge field personnel will be employed by NEET to manage and oversee the OM&A of the East-West Tie line. Further description of the role of the two personnel are found above in Table 1.

4.8 Asset Replacement

23. NextBridge East-West Tie line is new, and there are no asset replacements anticipated during the IR Term. As a general matter, asset replacements are based on asset condition assessments. Once an asset condition is determined to be at EOL, it is scheduled and prioritized for replacement. In the case of material unplanned capital replacement, NextBridge proposes using a Z-factor approach in accordance with section 2.8.12 of the Transmission Filing Requirements, where appropriate.

4.9 System Capability Assessment for Renewable Energy Generation (*OEB Filing Req. 5.3.4*)

24. The NextBridge East-West Tie line allows for both the transfer of committed generating resources and the potential to enable new renewable resources in the Northwestern Ontario region. If new generation requests emerge, the assessment of capacity need or limitation and its planning would be under the purview of the IESO as part of bulk system planning. At this time, there is no meaningful increase in the renewable energy generation connection forecast affecting the East-West Tie line.

5.0 REGIONAL CONSIDERATIONS (*OEB CH 2. FILING REQ. 2.4.2*)

1. The 2010 LTEP identified the East-West Tie line as one of five priority bulk transmission projects, based on advice provided by the former Ontario Power Authority – now the IESO.

2. In 2015 the IESO released the Assessment of the Rationale for the East-West Tie Expansion, which built upon and updated three previous East-West Tie line reports prepared by the IESO: i) the original June 2011 report; ii) the first update report, filed with the OEB in October 2013 entitled "Updated Assessment of the Rationale for the East-West Tie Expansion"; and iii) the second update report entitled "Assessment of the Rationale for the East-West Tie Expansion" filed with the OEB on May 5, 2014.

3. In 2017 the IESO released "Updated Assessment for the Need for the East-West Tie Expansion" and during the LTC hearings an addendum was submitted to the OEB "Reliability Impacts and the Projected System Costs of a Delay to the Project In Service Date". Copies of the 2015, 2017 and 2018 addendum reports can be found in Exhibit B, Tab 1, Schedule 5, Attachments 1 through 3.

4. At this time, the IESO is not currently under a regional planning process for Northwestern Ontario and NextBridge's participation in a regional planning process is not required.

5.2 Previous Transmission Planning and the Need for the East-West Tie

5. The East-West Tie line consists of a new 230 kV transmission line roughly paralleling the existing east-west tie line owned and operated by HONI between Wawa and Thunder Bay. The new transmission line will increase the electricity transfer capability into Northwest Ontario from 175 MW to 650 MW, and will improve the flexibility and efficiency of the northwest electricity system. As part of this project, upgrades are being planned for the Lakehead, Marathon, and Wawa transformer stations to accommodate the new line. The

East-West Tie line will provide a long-term, reliable electricity supply to northwest Ontario to enable forecast demand ROW and changes to the supply mix in the region.

6. In November 2010 the Ontario Power Authority – now the IESO, provided planning advice to the Government of Ontario that recommended that development work proceed immediately for five transmission projects, one of which was the East-West Tie line.

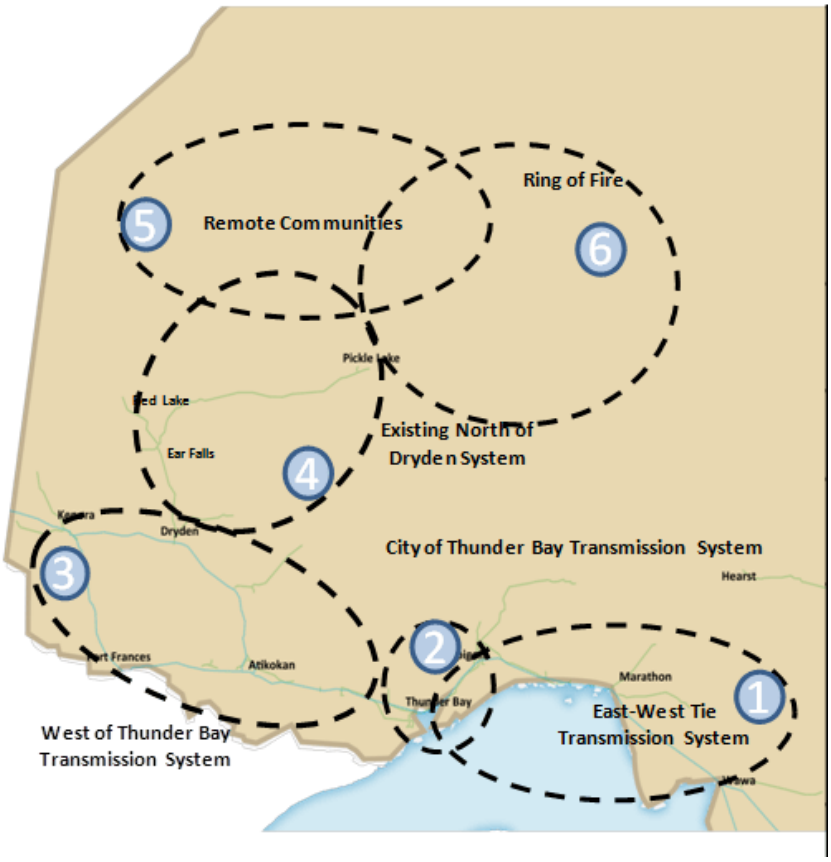
7. With regard to the existing East-West Tie, the IESO noted the following:

> *"Expansion of the East-West Tie or addition of local gas-fired generation would maintain adequate system reliability in the Northwest after coal-fired generation has been shut down in the region. A comparison of these options concludes that, while the overall costs of these options are similar, the transmission option compared to new long-term gas generation provides greater operational flexibility, reduces losses and congestion, and enables additional renewable resource developments in the Northwest. For these reasons, the OPA is recommending this option for the Northwest. It also recommends proceeding with development work on the expansion of the East-West Tie to allow it to come into service as soon as possible after coal phase out. Given the development timelines of new transmission, interim resources would be required to maintain local reliability until the transmission can come into service."*

8. The IESO conducts regional planning through its Integrated Regional Resource Planning ("**IRRP**") process, where local stakeholders collaborate in the development of integrated solutions for maintaining a reliable supply of electricity to Ontario communities. There are 21 electricity regions within Ontario, including the Northwest as one distinct region. The objective of the northwest IRRP process is to develop long-term electricity plans that thoughtfully integrate relevant resource options, such as conservation and demand management, distributed generation, large-scale generation, transmission, and distribution. The Northwest is a very large region with diverse needs and consists of the

districts of Kenora, Rainy River, and Thunder Bay, which is roughly the area north of Lake Superior stretching from the Wawa area in the east and the Manitoba border in the west. The IESO, together with local communities, undertook a planning processes in six sub-areas in order to understand and meet specific local needs, which together represented an overall Northwest IRRP (see Figure 1 below). Individual area plans are focused on those unique areas, but the solutions are interrelated. Area 1 is identified as the "East-West Tie Transmission System".

Figure 1. Northwest IRRP Sub-Areas



Source: OPA Website, 2013.

9. Outside of the recent letter confirming a March 2022 in-service date, a detailed economic overview and consideration of capacity needs associated with East-West Tie line were studied and confirmed by the IESO. The three needs assessments dated December 15, 2015, December 1, 2017, and June 29, 2018 are attached as Exhibit B, Tab 1, Schedule 5, Attachment 1 - 3 respectively.

5.3 Longer Term Economic and Planning Assumptions

10. The East-West Tie line is a 230 kV dual circuit transmission line, and with the proper maintenance as planned for by NextBridge, is extremely durable and resilient in normal circumstances. However, extraordinary events (including tornados and severe ice formations) can occur and cause damage to the line. These types of devastating weather events, while uncommon, may result in unplanned capital spending to repair the system. To address the risk of major storm damage or other events, NextBridge is proposing to utilize the OEB's Z-factor approach analogous to that provided to B2M to seek relief for unplanned spending if necessary in the future. NextBridge will request the Z-factor to protect the partners from the impacts that could result from unforeseen events and is not requesting any additional mechanism to be created.

5.4 Coordinated planning with third parties (*OEB Filing Req. 5.2.2*)

11. As stated above, the East-West Tie line is part of the bulk transmission system. Bulk system planning is under the purview of the IESO and is coordinated as part of that undertaking. If requested, NextBridge would participate in the bulk system planning process and/or regional bulk system planning process, as per section 3C of the Transmission System Code and the OEB's Planning Process Working Group Report, in compliance with UCT's obligations as a licensed transmitter. To date, NextBridge has not received such a request and is not expecting such a request in the foreseeable future.

ASSESSMENT OF THE RATIONALE FOR THE EAST-WEST TIE EXPANSION – IESO, 2015

Assessment of the Rationale for the East-West Tie Expansion

Third Update Report

Submitted to the Ontario Energy Board
(EB-2011-0140)

December 15. 2015

ieso
Connecting Today.
Powering Tomorrow.

1.0 KEY FINDINGS/RECOMMENDATIONS

This update confirms the rationale for the East-West Tie ("E-W Tie") expansion project based on updated information and study results. Under the Reference assumptions, the E-W Tie expansion, which permits more effective utilization of provincial resources to meet electricity needs identified for northwestern Ontario ("the Northwest"), provides a net economic benefit of $1.1 billion compared to a local generation alternative. To test the robustness of this result against uncertainty in the assumptions, the IESO considered high and low sensitivities on a number of key parameters, of which forecast demand growth, discount rates, and capital and fixed costs for generation and transmission had the largest impacts. Based on the sensitivities tested, the net benefit of the E-W Tie project ranges from a break-even outcome associated with the Low demand forecast scenario, to $1.7 billion under high demand growth.

The E-W Tie expansion project continues to be the IESO's recommended alternative to maintain a reliable and cost effective supply of electricity to the Northwest for the long term. The IESO supports the continuation of development work in order to maintain the viability of the E-W Tie expansion project with a targeted in-service date by the end of 2020.

2.0 INTRODUCTION

The Ontario Government's Long-Term Energy Plans ("LTEP") have both anticipated the expansion of a new E-W Tie transmission line. The 2010 LTEP, published in November 2010, identified the E-W Tie as a priority transmission project,[1] and the government's subsequent 2013 LTEP, published in December 2013 focused on the unique needs of Northern Ontario and included the E-W Tie expansion project.[2] The E-W Tie expansion project is intended to increase the transfer capability into the Northwest by adding a new transmission line roughly parallel to the existing E-W Tie transmission line, which extends between Wawa and Thunder Bay.

The Minister of Energy's letter to the Ontario Energy Board ("Board") of March 29, 2011 was the impetus for the Board undertaking a designation process to select the most qualified and cost-effective transmitter to undertake development work for the E-W Tie project. Early in the proceeding (EB-2011-0140), the Board requested that the former Ontario Power Authority ("OPA")[3] provide a report documenting the preliminary assessment of the need for the E-W Tie expansion. In response, the OPA filed its original report in June 2011, titled "Long Term Electricity Outlook for the Northwest and Context for the East-West Tie Expansion" ("June 2011 Report").

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[1] Ontario's 2010 Long-Term Energy Plan: Building Our Clean Energy Future, Figure 12, page 47.

[2] Ontario's 2013 Long-Term Energy Plan: Achieving Balance, page 52.

[3] On January 1, 2015, the Ontario Power Authority ("OPA") merged with the Independent Electricity System Operator ("IESO") to create a new organization that combined the OPA and IESO mandates. The new organization is called the Independent Electricity System Operator. Any assessments prior to January 1, 2015 were provided by the former OPA.

This report constitutes the Independent Electricity System Operator's ("IESO") third updated assessment of the rationale for the E-W Tie expansion project, as ordered by Board decisions Regarding Reporting by Designated Transmitter dated September 26, 2013 and January 22, 2015.[4] It builds upon and updates three previous E-W Tie reports prepared by the OPA: i) the original June 2011 Report; ii) the first update report, filed with the Board in October 2013, titled "Updated Assessment of the Rationale for the East-West Tie Expansion" ("October 2013 Report"); and iii) the second update report titled "Assessment of the Rationale for the East-West Tie Expansion" filed with the Board on May 5, 2014 ("May 2014 Report").

This report focuses on major changes that have occurred since the May 2014 Report and, based on these changes, provides an updated statement of the rationale for the E-W Tie expansion. This report also follows several additional filings with the Board in the E-W Tie proceeding, namely: i) the OPA's September 30, 2014 need update letter regarding the development schedule, including a recommendation and explanation of the rationale for revising the project's in-service date from 2018 to 2020; ii) the OPA's December 19, 2014 submission, titled "Context for Revised Development Schedule" filed with Upper Canada Transmission, Inc.'s ("UCT") December 19, 2014 response to the Board's October 29, 2014 letter requesting that UCT and the OPA collaborate to produce a revised development schedule for the E-W Tie based on the OPA's September 30th updated information; iii) the IESO's supporting letter of May 5, 2015 to UCT's May 15, 2015 filing with the Board provided to confirm that UCT's revised development schedule is consistent with the IESO's current information regarding the need for the E-W Tie expansion project.

In the filings referenced above, the OPA and IESO advocated that the additional time for development work afforded by the deferral of the in-service date from 2018 to 2020 be used to investigate potential cost savings for the project. To this end, UCT (o.a. NextBridge Infrastructure), the transmitter designated to develop the E-W Tie expansion project, requested that Parks Canada reconsider its decision regarding access to Pukaskwa National Park, but in June 2014 was denied that request. The IESO has also investigated the potential for cost savings from staging the project's implementation, and has refined the models and assumptions underlying this analysis, based on more detailed analysis and research.

The remainder of this report is organized as follows. Section 3 describes new activities undertaken to refine models and assumptions in preparing this update. Section 4 provides an updated conservation and demand forecast for the Northwest. It reflects changes since May 2014 and identifies major drivers for future electricity demand. Sections 5 and 6 analyze current and future internal and external resources that supply the Northwest and provide an update on Northwest capacity and energy supply needs. Section 7 provides an updated analysis of two alternatives to meet these needs: a case with no E-W Tie expansion, in which gas generation addresses the Northwest supply needs; and the E-W Tie expansion. Section 8 summarizes the IESO's recommendation.

[4] Board Decision and Order Regarding Reporting by Designated Transmitter dated September 26, 2013, page 4, and January 22, 2015, page 5.

3.0 ACTIVITIES UNDERTAKEN IN PREPARING THIS UPDATE

In the year since the OPA issued its letter deferring the E-W Tie expansion, the IESO has undertaken a variety of activities to investigate potential areas for cost savings, update system capability and Northwest operational needs, and refine and update the models and assumptions used in this assessment. These activities are introduced here, to provide context for the updated results and information presented in subsequent sections of this report.

Updated Transmission Cost Estimates

For this update, the IESO asked the respective transmitters to review the capital cost estimates for the new line and the station upgrades. Based on the most recent information, and accounting for Parks Canada's decision not to allow a route through Pukaskwa National Park, the previous planning estimate of $500 million for the line was confirmed by NextBridge Infrastructure.

For the station costs, Hydro One provided a revised estimate of approximately $150 million for the 650 MW E-W Tie expansion, up from the previous planning estimate of $100 million, reflecting more detailed design work than was previously available. This estimate accounts only for costs directly attributable to the E-W Tie project. Costs associated with a portion of the station upgrade work that would be required to enable the existing system to meet new NERC standards while maintaining system capability and operational requirements, regardless of whether the E-W Tie expansion goes ahead, was deducted from the station cost estimates.

Staging of Station Facilities

The IESO has identified a potential opportunity to defer costs by staging the installation of station facilities, while still maintaining reliability. This would involve an interim stage consisting of "twinning" the circuits, creating two "super-circuits", one carried by the existing E-W Tie line structures and the other on the new line. This interim stage would provide a westbound transfer capability of approximately 450 MW.

The interim stage would allow for approximately $100 million of the station facility costs to be deferred.

Refined Transmission System Limits

The IESO has continued to refine its studies of transmission system limits and interface capabilities, reflecting the most up-to-date available supply and demand information and application of new reliability criteria. These updated limits are reflected in updates to the capacity and energy models underlying the E-W Tie analysis.

Previously, the reported westbound capability of the existing E-W Tie was based on voltage and transient stability limitations. In this update, the westbound capability of the existing E-W Tie has been revised downward based on further study to assess thermal limitations on the existing system (see section 5.2). This means that the incremental capacity provided by the E-W Tie expansion is greater. It

also has the effect of increasing the generation capacity requirements in the generation alternative, all else being equal, compared to the higher existing E-W Tie limit used in the May 2014 Report.

The transfer capabilities of transmission interfaces outside the Northwest have also been refined in this update. The eastbound limit on the interface between Wawa and Sudbury, and the southbound limit between Sudbury and southern Ontario, have both been modeled to more accurately reflect their current capabilities to export power under system peak conditions. In the generation alternative, this has the effect of reducing the effectiveness of Northwest generation in providing capacity to the rest of the province.

Refined Resource Assumptions

The IESO continually updates its assumptions and models by observing market trends and conducting research. Since the May 2014 Report was published, the IESO has updated its assumptions for natural gas-fired generation, with a particular emphasis on generation sited in the Northwest, through third party consultants, external resources, and past procurement experience.

New learning suggests that to provide reliable peak capacity in the Northwest, storing reserve fuel on-site, at a relatively small capital and operating cost increase, is more cost-effective than procuring "firm" Gas Delivery and Management ("GD&M") services. Due to pipeline infrastructure, limited natural gas storage capacity in northern Ontario, and a mismatch in the commitment timeframes for gas and electricity, procuring "firm" service in the Northwest is expected to be more costly than the same level of GD&M service in southern Ontario. Having fuel on-site would allow a developer to procure "interruptible" GD&M services for natural gas as the primary fuel, but with a backup fuel supply in case service is interrupted. The onsite fuel could feasibly be diesel fuel oil, liquefied natural gas or compressed natural gas. Based on discussions with natural gas distribution companies about historical gas demand interruptions in the Northwest, the on-site fuel is expected to rarely be called upon.

In this update, the cost and technology assumptions for new-build natural gas-fired generation installed in the Northwest—i.e., the alternative to the E-W Tie assessed in this report—are based on this on-site reserve fuel strategy.

4.0 NORTHWEST CONSERVATION AND DEMAND

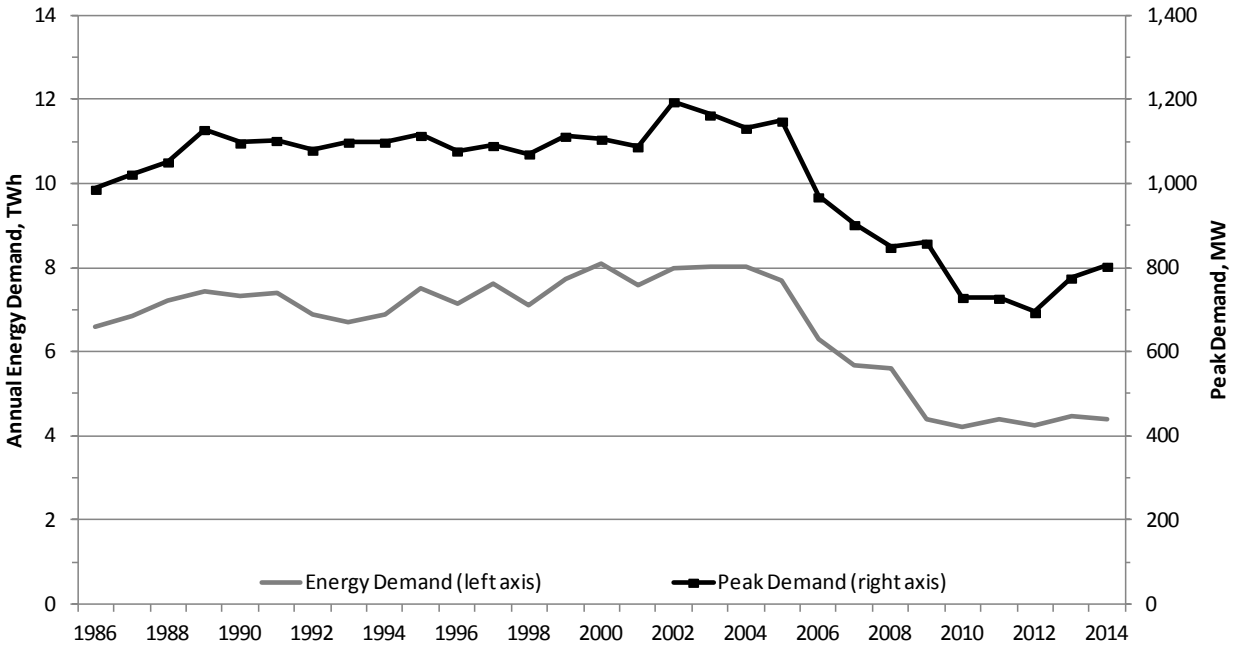
Throughout the planning and development of the E-W Tie expansion project, the IESO has maintained regular discussion with stakeholders and customers in the Northwest and continues to monitor developments that may affect electrical demand in the region. The forecast in this report reflects updated information and provides a range of demand scenarios based on the inherent uncertainty of industrial development in the region. As noted in the previous two need update reports, Northwest electrical demand is dominated by large, industrial customers and can fluctuate significantly in response to changing economic and market conditions. The Northwest is a winter-peaking region, in contrast to southern Ontario where electricity demand usually peaks during the summer months.

In this update, the demand forecast has increased marginally in magnitude, with growth occurring slightly later than in the May 2014 forecast, based on updated information of various developments.

4.1 Historical Northwest Demand

Historical electricity demand in the Northwest is presented in Figure 1 below. This update includes actual energy and demand data from 2014, which was not available when the May 2014 Report was prepared. The winter of 2014 saw an increase in demand in the Northwest driven by extreme temperatures and modest growth in the industrial sector. The Northwest electricity system performed well under the higher demand conditions of 2014, which included a winter peak of approximately 800 MW, and annual energy demand of almost 4.5 TWh.

Figure 1. Historical Northwest Electricity Demand



4.2 Drivers of Northwest Demand

The IESO continues to work together with interested parties to understand the drivers for demand in the Northwest, including engaging with stakeholders such as Common Voice Northwest, mining companies and industry associations, and carrying out discussions with the Ontario Ministry of Northern Development and Mines. The updated forecast reflects changes in the outlook for industry, as well as other developments in the Northwest.

In comparison to the May 2014 Report, drivers of Northwest demand that have changed include: more certainty in the development of several mining projects; updated information on the electricity requirements and timing associated with the TransCanada PipeLines Limited ("TCPL") proposed "Energy East" project; and consideration of recent plant closures in the pulp and paper sector.

Mining Sector

The IESO has continued to engage mining companies with developments in Ontario and reviewed technical documents to understand the feasibility, timing and likelihood of various developments. Factors such as commodity prices, access to capital and environmental considerations act as indicators of potential growth in the sector. Several mining projects in the Fort Frances and Red Lake areas have advanced to construction or initial production phases and various other projects throughout the region have had success raising capital and advancing their feasibility and environmental assessments. On the other hand, several other projects have experienced set-backs due to factors such as low commodity prices and environmental hurdles. The demand forecast considers the latest available information on the location, size and stage of development of mining projects in the Northwest.

Pulp and Paper Sector

Ontario's pulp and paper sector has been in decline for over 10 years. This decline continued in 2014 with the closure of two Ontario plants, one in the Northeast and one in the Northwest. There is a potential for demand stabilization from the retrofitting of old pulp and paper facilities to produce other fibers such as Rayon, however a substantial recovery of the pulp and paper sector is considered unlikely.

TransCanada Energy East Pipeline

This updated forecast includes updated information on the electrical requirements of the Energy East pipeline project. Two demand forecasts were considered for this project—medium and high—reflecting the impacts on Northwest demand of two alternate connection options proposed by TCPL.

Other Forecast Components

Minimal or no change has been made for the remaining components of the Northwest demand forecast since the May 2014 Report:

- Forestry sector
- Connection of remote communities remains on track for 2020
- Natural growth in residential, commercial and other industrial sectors

The IESO remains engaged in working with local distribution companies ("LDC") to implement the Conservation First framework, consistent with the 2013 LTEP and the March 31, 2014 Conservation First Directive from the Ministry of Energy to the OPA. LDC progress towards meeting the conservation targets will continue to be tracked through Conservation and Demand Management ("CDM") Plans and evaluation, measurement and verification ("EM&V") activities, and the conservation assumptions for the Northwest will continue to be updated accordingly.

4.3 Northwest Demand Scenarios

An updated demand forecast for the Northwest was developed, taking into account the impacts of the various drivers described above. Consistent with the previous two update reports developed by the

OPA, the IESO has represented demand growth uncertainty in the region by developing three scenarios to explore the robustness and flexibility of transmission and supply options under a range of outcomes. Key aspects of the scenarios are as follows:

- **Reference Scenario.** In this scenario, mining sector demand considers proposed mines that have passed significant development milestones. Mining loads are assumed to persist for the expected lifetime of the proposed developments. This scenario assumes modest growth in the forestry sector in the short and medium term and does not assume recovery of the pulp and paper sector. This scenario assumes the Energy East pipeline will proceed to production in 2020 under the medium demand forecast for this project.
- **High Scenario.** This scenario considers the impact of stronger and faster development in the mining sector which could potentially be driven by factors such as increased commodity prices. This scenario also reflects the stabilization of the pulp and paper sector and assumes the high demand forecast for the Energy East pipeline conversion project.
- **Low Scenario.** This scenario describes a more restrained outlook in the mining sector, continuing decline in the pulp and paper sector, and it assumes that the Energy East pipeline conversion project does not proceed.

The demand assumptions for Remote Communities, residential, commercial and other industries (other than those mentioned above) are the same in each scenario.

The resulting Northwest peak and annual energy demand scenarios, net of savings from planned conservation, are shown in Figure 2 and Figure 3. The Reference demand scenario shows the Northwest forecast increasing quickly in the medium term, due to advancing mining developments which are expected to come online, followed by more gradual growth in the long term. The wide range between the High and Low scenarios reflects the uncertainty in the assumptions underlying the forecast.

For comparison, the Reference scenario prepared for the May 2014 Report is also included in Figures 2 and 3. The current Reference forecast has a slower near-term growth rate than the May 2014 Reference forecast but is higher than the May 2014 Reference forecast in the long term.

Figure 2. Northwest Net Peak Demand Forecast Scenarios

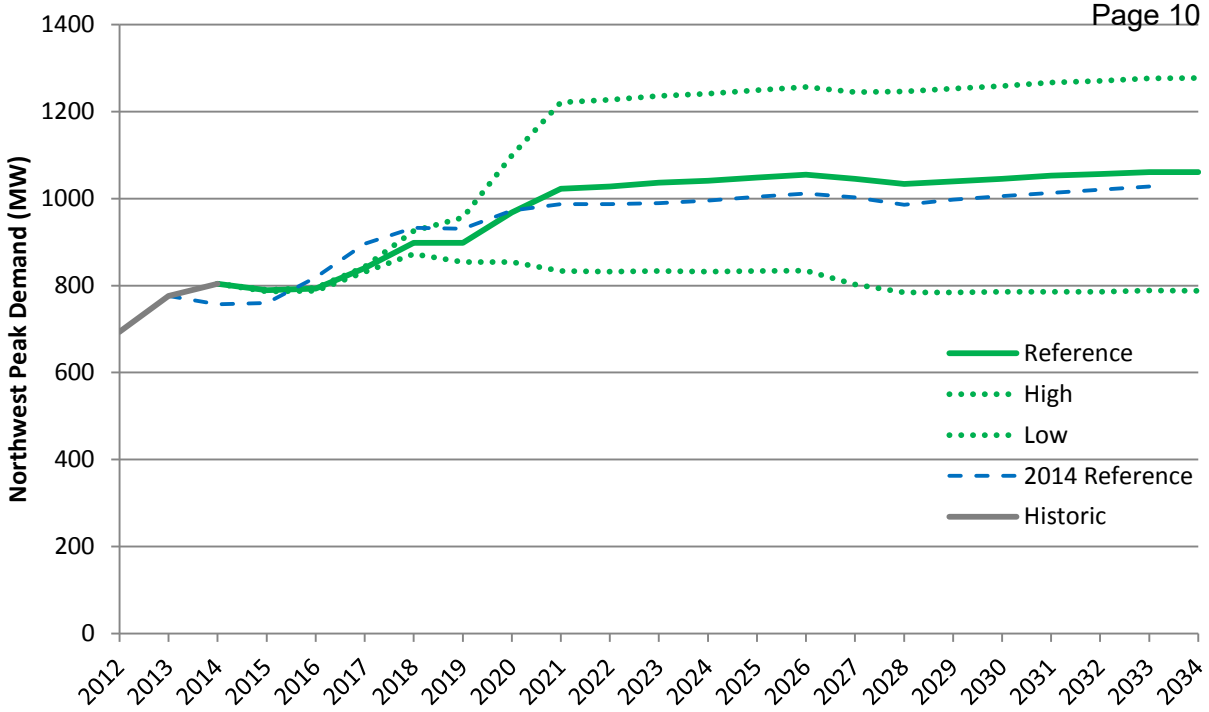
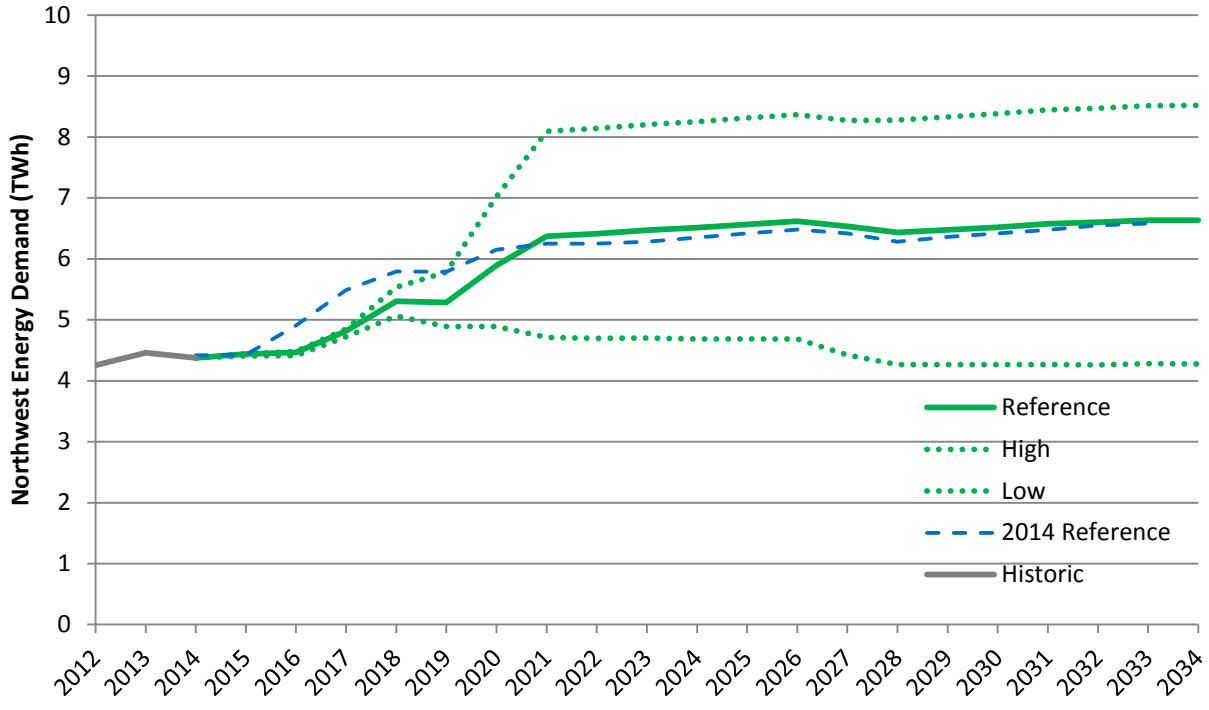


Figure 3. Northwest Net Energy Demand Forecast Scenarios



5.0 EXISTING RESOURCES TO SUPPLY NORTHWEST DEMAND

The Northwest relies upon both internal resources (generation located in the Northwest) and external resources (generation outside the Northwest accessed through existing ties) to meet its electricity supply and reliability requirements. An update on the Northwest supply outlook since the May 2014 Report is provided below.

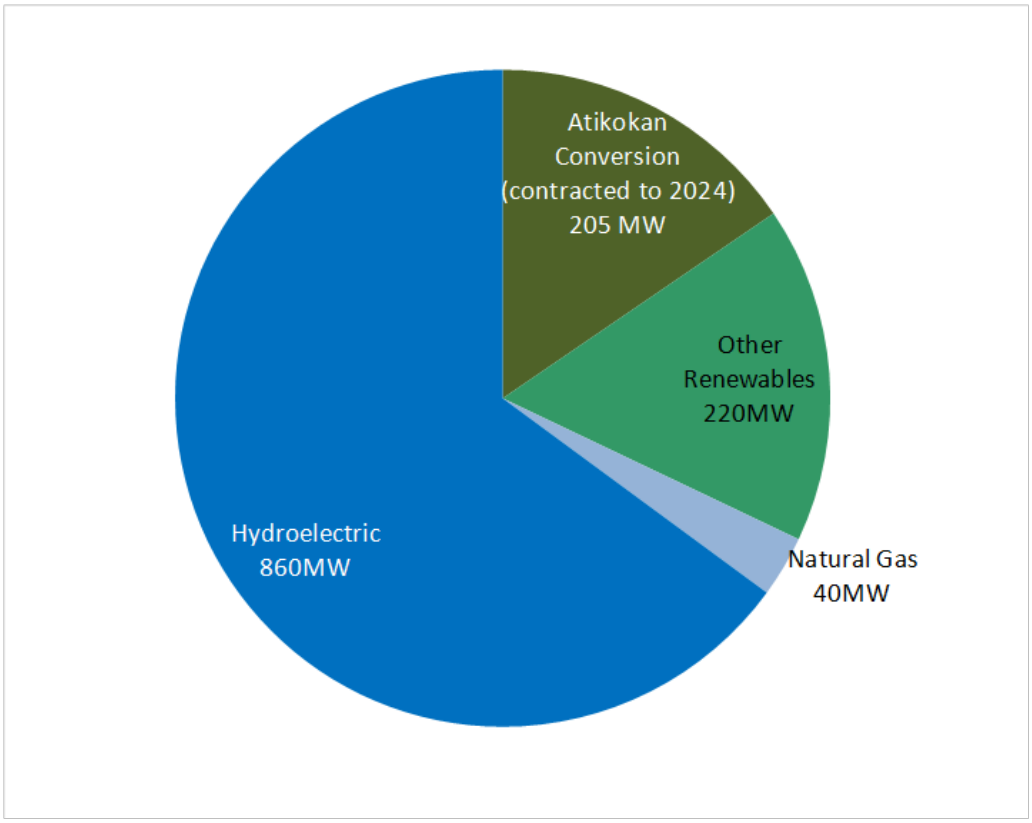
5.1 Internal Resources in the Northwest

The IESO has updated its assumptions regarding supply resources in the Northwest, where new information is available. The following changes have been made since the May 2014 Report:

- The 60 MW generator at Fort Frances, previously considered as embedded generation, has been removed from service as the operation has shut down.
- The rated capacities of the Atikokan Biomass Generating Station and the Thunder Bay Advanced Biomass Generating Station have been adjusted upward slightly based on updated contract and performance data.
- The maximum contracted hydroelectric capacity over the planning period has increased from 835 MW to 861 MW, due to projects that received contracts in the first phase of the Feed-in Tariff ("FIT") program coming into service.
- The capacity contribution (expected available capacity during peak hours) of hydroelectric generation has been updated based on new data and ongoing model improvements. The May 2014 Report assumed a winter capacity contribution of around 32% during low water years; in this report, the winter capacity contribution during low water years has been increased to 45%.
- The expiration of wind and solar generation contracts has been accounted for in this update.
- Some small-scale distribution-connected solar and gas plants that began operation prior to 2014 are now included in the demand forecast as embedded loads; these resources have been removed from the supply side model.
- 40 MW of new hydroelectric and solar capacity contracted primarily through the FIT program have come into service since the previous analysis was completed.

The updated installed capacity of Northwest internal resources in the year 2020 is 1,325 MW and is shown by fuel type in Figure 4.

Figure 4. Northwest Internal Resources by Type in 2020 (Installed Capacity)



5.2 External Resources Supplying the Northwest

Additional supply is provided to the Northwest through the existing E-W Tie; a 230 kV double-circuit transmission line that extends between Wawa TS and Lakehead TS, linking the Northwest system to the rest of Ontario.

In the May 2014 Report, the westbound transfer capability of the E-W Tie was quoted as 240 MW. This represents the operational limit for transfers across the E-W Tie that will ensure that both transient and voltage stability will be maintained following a double-circuit contingency (fault) involving the E-W Tie.

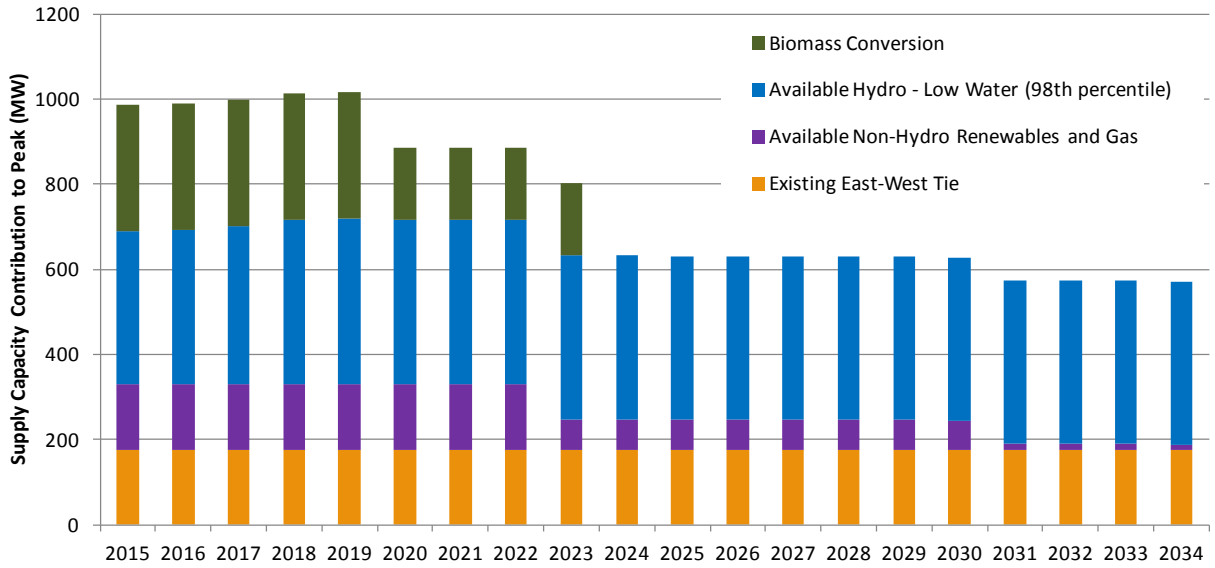
It has subsequently been recognized that following the loss of the double-circuit line between Marathon TS and Lakehead TS, the thermal rating of the parallel 115 kV single-circuit line can be more limiting under certain ambient conditions. Based on the ambient temperatures specified in the Ontario Resource and Transmission Assessment Criteria ("ORTAC") that are to be used in planning studies, the maximum transfer that can occur across the E-W Tie will be limited to 175 MW during the winter period and 155 MW during the summer by the thermal rating of this 115 kV line. Since these latter values are more restrictive, they have been used in the analysis underlying this report.

5.3 Summary of Existing Resources

The existing internal and external resources assumed to be available to supply the Northwest in this planning analysis are shown in Figure 5. The figure reflects the available capacity of internal resources at the time of Northwest peak demand under low water conditions. It also includes the westbound capability of the existing E-W Tie.

As Figure 5 indicates, available peak supply capacity is expected to be reduced at two points in the planning horizon: in 2020, corresponding to the expiry of the contract for Thunder Bay Advanced Biomass Generating Station; and in 2024, when the contract for Atikokan biomass operation expires.

Figure 5. Northwest Peak Supply Capacity under Low Water Conditions



6.0 THE NEED FOR ADDITIONAL SUPPLY FOR THE NORTHWEST

As described in previous reports, the forecast supply needs for the Northwest consist of both capacity and energy components. Based on the current outlook for Northwest demand and supply, and incorporating refined assumptions and models described in section 3, the IESO updated the assessment of the reliability and adequacy of the Northwest system. The updated capacity and energy requirements are described below.

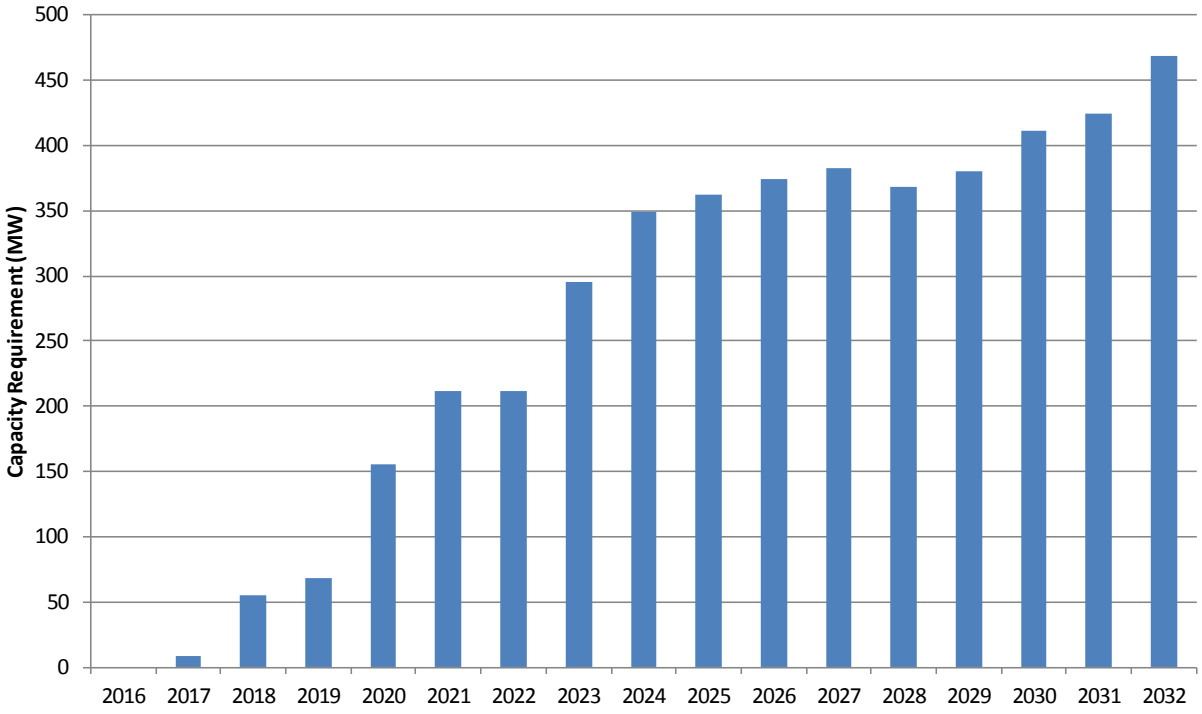
6.1 Expected Capacity Requirement

Consistent with the May 2014 Report, the IESO conducted a reliability assessment using a probabilistic approach to determine capacity requirements in the Northwest. As water conditions have a strong impact on overall supply availability in the Northwest, the probabilistic approach utilizes a range of water conditions.

The updated capacity need, based on the Reference peak demand scenario with no E-W Tie expansion, is shown in Figure 6. The capacity need increases from approximately 150 MW in 2020 to around 350 MW with the expiry of the Nipigon NUG and the Atikokan biomass contracts in 2023 and 2024 respectively. The need for additional capacity continues to climb gradually through the remainder of the planning period due to further load growth and the expiry of some smaller supply contracts, approaching 500 MW in the early 2030s.

As noted in the May 2014 Report, there is a small projected capacity need in the interim years before the E-W Tie expansion, based on assessment of planning criteria.[5] This need is lower than in the May 2014 Report due to the updated demand forecast as well as updated data and assumptions about hydroelectric availability during peak periods, and is associated with low-water years only. The IESO will continue to monitor this need and, if necessary, deploy short-term options to bridge the gap until the E-W Tie expansion comes into service.

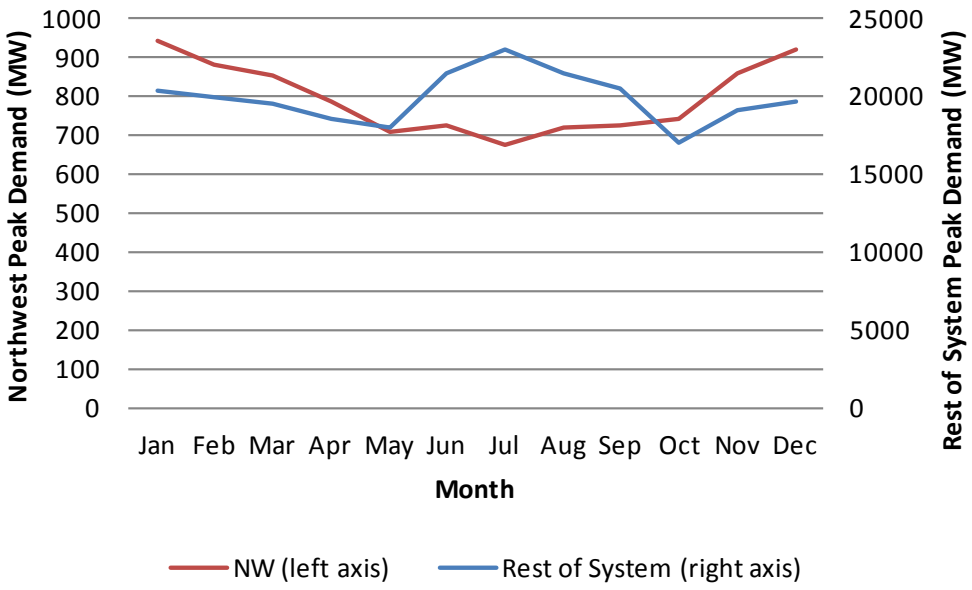
Figure 6. Expected Incremental Northwest Capacity Requirement under Reference Demand



As demand in the Northwest is winter-peaking, the incremental capacity requirements in the Northwest are greatest during the winter months. This is in contrast to southern Ontario, where peak demand requirements are highest during the summer months. This is demonstrated in Figure 7, using 2020 as an example year. This offset in capacity requirements enables the sharing of resources for capacity adequacy and increased system efficiency for energy arbitrage with the E-W Tie expansion.

[5] Assessment of the Northwest system based on operating criteria indicates that there is no capacity need prior to 2020.

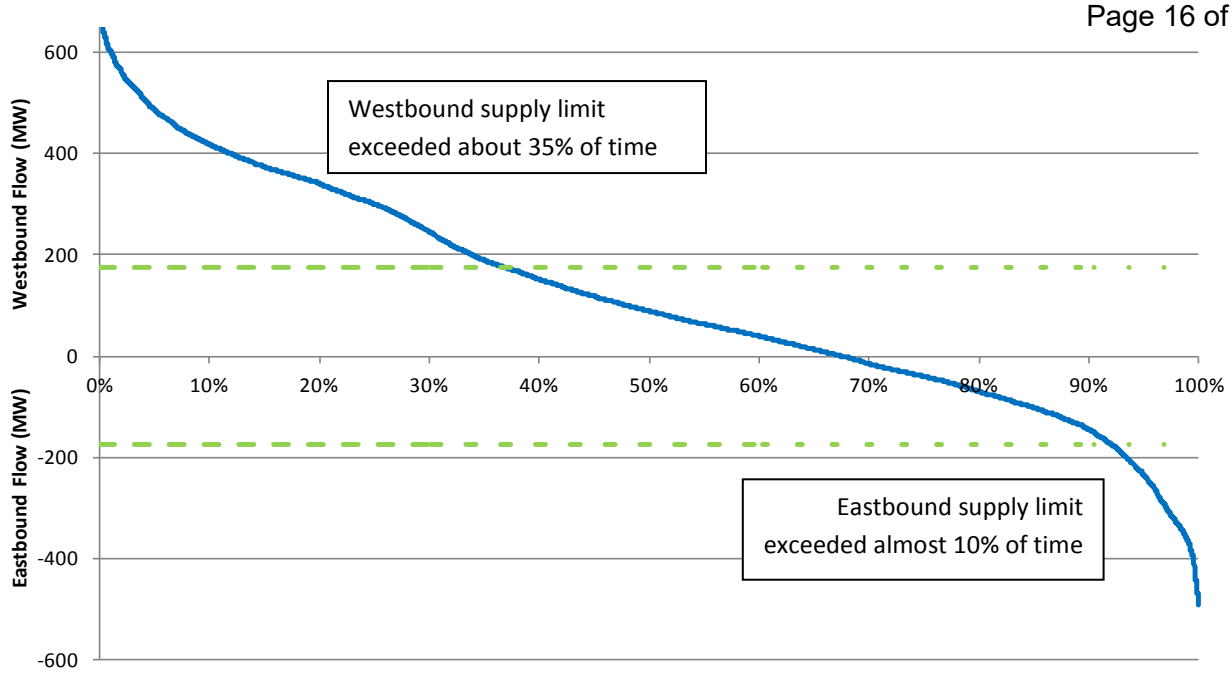
Figure 7. Timing of Demand in the Northwest vs. Rest of Ontario in 2020



6.2 Expected Energy Requirement

The expected energy requirement in the Northwest is defined by the energy demand forecast, as well as the supply capabilities of local generation and the existing E-W Tie. Figure 8 provides an updated forecast E-W Tie flow duration curve, for all hours of the year 2021, based on the latest Reference demand forecast and median water conditions. In this update, expected westbound flows exceed the existing E-W Tie capability approximately 35% of the time. This is based on application of the winter rating of 175 MW throughout the year. Applying the more restrictive limit of 155 MW during the summer months would likely result in a higher level of westbound congestion. Going eastbound, congestion is expected to occur just under 10% of time in 2021. The energy requirement is expected to grow with the demand forecast over the planning horizon.

Figure 8. Unconstrained Flow and Planning Limits on the Existing E-W Tie for the Year 2021



7.0 ANALYSIS OF ALTERNATIVES TO MEET NORTHWEST SUPPLY NEEDS

As in previous reports, two alternatives to meet the Northwest capacity and energy needs were evaluated based on the capacity needs identified for each of the demand scenarios: Reference, Low and High. The alternatives are broadly defined as follows:

(1) **No E-W Tie expansion.** In this alternative, all of the forecast capacity and energy needs are met through the addition of new gas-fired simple cycle gas turbine ("SCGT") generation in the Northwest, with the size of units and the timing of installation defined to meet the needs as they arise during the planning period. Under the Reference demand forecast, a total of 500 MW of generation is included.

(2) **E-W Tie expansion.** In this alternative, the E-W Tie expansion project provides a foundation for meeting the Northwest needs, with additional generation installed to meet any incremental supply requirements. In this update, a staged implementation of the E-W Tie expansion was adopted, with the interim 450 MW E-W Tie stage and the final 650 MW stage installed as required to meet the capacity needs throughout the study period. For the High growth forecast, a need for additional supply beyond the capability of the expanded E-W Tie emerges in the later years of the forecast; this supply is included in the analysis.

In both alternatives, local generation is assumed to consist of new-build natural gas-fired generation, utilizing on-site reserve fuel. For the reasons discussed in the May 2014 Report, continuing to operate

the Atikokan and Thunder Bay conversions beyond their contemplated expiry dates was not assumed in the alternative analysis.

Another alternative that was not analyzed in this (or previous) updates is a potential firm import purchase from Manitoba. The existing intertie between Ontario and Manitoba has a capacity of about 300 MW. Currently, it is used for short-term economic trades between the two jurisdictions and there are no contractual obligations to provide firm capacity in effect. For imports to be a viable alternative, the Northwest system would need to be able to absorb the required capacity beyond the border and transfer it within the Northwest to where it is needed. Currently, without major system expansion, only about 150-200 MW can be accommodated before running into constraints on the transmission system between Kenora and Dryden. Moreover, utilizing the existing intertie for firm import purchases would reduce its availability for economic transactions that currently can assist in meeting operational needs.

7.1 Cost-Effectiveness Comparison of Generation and Transmission Alternatives

Consistent with previous E-W Tie expansion need update reports, an economic analysis of the two alternatives was conducted and their relative net-present-value ("NPV") was compared. A sensitivity analysis was performed to test the robustness of the results under a variety of conditions. Among the sensitivities tested were the Reference, Low and High demand forecast scenarios, ranges in the cost of the generation alternative, and various other factors.

In addition to reflecting the updated capacity and energy needs, the economic analysis includes the refined assumptions identified in section 3.

Changes in assumptions since the May 2014 Report are as follows:

- The Reference demand forecast was updated as per the changes identified in section 4.3. Sensitivities to test the impacts of the updated Low and High demand growth scenarios on the NPV were performed.
- The updated existing supply resources described in section 5, including the updated westbound ratings for the existing E-W Tie, are reflected in the analysis.
- Eastbound constraints on the transmission interfaces between Wawa and Sudbury, and between Sudbury and southern Ontario, were included in the energy and capacity models based on refined studies of the capabilities of these interfaces.
- Additional study has identified that due to diversity in the demand profiles of the Northwest and the rest of Ontario (see section 6.1), fewer provincial resources are required to supply the Northwest in the E-W Tie expansion alternative.
- The transmission costs for the E-W Tie expansion are assumed to be $500 million for the line and $150 million for the stations (see section 3). A portion of the station costs is deferred consistent with the staged expansion of the E-W Tie included in this update.

- A better understanding of needs internal to the Northwest has influenced the SCGT technology type, sizing, and location, resulting in a net increase in capital costs for the "No E-W Tie expansion" alternative. A sensitivity of +/- 25% was assessed on the capital and ongoing fixed costs for generation.

- The study period extends from 2021, the first full year that the E-W Tie expansion would be in service, to 2050, when the first replacement decision is expected; this decision is associated with the generation alternative.

- Natural gas prices were assumed to be an average of $4.50/MMBtu throughout the study period. A sensitivity was performed with average gas prices of $8.50/MMBtu.

- The assessment is performed from a ratepayer perspective, and now includes all costs incurred by developers, which are passed on to ratepayers.[6]

The following assumptions remain unchanged from the May 2014 Report:

- The NPV of the cash flows is expressed in 2015$ CDN.

- The NPV analysis was conducted using a 4% real social discount rate. Sensitivities at 2% and 8% were performed.

- Median-water hydroelectric energy output was used for energy simulation in the economic analysis.

- The life of the station upgrades was assumed to be 45 years; the life of the line was assumed to be 70 years; and the life of the generation assets was assumed to be 30 years.

- New capacity in the Northwest and the rest of Ontario was added, as required, to satisfy reliability criteria. These capacity needs were determined as described in section 6.1. A sensitivity to determine the impact of adding 100 MW of gas-fired generation in the Northwest was performed.

Under the Reference assumptions, the E-W Tie expansion provides a net economic benefit of $1.1 billion compared to the no-expansion alternative. To test the robustness of this result against uncertainty in the assumptions, the IESO considered high and low sensitivities on a number of key parameters, of which forecast demand growth, discount rates, and capital and fixed costs for generation and transmission had the largest impacts. Based on the sensitivities tested, the net benefit of the E-W Tie project ranges from a break-even outcome associated with the Low demand forecast scenario, to $1.7 billion under high demand growth.

[6] The previous analyses were completed from a societal perspective. Taxes and returns assumed to change hands within Ontario were therefore not included in the economic analysis.

The E-W Tie expansion would provide additional benefits, beyond meeting the reliability requirements of the Northwest: system flexibility, removal of a barrier to resource development, reduced congestion payments, reduced losses, and improved operational flexibility. These benefits are additive to the economic benefits and form an important part of the rationale for the project.

8.0 CONCLUSION AND RECOMMENDATION

The IESO's most recent analysis illustrates that the E-W Tie expansion is economic under a wide variety of conditions. On this basis, the IESO continues to recommend the E-W Tie expansion as the preferred alternative to maintain a reliable and cost-effective supply of electricity to the Northwest for the long term.

Based on the updated demand forecast, the timing of the needs is consistent with the 2020 in-service date recommended in the OPA's 2014 letter. Therefore, the IESO continues to recommend that project development proceed toward a targeted 2020 in-service date, and to support the continuation of development work to ensure the continued viability of the project.

UPDATED ASSESSMENT OF THE NEED FOR THE EAST-WEST TIE EXPANSION – IESO, 2017

Updated Assessment of the Need for the East-West Tie Expansion

Submitted to the Ministry of Energy

December 1, 2017

ieso
Connecting Today.
Powering Tomorrow.

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1.0 KEY FINDINGS/RECOMMENDATIONS

This report has been prepared in response to the August 4, 2017 direction from the Minister of Energy ("Minister") requesting the IESO to prepare an updated need assessment, similar in scope to the previous update reports prepared for the Ontario Energy Board ("OEB"). This report confirms the rationale for the East-West Tie ("E-W Tie") Expansion project based on updated information and study results. This project continues to be the IESO's recommended option to maintain a reliable and cost-effective supply of electricity to the Northwest for the long term.

The E-W Tie Expansion project provides approximately $200 million in net cost savings compared to the least-cost local generation alternative. The IESO also considered high and low sensitivities on a number of key parameters, such the assumed cost of the generation alternative. Based on the sensitivities tested for the Reference outlook, the E-W Tie Expansion project, compared to the least-cost local generation option, ranges from a net cost savings of approximately $500 million to a net cost of just under $100 million.

The IESO continues to recommend an in-service date of 2020 for the E-W Tie Expansion project. Discussions with the transmitters confirmed their ability to meet this date, dependent on timely regulatory approvals. The IESO will continue to support the implementation of the project and monitor electricity supply and demand in the Northwest until the E-W Tie Expansion project comes into service.

2.0 INTRODUCTION

The Ontario Government's 2010[1] and 2013[2] Long-Term Energy Plans ("LTEP") have both identified the expansion of the E-W Tie transmission line as a priority project. The E-W Tie Expansion project is intended to increase the transfer capability into the Northwest by adding a new transmission line roughly parallel to the existing E-W Tie transmission line, which extends between Wawa and Thunder Bay.[3]

The Minister's letter to the OEB of March 29, 2011 was the impetus for the OEB undertaking a designation process to select the most qualified and cost-effective transmitter to undertake development work for the E-W Tie project. Early in that proceeding (EB-2011-0140), the OEB

[1] Ontario's 2010 Long-Term Energy Plan: Building Our Clean Energy Future, Figure 12, page 47.

[2] Ontario's 2013 Long-Term Energy Plan: Achieving Balance, page 52.

[3] The route deviates from that of the existing E-W Tie by travelling around Pukaskwa National Park rather than through, and travelling north of Loon Lake and west of Ouimet Canyon Provincial Park.

requested that the former Ontario Power Authority ("OPA")[4] – now the Independent Electricity System Operator ("IESO") and hereinafter referred to as the IESO – provide a report documenting the preliminary assessment of the need for the E-W Tie Expansion. In response, the IESO filed its original report in June 2011, titled "Long Term Electricity Outlook for the Northwest and Context for the East-West Tie Expansion" ("June 2011 Report"). As a result of the designation proceeding, Upper Canada Transmission, Inc. (o/a "NextBridge Infrastructure") was selected as the proponent to develop the E-W Tie.

The OEB's Phase 2 Decision and Order Regarding Reporting by Designated Transmitter, and the subsequent update due to the deferral of the in-service date from 2018 to 2020, dated September 26, 2013 and January 22, 2015[5] respectively, required the IESO to provide updates to the OEB on the need for the E-W Tie Expansion. In response, three previous E-W Tie reports were prepared by the IESO for the OEB: i) the first update report, was filed in October 2013, titled "Updated Assessment of the Rationale for the East-West Tie Expansion" ("October 2013 Report"); ii) the second update report titled "Assessment of the Rationale for the East-West Tie Expansion" was filed with the OEB on May 5, 2014 ("May 2014 Report"); and iii) the third update report titled "Assessment of the Rationale for the East-West Tie Expansion" was filed on December 15, 2015 ("December 2015 Report").

Following the December 2015 Report, the former Ontario Minister of Energy, Bob Chiarelli, issued a letter to the OEB stating that the E-W Tie Expansion continues to be the IESO's recommended alternative to maintaining a reliable and cost-effective supply of electricity in Northwestern Ontario for the long term and that the government had accordingly issued an Order in Council ("OIC") on March 10, 2016 declaring that the E-W Tie Expansion was needed as a priority project. Consequently, on December 6, 2016, the OEB issued an additional revision to their Phase 2 Decision and Order Regarding Reporting by Designated Transmitter relieving the IESO of the obligation of completing a 2016 need update report.

On July 31, 2017, NextBridge and Hydro One Networks Inc. ("Hydro One") filed Leave to Construct ("LTC") applications[6] with the OEB for the E-W Tie Expansion project. Their

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[4] On January 1, 2015, the Ontario Power Authority ("OPA") merged with the Independent Electricity System Operator ("IESO") to create a new organization that combines the OPA and IESO mandates. The new organization is called the Independent Electricity System Operator. Any assessments prior to January 1, 2015 were provided by the former OPA.

[5] OEB Decision and Order Regarding Reporting by Designated Transmitter dated September 26, 2013, page 4, and January 22, 2015, page 5.

[6] The OEB assigned file numbers EB-2017-0182 and EB-2017-0194 to the NextBridge and Hydro One applications respectively.

applications included new evidence provided by the IESO related to the preferred staging of the project's station facilities. Staging the construction of the station facilities was recommended to reduce the cost of the project, by deferring costs until the facilities are needed. The OIC, issued under the authority of section 96.1(1) of the *Ontario Energy Board Act, 1998*, satisfies the usual need requirement for obtaining section 92 approval.

The project costs included by NextBridge in its LTC application are higher than what was assumed in the IESO's December 2015 Report. Therefore, on August 4, 2017 the Minister requested the IESO to prepare an updated need assessment, consistent with the scope of previous need assessments requested by the OEB. The 2017 LTEP, published in October 2017, also addressed the need to review all options for meeting capacity needs in the Northwest to ensure ratepayers are protected as the E-W Tie Expansion project continues to be developed.[7]

This report provides an updated assessment of the E-W Tie Expansion project, reflecting changes that have taken place since the December 2015 Report, namely revised project costs and an updated demand and supply outlook for the Northwest.

3.0 CHANGES TO THE PLANNING ASSUMPTIONS

Major changes to the planning assumptions since the December 2015 Report are identified here in order to provide context for the updated results and the information presented in subsequent sections of this report.

Cancellation of TransCanada's Energy East Pipeline Project

The December 2015 Report included demand associated with TransCanada's Energy East project, in both the Reference and High demand outlooks. On October 5, 2017, TransCanada announced the termination of the Energy East project.[8] As a result, the anticipated demand associated with the Energy East project is no longer considered in any of the demand outlooks.

The Energy East project accounted for approximately 110 MW of peak demand and 1 TWh of energy demand in the December 2015 Report's Reference demand outlook.

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[7] Ontario's 2017 Long-Term Energy Plan: Delivering Fairness and Choice, page 39.

[8] "TransCanada Announces Termination of Energy East Pipeline and Eastern Mainline Projects", https://www.transcanada.com/en/announcements/2017-10-05-transcanada-anounces-termination-of-energy-east-pipeline-and-eastern-mainline-projects/.

Updated Load Supply Needs

The analysis in the December 2015 Report included a westbound E-W Tie limit of 155/175 MW[9] based on the thermal limitation of the underlying 115 kV circuit from Marathon TS to Lakehead TS. It is assumed that this limit remains the planning limit for the existing E-W Tie. This limit, however, relies on support from Manitoba following contingencies on the E-W Tie. The magnitude of support required is the highest for the loss of the E-W Tie from Wawa TS to Marathon TS since that contingency separates Northwestern Ontario from the rest of the province and leaves it connected only to Manitoba and Minnesota.

Relying on short-term support from neighbouring jurisdictions is an assumption made when operating the system province-wide. However, this support should not be relied on for an extended period of time without an agreement with the neighboring jurisdiction. The current practice is to operate the system such that we're not counting on this support for more than 30 minutes following a disturbance.[10]

The requirement to return the flow on the Manitoba and Minnesota interfaces to zero, or to the scheduled flow, within 30 minutes following a contingency on the E-W Tie is a requirement that is now being included in this update report when determining whether the Northwest has adequate resources to reliably meet its outlook for demand.

Staging of Station Facilities

In September 2014, as a result of the findings of the May 2014 Report , the IESO wrote a letter to the OEB recommending the deferral of the in-service date of the E-W Tie Expansion from 2018 to 2020. The letter indicated that the additional time would allow for the optimization of equipment and system design, including the staged construction of station facilities. Prior to Hydro One's LTC application being filed in July 2017, the IESO worked closely with Hydro One to evaluate the technical and economic feasibility of different staging alternatives for the required station facilities. The IESO's evidence outlines the staging alternatives that were compared and the rationale behind the recommended staged implementation of the station facilities.

[9] The planning limit for the existing E-W Tie is a thermal limitation, 155 MW reflects summer conditions and 175 MW reflects winter conditions.

[10] Market Manual 7.4: IESO Grid Operating Policies

The recommended staging includes an initial stage that provides 450 MW of transfer capability, with a station facility cost of $147 million. The second stage would be implemented only once the full 650 MW transfer capability of the line is needed, at an additional cost of $60 million.

Updated Transmission Cost Estimates

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.

As previously outlined, the cost of the station facilities required for the 650 MW E-W Tie Expansion project is approximately $207 million, up from the previous planning estimate of $150 million. This estimate accounts only for costs directly attributable to the E-W Tie Expansion project. As outlined in the IESO's evidence filed with the OEB in support of Hydro One's LTC application, facilities required to address the existing high voltage problem at Lakehead TS are required regardless of whether the E-W Tie project proceeds and are not considered as part of the cost of the E-W Tie station facilities.

The total project cost for the initial 450 MW stage is $924 million, and implementing the full 650 MW would increase overall costs to $984 million.

4.0 NORTHWEST DEMAND OUTLOOK

Throughout the planning and development of the E-W Tie Expansion project, the IESO has held regular discussions with stakeholders, customers and communities in the Northwest and the IESO continues to monitor developments that may affect electricity demand in the region. The demand outlook in this report reflects updated information and engagement which has taken place since the Minister's request for the IESO to provide a need update. Engagement with stakeholders and communities in the Northwest continues to provide valuable insight into the status of future developments. The IESO's outlook considers the likelihood of identified projects proceeding under three potential economic outlooks.

The Reference, Low and High demand outlooks reflect the inherent uncertainties related to industrial development in the Northwest. As noted in the previous three need update reports, Northwest electrical demand is dominated by large, industrial customers and can fluctuate significantly in response to changing economic and market conditions. The Northwest remains

a winter-peaking region, in contrast to Southern Ontario, where electricity demand usually peaks during the summer months.

In this update, the demand outlook has materially decreased in magnitude. This is driven by two significant developments: a continued decline in historical demand in the Northwest and the cancellation of TransCanada's Energy East Pipeline project and its subsequent removal from the Reference and High demand outlooks.[11]

4.1 Historical Northwest Demand

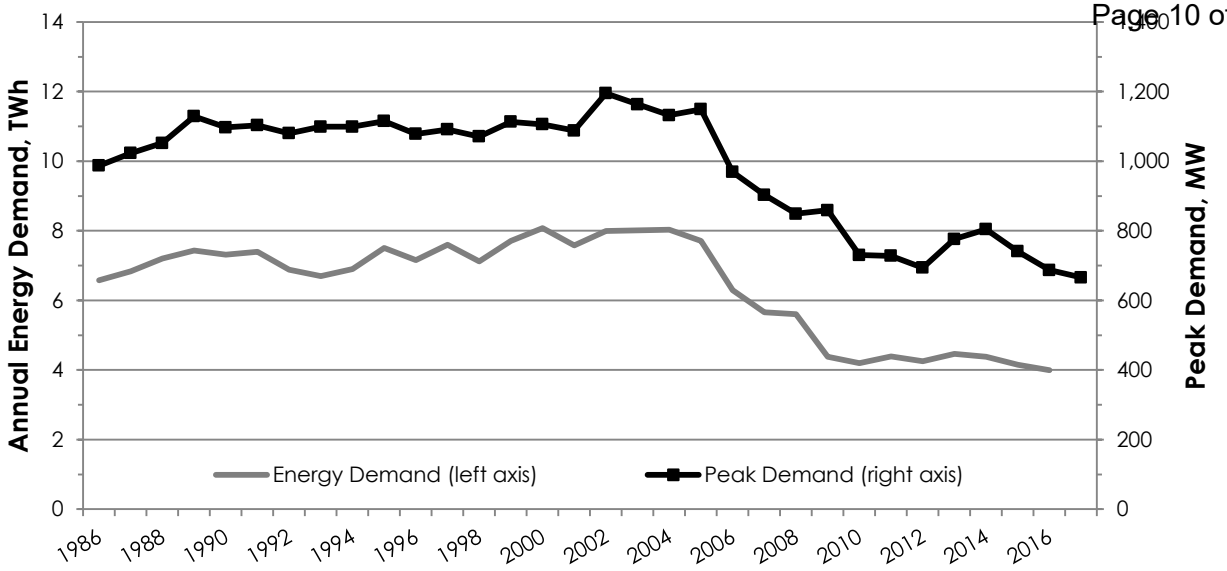
Historical electricity demand in the Northwest is presented in Figure 1 below. This update includes actual energy and peak demand data from 2015 and 2016 and preliminary data from 2017, which was not available when the December 2015 Report was prepared. While the winters of 2013 and 2014 saw an increase in demand in the Northwest, this was primarily driven by extreme low temperatures in the Northwest caused by a southward shift of the North Polar Vortex.[12] This resulted in a higher than average electric heating demand, driving winter peak demand to its highest level in five years.

Historical data now available for 2015 and 2016 and preliminary data available for 2017 shows a continuation of the declining trend for electrical demand in the Northwest due to the impacts of continued population decline, conservation, distributed generation and continued decline of the pulp and paper industry. This provides a lower starting point than in the December 2015 Report.

[11] The Energy East project was never included in the Low demand scenario.

[12] "Thunder Bay has coldest winter in 35 years, stats say", http://www.cbc.ca/news/canada/thunder-bay/thunder-bay-has-coldest-winter-in-35-years-stats-say-1.2580059.

Figure 1. Historical Northwest Electricity Demand



4.2 Drivers of Northwest Demand

The IESO continues to work with interested parties to understand the drivers of demand in the Northwest, engaging with stakeholders such as Common Voice Northwest ("CVNW"), mining companies, industry associations, and the Ontario Ministry of Northern Development and Mines. The updated outlook reflects changes in the status of developments throughout the Northwest.

In comparison to the December 2015 Report, the Northwest demand outlook has been impacted by a few key factors including: updated information on the status of mining developments; cancellation of TransCanada's proposed Energy East project; and continuing decline in the pulp and paper sector.

Mining Sector

The IESO has continued to engage mining companies with developments in Ontario and review technical documents to understand the feasibility, timing, and likelihood of potential mining developments. Factors such as commodity prices, access to capital and environmental considerations are indicators of potential growth in the sector. A mining project in the Fort Frances area has advanced to construction and initial production, and various other projects throughout the region have had success raising capital and advancing both their feasibility and environmental assessments. However, several other projects have experienced set-backs due to factors such as low commodity prices. The demand outlook considers the latest available information on the location, size, and stage of development of mining projects in the Northwest.

Pulp and Paper Sector

Ontario's pulp and paper sector has been in decline for over 10 years and this decline has continued since the December 2015 Report was published. While there is potential for demand stabilization, a return to the demand levels of a decade ago is considered unlikely.

TransCanada Energy East Pipeline

Demand associated with the Energy East Pipeline project which was previously included in both the Reference and the High demand outlooks has been removed.

Remote Communities

Connection of remote communities is assumed to begin in 2024, a delay of four years compared with the December 2015 Report.

Other Components of the Demand Outlook

Minimal or no change has been made to account for the remaining components of the Northwest demand outlook since the December 2015 Report:

- Forestry sector
- Natural growth in residential, commercial and other industrial sectors

The IESO continues to work with local distribution companies ("LDCs") to implement the Conservation First Framework, consistent with both the 2013 and 2017 LTEPs and the March 31, 2014 Conservation First Directive from the Ministry of Energy to the IESO. LDC progress towards meeting the conservation targets was tracked through Conservation and Demand Management ("CDM") Plans and evaluation, measurement and verification ("EM&V") activities, and the conservation assumptions for the Northwest were updated accordingly.

4.3 Northwest Demand Outlooks

An updated demand outlook for the Northwest was developed, taking into account the impacts of the drivers described above. Consistent with the previous three update reports, the IESO has represented demand growth uncertainty in the region by developing three outlooks to explore the robustness and flexibility of options to meet the need in the Northwest under a range of outcomes. Key aspects of the outlooks are as follows:

- **Reference demand outlook -** In this outlook, mining sector demand includes proposed mines that have passed significant development milestones. Mining loads are assumed to persist for the expected lifetime of the proposed developments. This outlook assumes

modest growth in the forestry sector in the short term and assumes stabilization of the pulp and paper sector.

- **High demand outlook -** This outlook considers the impact of stronger and faster development in the mining sector which could potentially be driven by factors such as increased commodity prices. This outlook also reflects modest growth in the forestry sector and the stabilization of the pulp and paper sector.
- **Low demand outlook -** This outlook describes a more restrained outlook in the mining sector and continuing decline in the pulp and paper sector.

The demand assumptions for Remote Communities, residential, commercial and other industries (other than those mentioned above) are the same in each outlook. The Energy East Pipeline project is not included in any outlook.

The resulting Northwest peak and annual energy demand outlooks, net of savings from planned conservation, are shown below in Figure 2 and Figure 3. The Reference demand outlook shows demand in the Northwest increasing quickly in the medium term, due to advancing mining developments that are expected to come online, followed by more gradual growth in the long term. The range between the High and Low outlooks reflects the uncertainty in the assumptions underlying the electricity demand growth in the Northwest.

For comparison, the Reference outlook prepared for the December 2015 Report has also been included in Figures 2 and 3. The current Reference outlook has a slower near-term growth rate than the December 2015 Reference outlook and is lower in the long term due to the continued decline in Northwest historical electrical demand and the cancellation of the Energy East Pipeline project.

Figure 2. Northwest Net Peak Demand Outlooks

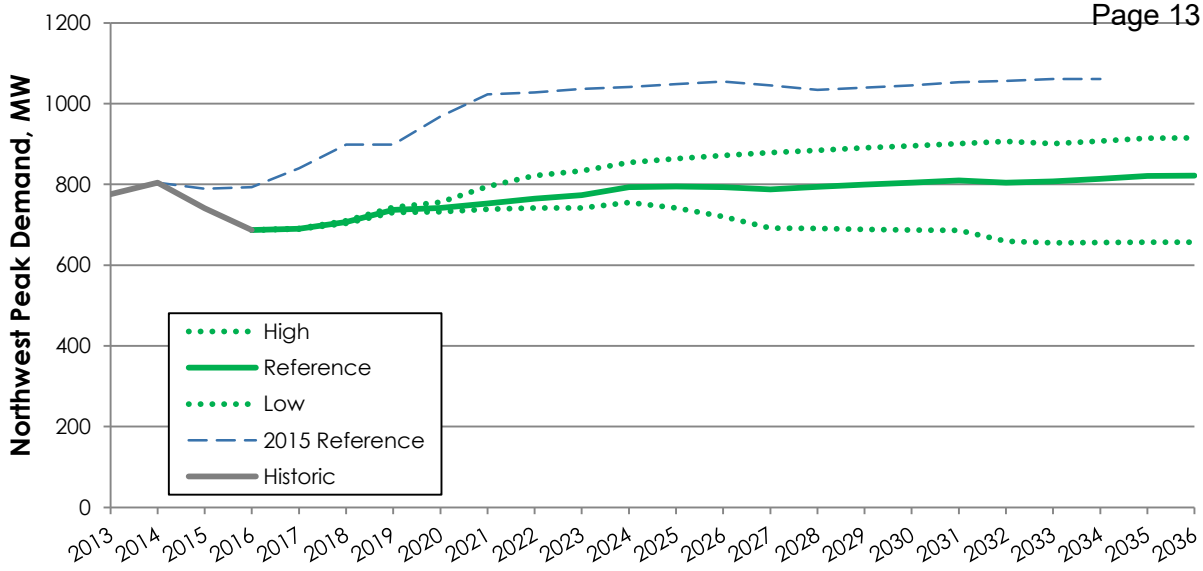
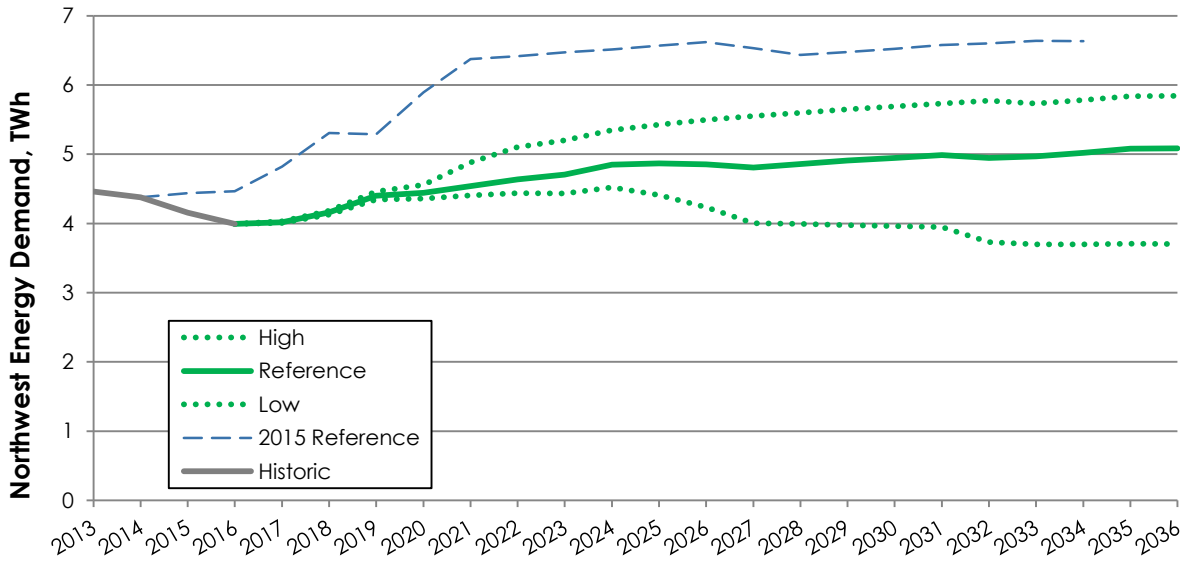


Figure 3. Northwest Net Energy Demand Outlooks



5.0 EXISTING RESOURCES TO SUPPLY NORTHWEST DEMAND

The Northwest relies upon both internal resources (generation located in the Northwest) and external resources (generation outside the Northwest accessed through existing ties) to meet its electricity supply and reliability requirements. An update on the Northwest supply outlook since the December 2015 Report is provided below.

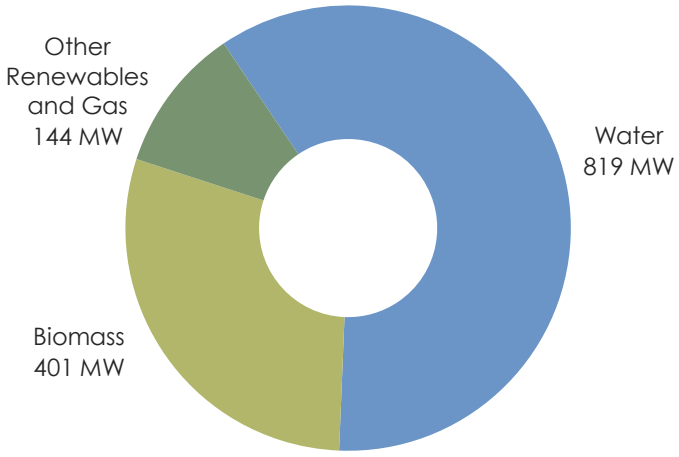
5.1 Internal Resources in the Northwest

The IESO has updated its assumptions regarding supply resources in the Northwest, where new information is available. The following material changes have been made since the December 2015 Report:

- Improved representation of water resources in the Northwest to better reflect run-of-river limitations.
- Incorporation of additional historical water data for the Northwest to better inform the probability of low water conditions.
- Some small-scale distribution-connected generation that began operation prior to 2017 is now included in the demand outlook as embedded generation; these resources have been removed from the supply-side model.

The installed capacity of internal resources in the Northwest for the year 2018 is approximately 1,360 MW and is shown by fuel type in Figure 4.

Figure 4. Northwest Internal Resources - Installed Capacity



5.2 External Resources Supplying the Northwest

Additional supply is provided to the Northwest through the existing E-W Tie; a 230 kV double-circuit transmission line that extends between Wawa TS and Lakehead TS, linking the Northwest system to the rest of Ontario.

The E-W Tie planning limit, consistent with the December 2015 Report, is 155/175 MW which respects the loss of the E-W Tie from Marathon TS to Lakehead TS. Staying under this limit ensures that, following contingencies on the E-W Tie, voltage levels in the Northwest are within

acceptable ranges, and equipment, including the Manitoba and Minnesota ties, stays within thermal limits.

However, as previously discussed, this E-W Tie planning limit relies on support from Manitoba following contingencies on the E-W Tie, which cannot be counted on for more than 30 minutes. As a result, there must be sufficient capacity in the Northwest to not only adequately supply the expected demand in the Northwest while staying under this planning limit, but also to reduce flows on the Manitoba and Minnesota ties to zero (or the scheduled transfer level) within 30 minutes.

For example, following the loss of the E-W Tie from Wawa TS to Marathon TS, the Northwest will be separated from the rest of Ontario and power will automatically flow from Manitoba and Minnesota to supply the Northwest. Action must then be taken to re-dispatch resources within the Northwest to return to scheduled flow levels and there must be sufficient capacity in the Northwest to do so.

6.0 THE NEED FOR ADDITIONAL SUPPLY FOR THE NORTHWEST

As described in previous reports, the outlook for supply needs in the Northwest comprises both capacity and energy components. The IESO updated its assessment of resource adequacy in the Northwest system, which is described below.

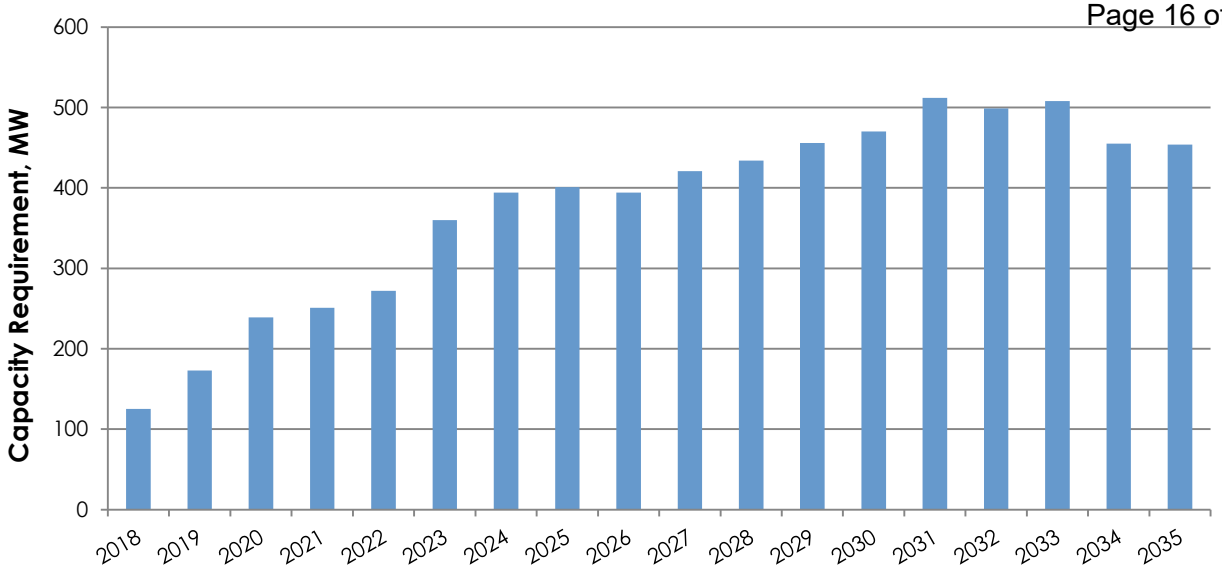
6.1 Capacity Adequacy Requirement

Consistent with the December 2015 Report, the IESO conducted a reliability assessment using a probabilistic approach to determine capacity requirements in the Northwest. As water conditions have a strong impact on overall supply availability in the Northwest, the probabilistic approach reflects a range of water conditions.

The updated capacity need, based on the Reference demand outlook with no E-W Tie Expansion, is shown in Figure 5. A 100 MW capacity need already exists today, and this need continues to grow to approximately 240 MW by the original 2020 in-service date. By 2022, the capacity need exceeds 260 MW, and grows to approximately 400 MW by 2024. The need for additional capacity increases to about 500 MW by 2035 as demand continues to grow and as supply changes.

As noted in earlier need update reports, there is a projected capacity need in the interim years before the E-W Tie Expansion in-service date, based on an assessment of applicable planning criteria. The near-term need is higher than in the December 2015 Report because it includes the capacity needed to reduce the flow from Manitoba to zero (or the scheduled flow level) following a contingency on the E-W Tie.

Figure 5. Expected Incremental Northwest Capacity Requirement under Reference Demand

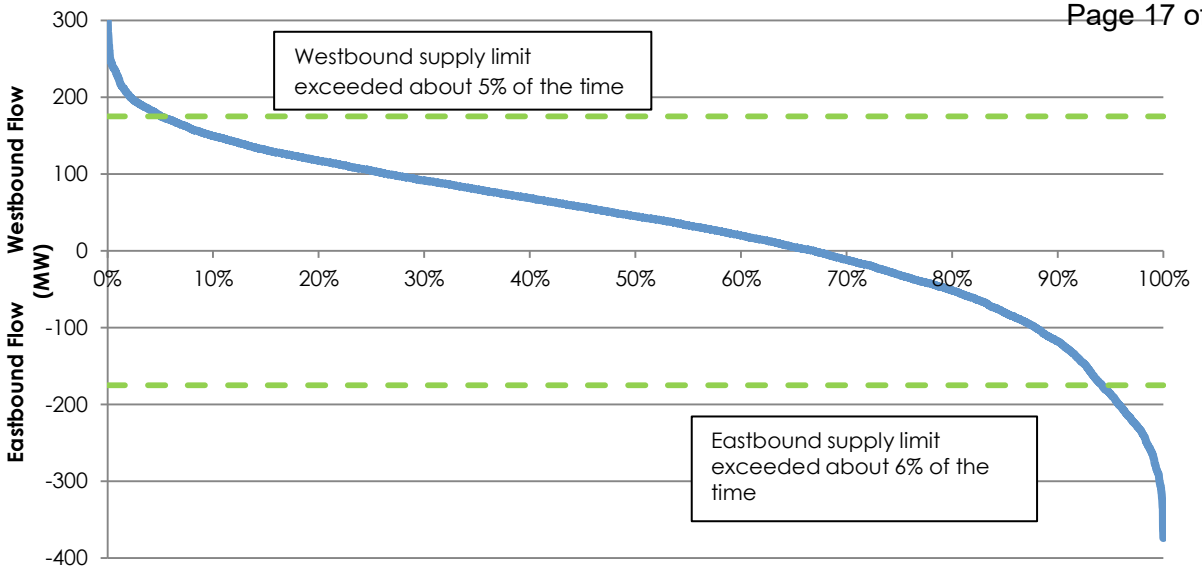


6.2 Energy Requirement

The expected energy requirement in the Northwest is defined by the energy demand outlook, as well as the supply capabilities of local generation and the existing E-W Tie. Figure 6 provides an updated E-W Tie flow duration curve, for all hours of the year 2023,[13] based on the updated Reference demand outlook and median water conditions. In this update, expected westbound flows exceed the existing E-W Tie capability approximately 5% of the time. This is based on application of the winter rating of 175 MW throughout the year. Applying the more restrictive limit of 155 MW during the summer months would result in a higher level of westbound congestion. Eastbound congestion is expected to occur approximately 6% of the time in 2023. The westbound energy requirement is expected to increase with the demand outlook over the planning horizon.

[13] The year 2023 has been shown for illustrative purposes. The energy assessment was carried out for years 2022 to 2035.

Figure 6. Unconstrained Flow and Planning Limits on the Existing E-W Tie for the Year 2025



7.0 ANALYSIS OF ALTERNATIVES TO MEET NORTHWEST SUPPLY NEEDS

In this updated need assessment, a number of alternatives to the E-W Tie Expansion were assessed taking into consideration updated information since the December 2015 Report. The two lowest cost options to meet the Northwest capacity and energy needs were identified to be: i) meeting Northwest needs through the addition of new local natural gas-fired generation, and ii) expanding the existing E-W Tie. These options are described further below:

(1) **No E-W Tie Expansion -** In this option, all of the identified capacity and energy needs are met through the addition of new natural gas-fired simple cycle gas turbine ("SCGT") generation in the Northwest, with the size of units and the timing of installation defined to meet the needs as they arise during the planning period. Under the Reference demand outlook, a total of 500 MW of generation is added. As in the previous update, it was assumed that, due to the difficulty and cost associated with obtaining firm gas service in the Northwest, all new-build natural gas-fired generation utilizes on-site reserve fuel.

(2) **E-W Tie Expansion -** In this option, the E-W Tie Expansion project provides a foundation for meeting the Northwest needs, with additional generation installed to meet any incremental supply requirements. In this update, a staged implementation of the E-W Tie Expansion was adopted, with the interim 450 MW E-W Tie stage and the final stage, to provide the full 650 MW transfer capability, added as required to meet the

capacity needs throughout the study period. Under the Reference demand outlook only the interim stage of the E-W Tie Expansion is required.

The assumptions and the results of the economic analysis comparing these two options are presented in section 7.1. As in the previous update reports, the economic analysis includes an assessment of the sensitivity of the results to changes in key variables to better understand their impact on the economic merits of both options.

No E-W Tie Expansion Option – Other Considered Alternatives

A number of the non-gas options for meeting Northwest needs were discussed in the May 2014 and December 2015 Reports. These were re-examined in the IESO's 2017 assessment. These options include utilizing existing biomass resources in the Northwest, building new non-emitting generation including storage, and firm imports from Manitoba. Although opportunities may exist to develop these resources to meet future provincial electricity needs, they were found to be insufficient for meeting the identified need in the Northwest due to technical and economic considerations.

New non-emitting resources such as wind and/or storage were also considered in this assessment. These were identified to be uneconomic for meeting Northwest needs relative to new natural gas-fired generation, and additional investments in transmission would be required to connect these resources. In addition, without expansion of the bulk transmission system, additional non-emitting generation resource development in the Northwest would increase surplus energy and congestion during periods of increased energy production from existing hydroelectric resources.

The use of the existing Manitoba intertie for either a short-term deferral of the need, or as part of an integrated solution for the long term, was also revisited. As discussed in the December 2015 Report, without major system expansion, only about 150-200 MW of firm capacity imports from Manitoba can be accommodated before running into constraints on the transmission system between Kenora and Dryden. Due to the magnitude of the need, firm Manitoba imports alone would not be sufficient to meet Northwest needs and would need to be paired with other resources.

7.1 Cost-Effectiveness Comparison of Generation and Transmission Alternatives

Consistent with previous E-W Tie Expansion need update reports, an economic analysis of the E-W Tie Expansion and the lowest cost generation option was conducted and their relative net present value ("NPV") was compared. A sensitivity analysis was performed to test the robustness of the results under a variety of conditions. Among the sensitivities tested were the

Reference, Low and High demand outlooks, ranges in the cost of the generation and transmission alternatives, and other cost-related assumptions.

Changes in assumptions since the December 2015 Report are as follows:

- The Reference demand outlook was updated as per the changes identified in section 4.3. Sensitivities to test the impacts of the updated Low and High demand growth outlooks on the NPV were performed.
- Existing supply resources were updated as described in section 5.
- Operating conditions were used in the energy assessment to better reflect the potential economic impact of each option.
- The transmission costs for the E-W Tie Expansion were assumed to be $777 million for the line and $207 million for the stations (see section 3). A portion of the station cost is deferred consistent with the staged expansion of the E-W Tie included in this update. The second stage is only required under the High demand outlook.
- The study period extends to 2051, when the first asset replacement decision is expected; this decision is associated with the generation alternative. Sensitivities of a 20-year and 70-year study period were assessed based on the typical planning horizon and the lifetime of a transmission line, respectively.
- Natural gas prices were assumed to be an average of $5.80/MMBtu throughout the study period – inclusive of carbon price. Sensitivities were assessed with the combined gas and carbon price ranging from $4.50/MMBtu to $10.50/MMBtu.
- The USD/CAD exchange rate was assumed to be 0.78. Sensitivities were assessed for 0.67 and 1.
- Additional sensitivities were analyzed including +20% and -15% for transmission capital costs, a +/- 75 MW margin of error on the capacity need analysis, and the impacts of electricity trade on energy prices.
- The NPV of all cash flow is expressed in 2017 $CDN.

The following assumptions remain unchanged from the December 2015 Report:

- The NPV analysis was conducted using a 4% real social discount rate. Sensitivities at 2% and 8% real social discount rate were also performed.
- The assessment is performed from an electricity ratepayer perspective.
- Median-water hydroelectric energy output was used for energy simulation in the economic analysis.
- Dual-fuel gas-fired generation was assumed to be added to the Northwest due to natural gas fuel supply limitations. Oil was assumed as the on-site reserve fuel. Other

options, such as compressed natural gas and liquefied natural gas stored on site, were also considered. However, these are expected to be higher cost than oil back-up.

- A sensitivity of +/- 25% was assessed on the capital and ongoing fixed costs for generation in the Northwest.
- The life of the station upgrades was assumed to be 45 years; the life of the line was assumed to be 70 years; and the life of the generation assets was assumed to be 30 years.
- New capacity in the Northwest and the rest of Ontario was added, as required, to satisfy Northeast Power Coordinating Council, Inc. ("NPCC") resource adequacy criteria.[14] These capacity needs were determined as described in section 6.1.

Under the Reference case assumptions, the E-W Tie Expansion project is approximately $200 million lower in net present cost compared to the no-expansion alternative. To test the robustness of this result against uncertainty in the assumptions, the IESO considered high and low sensitivities on a number of key parameters, of which changes to the demand outlook, discount rates, and assumed cost of the generation alternative had the largest impacts. Based on the sensitivities tested, the E-W Tie Expansion project, compared to new gas-fired generation in the Northwest, ranges from a net cost savings of approximately $500 million to a net cost of about $100 million.

The E-W Tie Expansion provides additional benefits, beyond meeting the reliability requirements of the Northwest, which are unique to a transmission solution. These include system flexibility, removal of a barrier to resource development, reduced congestion payments, reduced line losses, increased economic imports from Manitoba, decreased carbon emissions, and improved operational flexibility. These benefits are additive to the economic benefits and form an important part of the rationale for the project.

8.0 COMMUNITY INPUT

Stakeholder and community input is an important aspect of the planning process. Providing opportunities for input throughout the IESO's planning processes enables the views and preferences of stakeholders throughout the community to be considered in the development of demand outlooks and in the consideration and development of different alternatives to address identified needs.

[14] NPCC Regional Reliability Reference Directory # 1. Design and Operation of the Bulk Power System.

As part of the E-W Tie need update process, stakeholders throughout the Northwest were contacted to provide input into the outlook for electricity demand. The stakeholders directly involved included mining customers and other large industrial power consumers, CVNW, the Ministry of Northern Development and Mines, Union Gas Limited, TransCanada PipeLines Limited, and Thunder Bay Hydro Electricity Distribution Inc. Stakeholder input helped inform the status of developments in the region and their associated demand impacts. The list of stakeholders contacted throughout the development of the demand outlooks was consistent with previous update reports. The IESO also received written feedback from a variety of stakeholders, speaking to their continued support for the East-West Tie Expansion.

Finally, the IESO hosted a planning forum in Thunder Bay in October 2017 where stakeholders once again voiced their support for the project. Some have provided recommendations regarding alternatives to be considered for meeting Northwest capacity needs. Stakeholders at the forum also commented that the chosen solution should have the flexibility to accommodate demand uncertainty, decreasing the impediment to additional developments.

9.0 CONCLUSIONS AND RECOMMENDATIONS

The IESO's updated assessment of Northwest capacity needs and the options to address them demonstrates that the E-W Tie Expansion project continues to be the preferred option for meeting Northwest supply needs under a range of system conditions.

The IESO continues to recommend an in-service date of 2020 for the E-W Tie Expansion project. Discussions with the transmitters confirmed their ability to meet this date, dependent on timely regulatory approvals. The IESO will continue to support the implementation of the project and monitor electricity supply and demand in the Northwest until the E-W Tie Expansion project comes into service.

ADDENDUM TO THE 2017 UPDATED ASSESSMENT FOR THE NEED FOR THE EAST-WEST TIE EXPANSION – IESO, 2018

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

June 29, 2018

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Introduction

This addendum is in response to a June 14, 2018 request from the Ontario Energy Board ("OEB") to assess the impacts of a delay to the in-service date of a 230 kV double circuit line from Thunder Bay to Wawa (the "E-W Tie Expansion"). Specifically, this addendum addresses the potential reliability impacts of delaying the in-service date of the E-W Tie Expansion beyond 2020 and the projected system costs associated with managing the capacity gap for each of 2020, 2021, 2022, 2023 and 2024.

The IESO continues to recommend an in-service date of 2020 for the E-W Tie Expansion. If the in-service date is delayed beyond 2020, using interim measures to manage the need will result in additional costs and increased risks to system reliability. This addendum identifies the end of 2022 as the in-service date beyond which these risks to system reliability and the associated cost uncertainties are unacceptable.

The potential reliability impacts and costs of a delay to the in-service date of the E-W Tie Expansion can be addressed under the following categories:

- the incremental capacity need in the Northwest and associated cost of temporarily acquiring that capacity until the E-W Tie Expansion is in service;
- the increased energy costs that will be incurred until the new E-W Tie Expansion is in service; and
- the increased transmission losses and associated costs that will be incurred until the new E-W Tie Expansion is in service.

The following sections describe these impacts and costs in further detail.

Capacity Cost

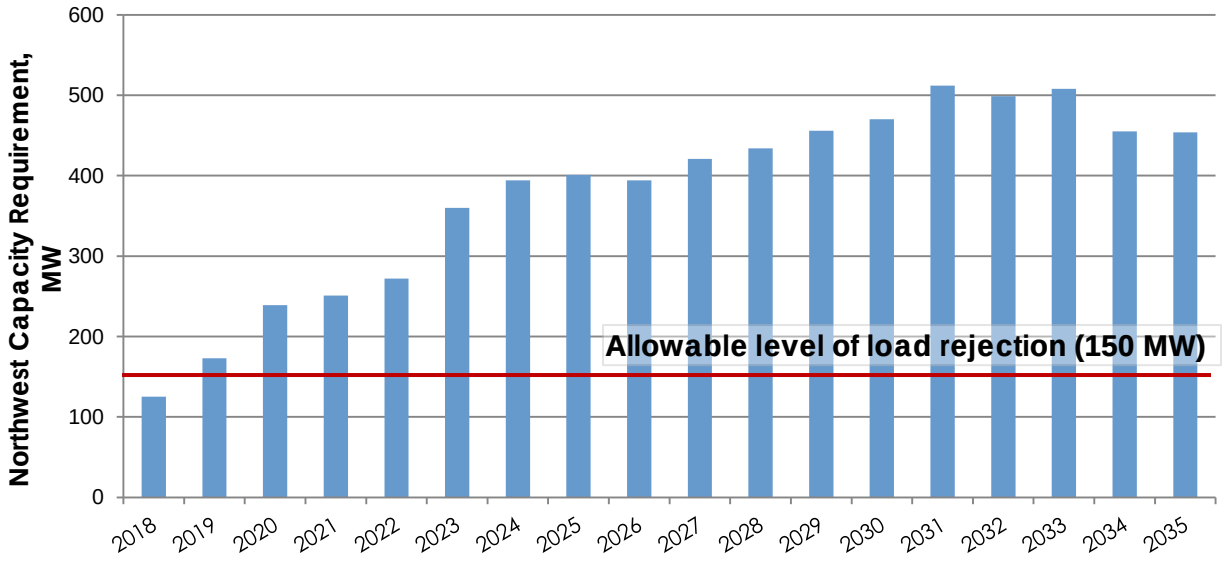
As noted in the 2017 Updated Assessment for the Need for the East-West Tie Expansion ("2017 Update Report"), there is a capacity need which exists prior to the recommended 2020 in-service date. This capacity need can be met on an interim basis by utilizing the existing Northwest Special Protection Scheme[1]. Ontario planning criteria allow for the rejection of 150 MW of load for the loss of the existing East-West Tie line, until new transmission reinforcements come into service, provided load can be restored within 8 hours[2].

[1] The Northwest Special Protection Scheme is an existing Special Protection Scheme ("SPS") that allows for load rejection or cross-tripping of transmission elements (e.g. lines, reactive devices) for a number of contingencies in the Northwest, including the loss of the existing East-West Tie.

[2] Load rejection via the SPS for the loss of the existing East-West Tie is intended to be used only as an interim measure (Ontario Resource and Transmission Assessment Criteria, section 3.4.1, section 7.2).

Figure 1 presents the incremental Northwest capacity need from the 2017 Update Report, as well as the allowable level of load rejection (150 MW). In order to maintain a similar level of reliability as that provided by the E-W Tie Expansion and comply with Ontario planning criteria, the incremental capacity gap above the 150 MW of allowable load rejection would need to be addressed through other interim measures for the duration of any delay.

Figure 1 Expected Incremental Northwest Capacity Requirement under Reference Demand (2017 Update Report)



A number of resource options were considered as potential interim measures to address this incremental capacity need, including demand response, firm imports from Manitoba, and contract extensions with existing resources. These options and applicable considerations are outlined in further detail:

- The 2018 demand response auction cleared 30 MW of demand response in the summer and winter in the Northwest for approximately $80/kW-year. However, the product's availability limits its contribution to meeting the capacity need in the Northwest and the extent to which additional demand response can be acquired in the Northwest on a cost-effective basis is unknown.

- The cost of firm import capability from Manitoba is uncertain; it would not be known until the time of negotiation and the price could be increased by the short commitment period and reduced competition due to the small size of the Northwest market. Currently, the firm import capability from Manitoba is also limited to between 150 – 200 MW[3]. To inform a decision with respect to acquiring firm imports, the cost of a

[3] It should be noted that estimated firm import levels are based on transmission capabilities considering planning criteria, in accordance with applicable reliability criteria, and not real-time operating limits.

firm capacity import from Manitoba would be compared to the cost of acquiring new local generating capacity. The lifetime levelized cost of new local generating capacity in Northern Ontario is approximately $180/kW-year[4].

- There are resources within the Northwest with contracts currently set to expire throughout the 2020-2024 period. Extending contracts for select facilities could be considered as an interim measure. While the contract terms for these facilities are not public, the capacity cost would be compared to the cost of acquiring new local generating capacity. However, there could be a mismatch between how long the IESO would need the facility to run to meet the need and the facility owner's required commitment period for re-acquiring the facility, which could contribute to additional costs.

Based on these considerations, the IESO believes it is reasonable to estimate the capacity cost of addressing a delayed in-service date of the E-W Tie Expansion using the lifetime levelized cost of new local generating capacity in Northern Ontario. A sensitivity range was also applied, with the low end of the range reflective of the recent cost of winter demand response resources in the Northwest and the high end reflecting a 25%[5] uncertainty range on the levelized cost of new local generating capacity. The incremental capacity required and the associated estimated cost for 2020, 2021, 2022, 2023 and 2024 are presented in Table 1.

To the extent the delay extends beyond the end of 2022, the IESO anticipates that the risk of no longer being able to manage the capacity need through interim measures and the cost of managing the associated risk will substantially increase, for the following reasons:

- There is a step change in the capacity need, requiring more capacity to be acquired.
- To fill this capacity gap an increasing number of interim measures would be required, which increases the risk that the IESO may not be able to implement the required interim measures. For example, prior to the end of 2022, the capacity need can be met by imports from Manitoba and by arming 150 MW of load rejection; however, beyond the end of 2022, additional measures will be required such as demand response or contract extensions.
- Since more than one interim measure would be required beyond the end of 2022, the cost uncertainties increase, especially if one of the measures is contract extensions (e.g. it is unclear over how many years the facility owner would want to recover any capital costs required for the contract extension).

Historical flows are not indicative of what firm import levels are achievable as different contingencies are respected under planning and operating criteria.

[4] The $180/kW-year reflects economies of scale associated with addressing a smaller capacity need in the interim as some of the need is managed through load rejection.

[5] Reflects the same sensitivity range for Northwest capacity costs used in the 2017 Update Report (page 18, line 3).

All of this uncertainty creates a risk that the IESO may not be able to acquire the needed capacity beyond the end of 2022. As such, the IESO's assessment is that the E-W Tie Expansion should not be delayed beyond the end of 2022 due to unacceptable risks to system reliability and the associated cost uncertainties.

Table 1 Projected Cost of the Incremental Capacity Requirements (2020-2024)

Year	Requirement (MW)	Allowable Load Rejection (MW)	Incremental Requirement (MW)	Projected Cost (2017$ millions)	Projected Cost Range (2017$ millions)
2020	239	150	89	$16	$7 to 20
2021	251	150	101	$18	$8 to 23
2022	272	150	122	$22	$9 to 27
2023	360	150	210	$38	$16 to 47
2024	394	150	244	$44	$19 to 55

The IESO plans the electricity system to required standards, set out in the Ontario Resource and Transmission Assessment Criteria ("ORTAC") and by the North American Electric Reliability Corporation ("NERC"). The IESO's recommended in-service date is based on these criteria, which require that a solution be implemented by 2020 when the potential capacity shortfall can no longer be met through permitted load rejection. In the event the E-W Tie Expansion is delayed beyond the recommended 2020 date, the IESO would take necessary action to acquire the required additional capacity.

The short duration being contracted for combined with the small size of the Northwest market means these costs are uncertain. Acquiring this capacity may come at a higher cost if there are insufficient or limited resources competing to provide this short-term capacity.

In summary, the costs associated with a delay beyond the end of 2022 are very uncertain and may materially increase, as new resources or capital investment in retired facilities would likely be required in addition to any interim measures taken during the 2020 to 2022 period. The number of interim measures that would need to be employed and the risks associated with each interim measure increase the overall reliability risk to the Northwest. In the event of a delay to the in-service date, the IESO does not support allowing the E-W Tie Expansion to be delayed beyond the end of 2022 as the increased risks to system reliability and the associated cost uncertainties are unacceptable.

Energy Cost

The existing East-West Tie is one of the northern Ontario transmission interfaces currently subject to congestion, contributing to an increase in the average cost of energy. As a result of

congestion on the East-West Tie and the downstream interfaces, low-cost energy from hydro facilities is sometimes bottled in the Northwest, leading to higher priced – and often higher-emitting – resources being dispatched in southern Ontario to meet Ontario's energy needs.

The IESO used an energy dispatch model to estimate future congestion costs due to a delay to the in-service date of the E-W Tie Expansion; the model assumed median water levels. The estimated difference in energy production costs from delaying the in-service date of the E-W Tie Expansion is approximately $0.5 million (2017$) per year.

Additional Costs due to Losses

Due to the long length of the existing East-West Tie line, paralleling the facility with the new line will provide energy cost savings by decreasing the line losses. The projected hourly flows across the East-West Tie, from the IESO's energy dispatch model, were used along with power flow studies to produce an estimate of the cost savings. The estimated combined yearly savings that would be foregone due to a delay to the in-service date of the E-W Tie Expansion is approximately $0.7 million (2017$).

Conclusion

The IESO continues to recommend an in-service date for the E-W Tie Expansion of 2020. The recommended in-service date is based on applicable planning and reliability criteria to ensure the reliability needs in the Northwest are met and to avoid the additional risks and associated costs of not having expanded transmission capability between the Northwest and southern Ontario.

A summary of the annual costs that may be incurred if the E-W Tie Expansion is deferred is presented in Table 2 below.

Table 2 Summary of Potential Cost of Delay to In-Service Date (2020-2024)

Year	Potential Capacity Cost (2017$ millions)	Energy Cost (2017$ millions)	Foregone Loss Savings (2017$ millions)	Total Potential Cost of Delay (2017$ millions)
2020	$16	$0.5	$0.7	$17
2021	$18	$0.5	$0.7	$19
2022	$22	$0.5	$0.7	$23
2023	$38	$0.6	$0.7	$39
2024	$44	$0.6	$0.7	$45

While interim measures may be able to address the incremental capacity need for all years considered in Table 2, an increasing number of interim measures, each with their own risks,

would be relied on as the capacity requirement grows throughout the early 2020s. The costs associated with implementing alternative measures to address a delay beyond the end of 2022 are highly uncertain as new resources (such as new Northwest generation) or capital investment in retired facilities would likely be required in addition to any interim measures taken during the 2020 to 2022 period.

The IESO continues to recommend an in-service date of 2020 for the E-W Tie Expansion. If a delay is to be incurred, relying on interim measures will result in additional risks to reliability and increased costs. In this case, the IESO does not support delaying the in-service date of the East-West Tie Expansion beyond the end of 2022 as the increased risks to system reliability and the associated cost uncertainties are unacceptable.

6.0 CAPITAL EXPENDITURE PLAN

1. This section provides the details of the overall capital expenditure plan that NextBridge will undertake over the IR Term and other pertinent information regarding the elements of the planning process. 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.

2. 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.*

3. 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 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.

6.2 Capital expenditure summary (*OEB Filing Req. 5.4.2)*

4. 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 prudency for these expenditures as part of its next rebasing that will occur at the end of the IR Term. During the IR Term, the expenditures will be depreciated, and that depreciation expense is not being sought for recovery in the current application. 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.

Table 1. Overall Plan ($ Millions)

Capital Plan ($ Millions)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
General Plant - Office & Vehicles	-	0.16	0.11	0.01	0.15	-	-	0.20	-	-
Storage Yard	-	-	-	0.30	-	-	-	-	-	-
Reliability - Bird Deterrents, ROW Cameras	0.23	0.43	0.63	0.33	0.13	0.20	0.40	0.60	0.30	0.10
Total	**0.23**	**0.59**	**0.74**	**0.64**	**0.28**	**0.20**	**0.40**	**0.80**	**0.30**	**0.10**

5. 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. The general plant portion of this plan will include those items associated with offices, vehicles, tools, and equipment needed to perform the operations, maintenance, and oversight of the East-

West Tie line. The storage yard portion of this plan is to build and operate a storage yard. The reliability portion is associated with reliability improvement projects such as bird deterrents and ROW cameras. Each of these areas are discussed more fully below.

6.3 Justifying capital expenditures (*OEB Filing Req. 5.4.3)*

General Plant:

Vehicles

6. NextBridge expects field personnel to travel frequently along the East-West Tie line and ROW. Due to the length of the transmission line, NextBridge expects mileage and associated maintenance costs to be much higher than average vehicle users on an annual basis, requiring vehicles to be replaced every few years. NextBridge field personnel will be spending a significant amount of time driving, making it one of the higher risk tasks that is performed on a regular basis. New vehicles will be equipped with required safety features to enhance driving safety under the various conditions present along the transmission line area.

7. NextBridge has included two vehicles (trucks) for the two NEET personnel dedicated to NextBridge's field operations which will allow for the installation of required safety equipment for navigating the terrain and avoid excess mileage and other charges associated with leased vehicles which are driven more than average users.

Utility Terrain Vehicles (UTVs)

8. NextBridge expects the two personnel responsible for monitoring and maintaining the line to travel frequently along the East-West Tie line ROW. Due to the terrain of the ROW, limited access points and the length of the line, much of the travelling along the ROW to be restricted to UTVs. Due to expected heavy use of this equipment, NextBridge expects these vehicles to be replaced approximately every five years. NextBridge field personnel

will be spending a significant amount of time driving on the ROW, making it one of the higher risk tasks that NextBridge will perform. New UTVs will be outfitted with required safety features to enhance driving safety under the various conditions present along the ROW. The use of UTVs to reach the majority of sections of ROW will greatly reduce the need for helicopters, which will amount to large savings to the ratepayers. NextBridge proposes to purchase two UTVs to allow for reliable access to the ROW, and to allow the installation of required safety equipment. Purchasing these units will also ensure that these pieces of equipment are available to the NextBridge field personnel at all times.

Unmanned Aerial Vehicles (UAVs)

9. NextBridge proposes to utilize UAV Technology as a tool for its field personnel. NextBridge field personnel would be trained as necessary to operate the UAVs and expected to routinely use them for maintenance validation and for spot inspections of areas that are not readily accessible, or as an alternative to areas that we may not desire to be in the immediate area for environmental reasons or out of respect for Indigenous communities. The UAVs will allow NextBridge field 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 and structure, arms, structure grounds, insulators, conductors, shield wires, dampers, markers, hardware, guys and anchors, electrical and mechanical components, any missing structure numbers, the condition of aerial marker balls, and transmission structure lighting. Further, the inspection may include the general condition of the ROW, vegetation, gates, fences, culverts, access roads, any erosion problems or encroachments such as buildings, storage areas, old poles, deer stands, etc., without physically being in the ROW. The use of UAVs to reach the hard-to-access sections of ROW will greatly reduce the need for helicopters, which will amount to large savings to the ratepayers. Therefore, NextBridge will purchase two UAVs to be used as part of the standard tool package for the NextBridge field personnel.

Office Space

10. 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 through:

    - Elimination of lease and/or rental payments leading to certainty of annual operating expenses
    - Securing of optimal location for place of business and safe storage of spare parts with 24-hour access to NextBridge field personnel

11. Therefore, NextBridge will purchase this office to avoid the possibility of fluctuation of lease/rental payments over the course of the East-West Tie line and to secure a location which meets the needs of the project.

Storage Yard

12. 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 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. NextBridge will recommend purchasing this storage yard to allow for the strategic placement of the yard based on potential environmental impacts. The purchase of the storage yard is expected to yield additional

savings through certainty of avoiding the possibility of fluctuation of lease/rental payments over the course of the project life.

13. The reliability portion of the plan contains the items below:

Structure Bird Deterrent (Avian Mitigation)

14. NextBridge field personnel and HONI will be performing annual transmission line aerial and ground patrols as part of its regular maintenance inspection program to identify issues and risks that should be addressed in order to ensure the safety and reliability of the East-West Tie line. During the patrols, NextBridge field personnel may observe bird excrement buildup on transmission line structures, which could cause a fault on the line and subsequent outage that could potentially damage the transmission system.

15. 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. Leaving the excrement buildup in the structure components is not an option because it increases the chances of re-occurring line faults and potentially risking outages and line downtime. Additionally, if a nest is discovered, NextBridge will work with the appropriate governmental agencies (as necessary) in order to create a plan to remove it and install a solution to deter future nests.

ROW Cameras

16. It would be beneficial to have the capability to remotely monitor various portions of the East-West Transmission line live (or download recording to view any ongoing or historical events) at various critical highway or other crossings along the ROW. This would allow for rapid discovery and repair of any potential issues. Once a potential issue is discovered a crew would be dispatched to the location to complete a visual inspection. If the inspection revealed an issue NextBridge would be notified immediately and a course of action for

repair determined. This process would take significantly less time and cost than frequently doing visual inspections for potential issues.

7.0 BENCHMARKING STUDY

7.1 Construction Costs

1. Independent third-party consultant, Charles River Associates, was engaged by NextBridge to prepare a benchmarking study of transmission projects comparable to that of the East-West Tie line. A copy of the CRA report can be found at Exhibit B, Tab 1, Schedule 7, Attachment 1.

2. To complete this study, CRA reviewed publicly available data from transmission solicitations, public documents, regulatory filings, and benchmarking reports in an effort to present benchmarks against which to assess the reasonableness of the proposed costs of the East-West Tie line. Wherever possible when choosing benchmarks, CRA considered the specifics related to the East-West Tie line's construction including project requirements, terrain, and technology:

   - Hydro One's 2007 Bruce to Milton application and relevant transmission rate filings
   - BC Hydro's information on the Northwest Transmission Line project
   - Black & Veatch's 2014 transmission expansion planning report for the Western Electricity Coordinating Council
   - Alberta Electric System Operator's (AESO) transmission cost benchmarking database
   - Hydro One's Niagara Reinforcement Limited Partnership's 2020-2024 Transmission Revenue Cap IR Application and Evidence Filing

3. The CRA study concludes that costs per km for the East-West Tie line remain lower than the benchmarks even under forecasting sensitivity tests, as follows:

   "The estimated average project capital cost per km for the New EWT Line in 2022 CAD is approximately $1.65 million/km which is calculated by

discounting annual Construction project costs by 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 the Plateau region has some critical differences compared to Northwestern Ontario, and thus our estimates may be conservative.

This calculation results in New EWT Line total 2022 project costs of $741 million, and at $1.65 million/km makes it a lower cost project compared to the benchmarks presented in Figure 11. Costs per km for the New EWT Line remain lower than the benchmarks even under forecasting sensitivity tests.

Table 1. Figure 11 – Benchmarking Base Results

	NextBridge EWT (Designation Proceeding)	New EWT	Bruce to Milton	BC NTL	2014 WECC	AESO Project 1	AESO Project 2	Niagara
Voltage (kV)	230 kV	230 kV	500 kV	287 kV	230 kV	240 kV	240 kV	230 kV
Length (km)	400	450	180	344	450	450	450	76
Costs reported in $	2012	2017	2012	2014	2014	2013	2013	2019
Total Cost Line Only ($M)	**419**	**711**	**327**	**664**	**653**	**1468**	**1333**	**119**
Line Cost (adjusted to 2022 $M)	**489**	**741**	**430**	**871**	**866**	**1748**	**1590**	**126**
2022 Cost M/km	**1.22**	**1.65**	**2.39**	**2.53**	**1.92**	**3.89**	**3.53**	**1.66**

CRA BENCHMARKING REPORT

Prepared for:

NextBridge Infrastructure

Transmission Cost Benchmarking Study

Prepared by:

Charles River Associates

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Date: October 13, 2020

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1. Overview

1.1. Mandate

Charles River Associates ("CRA") was engaged by NextBridge Infrastructure ("NextBridge") to prepare a benchmarking study of transmission projects comparable to that of its East-West Tie Line ("New EWT Line") as described in detail in Ontario Energy Board ("OEB") matter EB-2017-0182.

To complete this study, CRA reviewed publicly available data from transmission solicitations, public documents, regulatory filings, and benchmarking reports in an effort to present benchmarks against which to assess the reasonableness of the proposed costs of the New EWT Line. Wherever possible when choosing benchmarks, CRA considered specifics related to the New EWT Line's construction including project requirements, terrain, and technology.

Transmission projects are unique and there are a variety of factors that can contribute to differences in cost estimates across projects. Therefore, the ultimate goal of this benchmarking study is to employ objective research and analysis in order to provide the OEB with a basis for assessing the relative reasonableness of the projected costs of the New EWT Line. CRA has applied a sensitivity analysis its benchmark results in order to account for variations that can exist across cost escalation approaches.

1.2. Approach

In order to develop a robust set of comparable benchmarks, CRA reviewed a number of publicly available sources and included the following in this study:

- Hydro One's 2007 Bruce to Milton application and relevant transmission rate filings thereafter;
- BC Hydro's information on the Northwest Transmission Line project;
- Black & Veatch's 2014 transmission expansion planning report for the Western Electricity Coordinating Council ("WECC"); and,
- Alberta Electric System Operator's ("AESO") transmission cost benchmarking database.
- Hydro One's Niagara Reinforcement Limited Partnership's 2020-2024 Transmission Revenue Cap IR Application and Evidence Filing

CRA analyzed each of these and gathered information on reported costs of comparable transmission benchmarks. We have noted some particular challenges in benchmarking the New EWT Line against existing projects. In general, the overall challenge is the number of factors that make the New EWT Line unique from an engineering standpoint. This includes the challenging terrain and weather of Northwestern Ontario and use of double circuit guyed-Y tower type structures. It was challenging to find projects that were an exact technical match so

in order to incorporate the uniqueness of the New EWT Line in this benchmarking study as effectively as possible, CRA endeavored to include only those benchmarks that were as technically similar to the New EWT Line as reasonably possible. The fundamental requirement was that benchmarks be as close to 240 kilovolt ("kV") as possible (only 230 kV, 240 kV and 287 kV projects were included), double circuit (if possible), and have relatively long line lengths (greater than 100 km was preferred, with the understanding that due to lack of available public cost information, lengths as low as 80 km were accepted). The difference between 230 kV, 240 kV and 287 kV was considered immaterial to overall cost. Bruce to Milton is an exception as it is 500 kV. In order to scale the Bruce to Milton project from 500 kV to 230 kV, CRA used the WECC 2014 study by Black and Veatch which provided the base capital cost per mile for projects of both voltages. On average, this study 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. Therefore, CRA applied the factor of 1.99 to scale the 2012 reported cost of Bruce to Milton to approximate what a 230 kV would cost and then escalated this to 2022 dollars. Again, the difference between 240 kV and 230 kV was considered immaterial. While CRA considers this factor derived from WECC is the best available, its application in Ontario adds a degree of uncertainty to the results. CRA has accordingly applied a wider, +/- 5%, sensitivity band to this project to produce a wider range of potential benchmark cost results.

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[1] and the Canadian Price Index ("CPI"). The CAD to US Dollar ("USD") annual average exchange rate was taken as published by the Board of Governors of the Federal Reserve System.[2]

For the sensitivity analysis, CRA applied +2% to -2% on the base 2017 CAD millions per km ("M/km") benchmark results to account for potential variations and subjectivity that can exist in cost escalation approaches. Once again, for Bruce to Milton this was extended to +/-5% to

1 The Handy-Whitman Index is prepared by Whitman, Requardt and Associates and is representative of cost trends for different types of utility construction. Separate Indices are published for the electric, gas and water industries. These are used by regulatory bodies, operating bodies, operating utilities, service companies, valuation engineers as well as insurance companies. For example, PJM uses this index to complete its annual update of Maintenance Adder Escalation Index Numbers. Handy-Whitman Index values are widely used to trend earlier valuations and original cost records to estimate reproduction cost at prices prevailing at a certain date. (Source: https://wrallp.com/about-us/handy-whitman-index)

2 Board of Governors of the Federal Reserve System (US), Canada / U.S. Foreign Exchange Rate [AEXCAUS], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/AEXCAUS, November 30, 2017.

capture potential uncertainties inherent in using the WECC 2014 model to scale the project from 500 kV to get a cost representative of a 230 kV.

2. Assumptions and Calculations

2.1. Foreign Exchange and Cost Escalation

Two primary data sources are expressed in USD: The WECC 2014 study and the Handy-Whitman index. The exchange rates used for this purpose and for adaptation of the Handy-Whitman index were the annual average of the USD to CAD daily exchange rates for the applicable year as published by the Board of Governors of the Federal Reserve System.

In order to estimate benchmark escalation, where granular costs were available CRA grouped them into three categories: (i) Materials; (ii) Construction; and (iii) Other. CRA calculated the cost share of each of these categories as a percentage of the project's total cost.

To escalate Materials costs, CRA used a blend of Handy-Whitman's Towers & Fixtures and Overhead Conductors and Devices indices. Materials involved in transmission 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 materials 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 an 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.

For Construction costs and Other costs, CRA has used the Canadian CPI to escalate benchmark costs. The labour element (at least) of Construction and Other costs is not freely traded between Canada and the US, so is much less impacted by exchange rate changes. CRA analyzed the 10-year compound annual growth rates ("CAGR") for Transmission Project Construction related costs reported by Statistics Canada's Electric Utility Consumer Price Index ("EUCPI") and found that these costs escalated ~2.3% per year on average from 2004 to 2014.

Since the EUCPI is currently being reviewed by Statistics Canada, it was not used in this study.[3] CRA decided that CPI at a 10-year CAGR of 1.6% ("CAD CPI") and 1.7% in the case of US CPI were appropriate and conservative escalators for Construction and Other costs.

The relative share of construction costs to total project cost varied widely across projects studied. Construction costs depend on the supply, demand and price of labour, but to a greater extent on the location of a project, its terrain, structures, geography, land use, and environmental considerations. Each of these factors influences the degree of construction and engineering complexity and ultimately, this impacts cost. Going from flat to mountainous terrain increases the cost of a transmission line, as the terrain influences where structures are located, how many structures will be required and which type (strength) of structures will be required. As terrain becomes more rugged, access to the site and construction also becomes more complex and costly. Construction costs for utility specific applications such as transmission or distribution are extremely dependent on the aforementioned factors.

Other costs include all other costs not classified as Materials or Construction. These can include but are not limited to, regulatory, engineering, development, and project management costs. For Other costs, CRA applied the CPI to escalate costs to 2022 dollars.

Handy-Whitman indices used for escalating Materials cost were taken from its Plateau Region, which includes Montana, Idaho, Wyoming, Nevada, Utah, Colorado, New Mexico, and Arizona. The Plateau region was chosen for a number of reasons. First, the population density and terrain of Montana, Wyoming, Idaho, and Colorado are generally similar to that of Northwestern Ontario with densely forested regions and mountainous terrain. Second, as depicted by Figure 1 and Figure 2, the Plateau indices for each of Towers and Fixtures and Conductors and Devices exhibit escalation generally at the lower end of the range, so that escalated cost results will be at the conservative end of the range of Handy-Whitman regions.

3 In 2014 Statistics Canada suspended the Electric Utility Construction Price Index ("EUCPI") series which measured the price change for constructing distribution systems and transmission lines systems. The EUCPI provided users with information that could be employed in contract escalation, cost-benefit analysis, benchmarking studies and time series analysis. The EUCPI is currently under review to ensure that the models used in its future computation will take into account current practices in construction. Source: Statistics Canada. Table 327-0011 - Electric utility construction price index (EUCPI), annual (Index, 1992=100) and CRA Analysis.

Figure 1. Handy-Whitman Towers and Fixtures (All Regions, CAD)

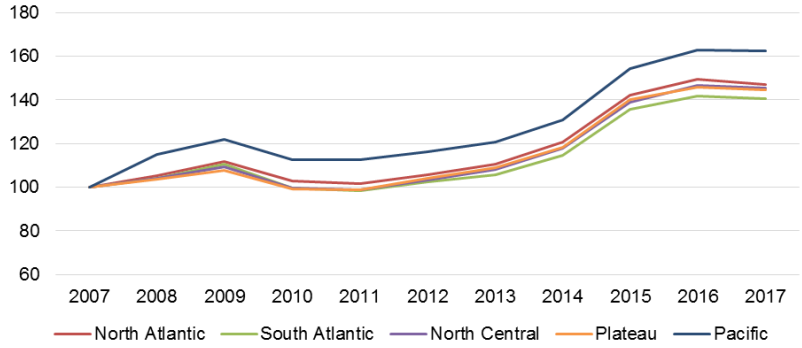
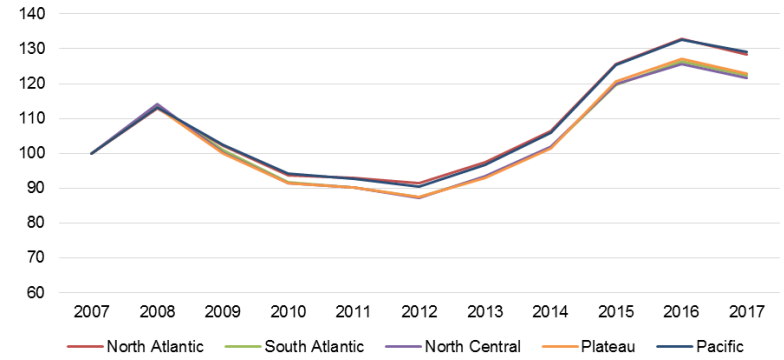


Figure 2. Handy-Whitman Overhead Conductors and Devices (All Regions, CAD)



2.2. Benchmark Calculations

2.2.1. New EWT Line

Development costs from August 2013 through July 2017, and construction costs starting in August 2017 were included to conduct the New EWT Line benchmarking. Construction costs are projected to end in 2022, with the commercial operation date anticipated by the end of March 2022.

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. Costs as provided by NextBridge are included in Figure 3 while the costs adjusted to 2022 CAD are shown in Figure 4.

Figure 3. New EWT Line Annual Project Costs

Costs	Total	*Pre 8/1/2017*	2017	2018	2019	*2020 to COD*
Development	36,572	36,572	-	-	-	-
Construction	578,948	-	2,135	22,973	73,503	480,337
Materials*	66,870	-	-	-	11,242	55,628
Other	60,320	-	2,539	8,709	16,914	32,158
Subtotal	**742,710**	**36,572**	**4,674**	**31,682**	**101,659**	**568,123**
IDC	31,003	-	249	835	4,597	25,322
Total	**773,713**	**36,572**	**4,923**	**32,517**	**106,256**	**593,445**

*Materials outside of EPC contract; the Construction category has Materials sourced by EPC contractor

Figure 4. New EWT Costs in 2022 CAD

Discounted Costs	Disc.	*Pre 8/1/2017*	2017	2018	2019	*2020 to COD*
Development	1.6%	32,410	-	-	-	-
Construction	1.6%		1,970	21,538	70,031	465,089
Materials*	3.4%		-	-	10,134	51,910
Other	1.6%		2,342	8,165	16,115	31,137
Subtotal		**32,410**	**4,312**	**29,702**	**96,280**	**548,136**
IDC	1.6%	-	783	4,380	24,518	-
Total		**32,410**	**5,095**	**34,082**	**120,798**	**548,136**

Total Cost	**740,521**
Cost M/km	**1.65**

2.2.2. Bruce to Milton

In their initial 2007 application, Hydro One estimated that the total cost of the 500 kV Bruce to Milton project would be $635 million with $68 million, or 11%, estimated for station work.[4] However, in 2012 Hydro One submitted their 2013 - 2014 transmission rate application and cited in it that the cost of the Bruce to Milton project had increased to $732 million.[5] CRA has therefore assumed a total line cost of $651 million which is based on the updated total project cost estimate of $732 million (nominal $) included in Hydro One's rate application less 11% ($80.5 million) estimated for station work. Figure 5 provides CRA's assumptions for the Bruce to Milton project.

Figure 5. Bruce to Milton Calculations

Reported Costs	
2012 Reported Costs ($)	732,000,000
Less Station Cost ($)	(80,520,000)
2012 Line Cost ($)	651,480,000
Scaling Factor	1.99
2012 Line Cost Scaled to 230 kV ($)	327,376,884

Reporting Year	2012
Length (km)	180
Voltage	500 kV

Indices Used	2012	2022	CAGR	Growth
HW - Towers & Fixtures	494	780	4.7%	**4.7%**
HW - Overhead Conductors & Devices	536	853	4.8%	
Construction Costs - CPI	104	120	1.4%	**1.4%**
Other Costs - CPI	104	120	1.4%	**1.4%**

Cost Breakdown	% of total cost
Materials	**38.4%**
Construction	**13.4%**
Other	**48.1%**

Cost Escalation		2012 Costs	Assumed Growth	Escalation Factor		2022 Costs
Materials	$	125,869,772	4.7%	1.59	$	199,671,021
Construction	$	43,881,205	1.4%	1.14	$	50,216,640
Other	$	157,625,907	1.4%	1.14	$	180,383,458
Total Assumed Scaled Cost	**$**	**327,376,884**		**Total Cost**	**$**	**430,271,120**
				Cost M/km	**$**	**2.39**

CRA then scaled the 500 kV project to a 230 kV project using the ratio between the baseline capital costs for each type of system as reported in the Black & Veatch's 2014 transmission expansion planning report for the WECC. According to this report a 500 kV system would be

4 Hydro One. *Project Cost, Economics and other Public Interest Considerations.* EB-2007-0050. Exhibit B. Tab 4. Schedule 1. March 29, 2007. pp. 1-2. This figure for Bruce-Milton does not appear to include development costs.

5 Hydro One. *In-Service Capital Additions.* EB-2012-0031. Exhibit D1, Tab 1, Schedule 2. August 15, 2012. p2.

1.99 times more costly per mile, than a 230 kV system.[6] After scaling, the 2012 total unit cost is approximately $327 million.

2.2.3. BC Hydro's Northwest Transmission Line

The Northwest Transmission Line is a 344 km, 287 kV single circuit guyed lattice tower transmission line[7] between Skeena BC and Bob Quinn Lake. It was completed in 2014 at a total reported cost of $746 million.[8] This includes costs for substations but because the project was exempt from the Utilities Commission Act and a regulatory review was not undertaken, detailed cost estimates, annual project cash flows, and substation costs are not publicly available. CRA has therefore assumed 11% (or $82 million) of the total cost of the project was attributable to substations work consistent with the Bruce to Milton project. CRA also recognizes that some of the project costs would have been incurred in years prior to 2014. CRA has taken the conservative approach by escalating the total project cost from 2014 to 2022 by assuming that all costs were incurred in 2014. Figure 6 provides the calculations for the Northwest Transmission Line benchmark results under these assumptions.

Figure 6. Northwest Transmission Line Calculations

Statement of Average Rate Base ($CAD)		
2014 Reported Costs	$	746,000,000
Less Substation Cost Estimate	$	(82,060,000)
2014 Total Costs	$	663,940,000

Reporting Year	2014
Length km	344
Voltage	287kV

Indices Used	2014	2022	CAGR	Growth
HW - Towers & Fixtures	560	780	4.2%	4.1%
HW - Overhead Conductors & Devices	624	853	4.0%	
Construction Costs - CPI	107	120	1.3%	1.3%
Other Costs - CPI	107	120	1.3%	1.3%

NRLP Rate Base	2014 Amount ($ Mil per km)		Annual Growth	Escalation Factor	2022	
	$	663,940,000	2%	1.31	$	870,506,162

2022 Total Cost (76 km	$	870,506,161.65
2022 Total Cost M/km	**$**	**2.53**

6 WECC 2014 includes new line cost 2014 (USD/mile) of $3,071,750 for a 500 kV double circuit system and $1,536,400 for a 230 kV double circuit system.

7 Burns and McDonnell. *Northwest Transmission Line.* https://www.burnsmcd.com/projects/northwest-transmission-line.

8 Correspondence with BC Hydro Stakeholder Engagement. January 2, 2018.

2.2.4. Alberta Projects

All transmission facility capital cost estimates and final costs for projects built in Alberta since 2005 are entered into the AESO cost benchmark database.[9] CRA filtered through the AESO database to display the actual costs for two 100+ km double circuit, 240 kV projects. Both projects used in this analysis as benchmarks are actual projects constructed in Alberta in 2010[10] with costs reported by the AESO in 2013 CAD. Costs included and reported by AESO were grouped into categories by CRA as follows and escalated from 2013 to 2022:

- **Materials:** Conductor, Hardware, Lattice Structures
- **Labor:** Construction, ROW Preparation Brush, Engineering, Survey
- **Others:** Contingency and Escalation, Owner Costs, Project and Construction Management, Salvage, AFUDC, and E&S

This data provided granular-enough cost categories such that CRA was able to take proportionate shares of materials, construction and other costs into consideration when escalating costs. These assumptions and calculations are shown in Figure 7.

9 AESO. Transmission Costs. <https://www.aeso.ca/grid/transmission-costs>

10 Project 1 is representative of the AESO's Line Facility ID: L10611336112 and Project 2 is representative of the AESO's Line Facility ID: L_10607745763.

Figure 7. Alberta Benchmark Calculations

Reported Costs Project 1 Line ID: L_10311336112		
2013 Reported Costs	$	3,261,617
2013 Line Cost (per km)	$	3,261,617
2013 Line Cost (450 km)	$	1,467,727,650

Reporting Year	2013
Length km	450
Voltage	240 kV

Reported Costs Project 2 Line ID: L_10607745763		
2013 Reported Cost	$	2,962,952
2013 Line Cost (per km)	$	2,962,952
Line Cost (per 450 km)	$	1,333,328,400

Reporting Year	2013
Length km	450
Voltage	240 kV

Indices Used	2013	2022	CAGR	Growth
HW - Towers & Fixtures	529	780	4.4%	4.5%
HW - Overhead Conductors & Devices	569	853	4.6%	
Construction Costs - CPI	105	120	1.4%	1.4%
Other Costs - CPI	105	120	1.4%	1.4%

Project 1: Cost Breakdown	% of total cost
Materials	16.3%
Construction	33.0%
Other	50.7%

Project 2: Cost Breakdown	% of total cost
Materials	16.6%
Construction	33.6%
Other	49.8%

Project 1 Cost Escalation	2013 Amount (per km)		Annual Growth	Escalation Factor	2022 Amounts	
Materials	$	530,346	4.5%	1.49	$	788,661
Construction	$	1,076,247	1.4%	1.13	$	1,220,183
Other	$	1,655,024	1.4%	1.13	$	1,876,366
				Total Cost	**$**	**3,885,210**
				Cost M/km	**$**	**3.89**
				Cost (450 km)	**$**	**1,748,344,517**

Project 2 Cost Escalation	2013 Amount (per km)		Annual Growth	Escalation Factor	2022 Amounts	
Materials	$	491,421	4.5%	1.49	$	730,777
Construction	$	996,451	1.4%	1.13	$	1,129,716
Other	$	1,475,080	1.4%	1.13	$	1,672,356
				Total Cost	**$**	**3,532,848**
				Cost M/km	**$**	**3.53**
				Cost (450 km)	**$**	**1,589,781,807**

Project 1 Cost Escalation	2013 Amount (per km)		Annual Growth	Escalation Factor	2017 Amounts	
Materials	$	530,346	7.5%	1.33	$	707,166
Construction	$	1,076,247	1.5%	1.06	$	1,140,619
Other	$	1,655,024	1.5%	1.06	$	1,754,013
				Total Cost	**$**	**3,601,798**
				Cost M/km	**$**	**3.60**
				Cost (450 km)	**$**	**1,620,809,051**

Project 2 Cost Escalation	2013 Amount (per km)		Annual Growth	Escalation Factor	2017 Amounts	
Materials	$	491,421	7.5%	1.33	$	655,263
Construction	$	996,451	1.5%	1.06	$	1,056,050
Other	$	1,475,080	1.5%	1.06	$	1,563,307
				Total Cost	**$**	**3,274,620**
				Cost M/km	**$**	**3.27**
				Cost (450 km)	**$**	**1,473,578,867**

2.2.5. Western Electricity Coordinating Council 2014 Study

CRA took the base capital cost for a 230 kV double circuit project from the Black & Veatch 2014 transmission expansion planning report done for the WECC in 2014 and applied cost escalation of approximately 1.4% per year to determine the 2022 base capital cost in USD per mile. CRA then applied the following multipliers and adders to this base 2022 USD capital cost:

- **Conductor Type:** ACSR, cost multiplier of 1.00
- **Transmission Structure:** Lattice, cost multiplier of 0.90
- **Transmission Length:** > 10 miles, cost multiplier of 1.00
- **Terrain:** Forested, PG&E, cost multiplier of 1.50[11]
- **Right of Way Widths:** 64m, equating to 25.44 ROW/acres per mile[12]
- **Land Cost/Acre:** BLM zone 6, equating to a land cost of $1,024 USD per acre

CRA then applied a forecasted 2022 CAN/USD exchange rate of 1.33 and converted miles to km to arrive at the total cost per km in 2022 CAD. Figure 8 provides the calculation breakdown for the WECC benchmark.

Figure 8. WECC Benchmark Calculations

11 CRA utilized the terrain cost multiplier provided by NextBridge.

12 CRA relied on a 65m ROW width provided by NextBridge. Acres/mile values were calculated in accordance with the WECC study, by multiplying the right of way width by 5,280 feet per mile and dividing by 43,560 sq. ft. per acre.

Reported Capital Costs		
Total Capital Cost (2014 USD per Mile)	$	1,536,400

Reporting Year	2014
Length km	450

Multipliers and Adders	Capital Cost Multiplier
Conductor: ACSR	1.0
Transmission Structure: Lattice	0.9
Length: >10 miles	1.0
Terrain: Forested	1.5
ROW/acres per mile	25.44
Land Cost/acre: BLM Zone 6	1,024

Length (mile)	280
ROW Width for New EWT (miles)	64
Voltage	230 kV
miles to km	1.60934

Indices Used (USD)	2014	2022	CAGR	Growth
HW - Towers & Fixtures	507	588	1.9%	1.7%
HW - Overhead Conductors & Devices	565	643	1.6%	
Construction Costs - CPI	109	120	1.2%	1.2%
Other Costs - CPI	109	120	1.2%	1.2%
CAN/USD FX	1.10	1.33	2.3%	2.3%

Average Annual Growth Rate		**1.4%**
Total Capital Cost (2022 USD per Mile)	$	1,707,155
Total Cost Per Mile (incl. Multipliers & Adders)	$	2,330,715
Total Cost Per Mile (2022 CAD)	$	3,092,626
Total Cost Per Km (2022 CAD)	$	1,921,673
Total Cost (M/km)	**$**	**1.92**

2.2.6. Niagara Reinforcement

- For the 2020 update, CRA reviewed the settlement agreement filed with the Ontario Energy Board in connection with the application by the Niagara Reinforcement Limited Partnership (NRLP). The 76 km double circuit 230 kV transmission line connects the Allanburg Transformer Station and the Middleport Transformer Station. The settlement agreement included the NRLP Statement of Average Rate Base for 2019. 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 (Demonstrated in Figure 14. Indices Used in Analysis)[13]. The calculations for the 2022 Total Cost of $1.66 million per kilometer are demonstrated below in Figure 9. NRLP Benchmark Calculations
- **Materials:** Conductor, Towers & Fixtures
- **Construction:** Transmission Corridor Land and Rights

Figure 9. NRLP Benchmark Calculations

[13] The Niagara region has different, and more difficult, terrain than that of Northwestern Ontario, which may lead lower construction costs compared to Northwestern Ontario.

Statement of Average Rate Base ($CAD)		
2019 Report Costs (per km)	$	1,571,447
2019 Reported Costs (76 km)	$	119,430,000
2022 Line Cost (per km)	$	1,657,500
2022 Line Cost (76 km)	$	125,970,027

Reporting Year	2019
Length km	76
Voltage	230 kV

Indices Used	2019	2022	CAGR	Growth
HW - Towers & Fixtures	741	780	1.8%	1.8%
HW - Overhead Conductors & Devices	808	853	1.8%	
Construction Costs - CPI	115	120	1.4%	1.4%
Other Costs - CPI	115	120	1.4%	1.4%

NRLP Rate Base	2019 % of total cost
Materials	99.2%
Construction	0.8%
Other	0.0%

NRLP Rate Base	2019 Amount ($ Mil per km)		Annual Growth	Escalation Factor	2022	
Materials	$	1.56	1.8%	1.05	$	1.64
Construction	$	0.01	1.4%	1.04	$	0.01
Other	$	-	1.4%	1.04	$	-

2022 Total Cost per Km	$	1,657,500
2022 Total Cost (76 km	$	125,970,026.97
2022 Total Cost M/km	$	1.66

2.3. Operation, Maintenance & Administration Expenses

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. Additionally, the final line in Figure 10 assumes a 1/1.30 exchange rate for USD/CAD.

Figure 10. Bruce to Milton, Niagara & New EWT OM&A Benchmarking

$k (CAD)	**Niagara 2020**	**Bruce-Milton 2019**	**New EWT**
O&M Expenses	320	600	1,275
Admin. & Corporate[14]	510	200	1,665
Regulatory			65
Total OM&A	**830**	**1,600[15]**	**3,005[16]**

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.

Total kilometers	76	180	450
OM&A / km (CAD)	**10.92**	**8.89**	**6.68**
OM&A / km (USD)	8.40	6.84	5.14

3. Results

CRA benchmarked the current estimated New EWT Line capital cost[17] against other projects using the approach and assumptions described above. CRA has included the indices used in cost escalation in Appendix A. Figure 11 provides an overview of the benchmarking results, which shows that the current estimated costs for the New EWT Line at $1.65 M/km are reasonable and cost-effective when compared to other similar transmission projects.

To ensure robustness of the analysis CRA has also provided results when base M/km results are scaled up and down by 2%. The results for this sensitivity analysis are shown in Figure 12. The resulting range around the base results and how they compare to the New EWT cost are shown graphically in Figure 13 where the vertical lines represent the variation around the base case, with the base case represented by the small blue diamonds. This graphic illustrates that even under the widest ranges of sensitivity on the cost escalation indices used, the New EWT Line remains reasonable compared to other similar projects.

Figure 11. Benchmarking Base Results[18]

	NextBridge EWT (Designation Proceeding)	New EWT	Bruce to Milton	BC NTL	2014 WECC	AESO Project 1	AESO Project 2	Niagara
Voltage (kV)	230 kV	230 kV	500 kV	287 kV	230 kV	240 kV	240 kV	230 kV
Length (km)	400	450	180	344	450	450	450	76
Costs reported in $	2012	2017	2012	2014	2014	2013	2013	2019
Total Cost Line Only ($M)	**419**	**711**	**327**	**664**	**653**	**1468**	**1333**	**119**
Line Cost (adjusted to 2022 $M)	**489**	**741**	**430**	**871**	**866**	**1748**	**1590**	**126**
2022 Cost M/km	**1.22**	**1.65**	**2.39**	**2.53**	**1.92**	**3.89**	**3.53**	**1.66**

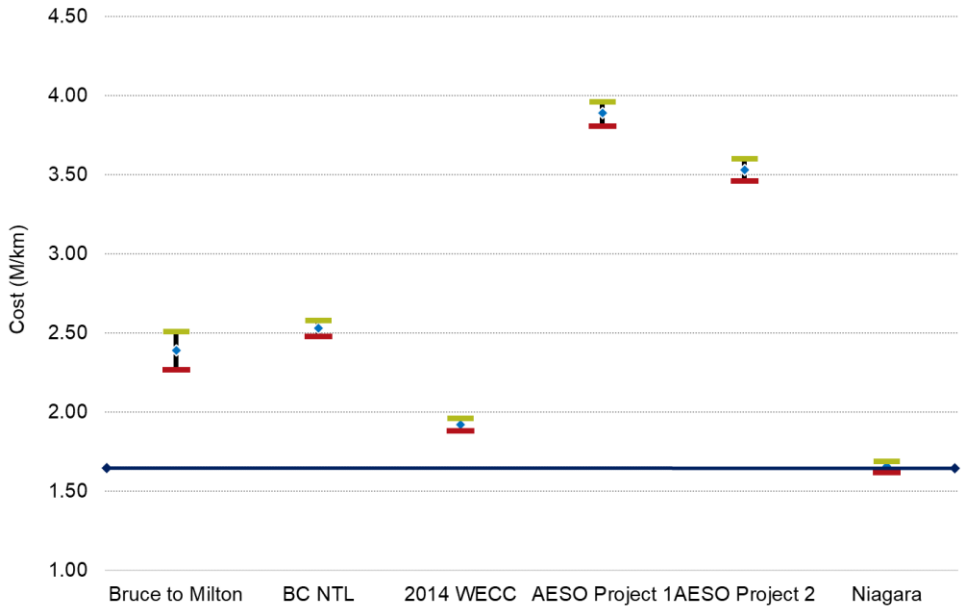
17 Capital cost is an all-in amount, including development and constructions costs.

18 Note: Bruce to Milton has been scaled to 230 kV by a factor of 1.99, consistent with the differences in base capital cost in the WECC 2014 study.

Figure 12. Sensitivity Analysis Results

Sensitivity Analysis	Bruce to Milton	BC NTL	2014 WECC	AESO Project 1	AESO Project 2	Niagara
5%	2.51					
4%	2.49					
3%	2.46					
2%	2.44	2.58	1.96	3.96	3.60	1.69
1%	2.41	2.56	1.94	3.92	3.57	1.67
-1%	2.37	2.51	1.90	3.85	3.50	1.64
-2%	2.34	2.48	1.88	3.81	3.46	1.62
-3%	2.32					
-4%	2.29					
-5%	2.27					

Figure 13. Range of Benchmark Results



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.

This calculation results in New EWT Line total 2022 project costs of $741M, and at $1.65 M/km, it is a lower-cost project compared to the benchmarks presented in Figure 11. Costs per km for the New EWT Line remain lower than the benchmarks even under forecasting sensitivity tests.

The Bruce to Milton benchmark ranges from $2.27 M/km to $2.51 M/km. This project has been scaled down to a 230 kV using the WECC study but even under the widest sensitivity bands, the New EWT Line is still less expensive.

BC's Northern Transmission Line is estimated at $2.53 M/km in the benchmarking base case. Compared to this project in BC, the estimated New EWT cost per km is significantly lower.

The Niagara Reinforcement is estimated at $1.66 M/km. The cost for the 76 kilometer, 230kV line is relatively low compared to other projects, and similar to the new EWT Line.

A WECC study from 2014 estimated that a 230 kV transmission line located in a forested area that uses the same conductor type (ACSR) as the New EWT Line would be $1.92 M/km.

Finally, the AESO's cost benchmark database offers two technically similar project costs, one project at a cost of $3.89 M/km and another at $3.53 M/km. Both of these projects are 240 kV double circuit transmission lines larger than 100 km constructed in Alberta.

Appendix A: Benchmarking Analysis Inputs

Figure 14. Indices Used in Analysis

Handy Whitman Plateau (USD)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10-Year CAGR	5-Year CAGR
HW - Towers & Fixtures	424	463	471	458	474	494	514	507	523	526	539	*548*	*558*	*568*	*578*	*588*	2.4%	1.8%
HW - Poles & Fixtures	473	498	521	540	518	529	533	526	540	541	546	*549*	*553*	*556*	*560*	*564*	1.4%	0.6%
HW - Structural Steel Erected	444	509	510	469	488	497	513	511	519	495	514	*517*	*521*	*524*	*528*	*532*	1.5%	0.7%
HW - Overhead Conductors & De	559	613	678	551	543	536	552	565	582	601	587	*598*	*609*	*620*	*631*	*643*	0.5%	1.8%
																Average	**1.5%**	**1.4%**
US CPI (2010 = 100)	94.9	98.7	98.4	100.0	103.2	105.3	106.8	108.6	108.7	110.1	112.2	*113.6*	*115.1*	*116.5*	*118.0*	*119.5*	**1.7%**	**1.3%**
CAN CPI (2010=100)	95.6	98.0	98.3	100.0	102.9	104.5	105.5	107.5	108.7	110.2	111.8	*113.3*	*114.8*	*116.4*	*118.0*	*119.6*	**1.6%**	**1.4%**
FX USD/CAD	1.07	1.07	1.14	1.03	0.99	1.00	1.03	1.10	1.28	1.32	1.30	*1.30*	*1.33*	*1.33*	*1.33*	*1.33*		

Handy Whitman Plateau (CAD)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10-Year CAGR	5-Year CAGR
HW - Towers & Fixtures	455	494	537	472	469	494	529	560	669	697	700	*711*	*741*	*754*	*767*	*780*	4.4%	7.2%
HW - Poles & Fixtures	508	531	595	556	512	529	549	581	691	716	709	*712*	*734*	*738*	*743*	*748*	3.4%	6.0%
HW - Structural Steel Erected	477	543	582	483	482	497	528	564	664	656	667	*670*	*691*	*696*	*701*	*705*	3.4%	6.1%
HW - Overhead Conductors & De	600	653	774	567	537	536	569	624	744	796	762	*775*	*808*	*823*	*838*	*853*	2.4%	7.3%
																Average	**3.4%**	**6.9%**
US CPI (2010 = 100)	94.9	98.7	98.4	100.0	103.2	105.3	106.8	108.6	108.7	110.1	112.2	*113.6*	*115.1*	*116.5*	*118.0*	*119.5*	**1.7%**	**1.3%**
CAN CPI (2010=100)	95.6	98.0	98.3	100.0	102.9	104.5	105.5	107.5	108.7	110.2	111.8	*113.3*	*114.8*	*116.4*	*118.0*	*119.6*	**1.6%**	**1.4%**

CRA Notes
1. HW Plateau (USD) for 2018-2022 is calculated based on 2012 to 2017 CAGR
2. CPI for 2018-2019 is calculated based on 2012 to 2017 CAGR
3. FX USD/CAD is added for 2018 and 2019 using Bank of Canada Annual Exchange Rates
4. HW Plateau (CAD) for 2018-2019 is calculated using the USD/CAD and HW Plateau (USD) figures

Figure 15. Electric Utility Construction Price Index (Indicative Only)[19]

Transmission Construction Price Index Components	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	10-Year CAGR	5-Year CAGR
Initial grading and clearing	136.6	149.7	160.4	176.7	194.5	191.4	191.2	195.6	198.3	186.6	189.2	3.3%	-0.2%
Installation labour	127.2	125.3	127.5	130.3	127.7	127.2	132.8	143.4	147.1	142.1	138.8	0.9%	1.8%
Installation equipment	139	142.9	144.6	144.7	154	156.1	149.3	150	153	156.7	164.4	1.7%	1.0%
Construction indirects	122.3	121.3	123.5	128.9	131	140.5	143.4	147.8	146.9	146.3	152.8	2.3%	1.7%
Engineering	130.4	130.8	133	138.9	142	154.2	158.1	164.5	166.4	164.2	172.4	2.8%	2.3%
Head office administration	129.5	130	132.2	137.8	140.9	152	155.8	161.7	163.5	161.7	169.5	2.7%	2.2%
											Average	**2.3%**	**1.5%**

19 Statistics Canada. Table 327-0011 - Electric utility construction price index, annual (index, 1992=100) which was discontinued in 2014.

RATE BASE

Rate Base Summary

1. This Exhibit provides NextBridge's rate base for the Test Year (April 1, 2022 – March 31, 2023). NextBridge's proposed rate base consists of gross plant, less accumulated depreciation. NextBridge annual depreciation expense of $9.26 million per year and methodology comparisons are explained in Exhibit F, NextBridge is not requesting a cash working capital allowance to be part of rate base. A historical and bridge year of rate base or fixed assets is not applicable, given that NextBridge is a new transmitter with a newly constructed asset.

2. 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. Also, to bookend the reports as of the date of this filing, the Q3 2020 report is also attached as Attachment 3. 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).

3. NextBridge requests that the gross plant for the Test Year consist of the following items which are further described below, assuming an in-service date of March 31, 2022.

Table 1. Gross Plant Summary ($ Millions)

Gross Plant	$ Millions
Development	31.2
Phase Shift	5.3
Construction	737.1
Spare Strategy	1.2
Total Opening Gross Plant 4/1/22	**774.9**
Test Year In Service Additions	0.2
Total Closing Gross Plant 3/31/23	**775.2**
Average Gross Plant Test Year	**775.1**

Table 2. Transmission Rate Base ($ Millions)

Rate Components	Test Year
	(April 1, 2022 to March 31, 2023)
Average Gross Plant	775.1
Average Accumulated Depreciation	4.6
Average Net Plant	**770.4**
Cash Working Capital	n/a
Materials and Supply Inventory	n/a
Transmission Rate Base	**770.4**

Table 3. Statement of Average Rate Base

NextBridge Test Year ($ Millions)			
Line No	**Particulars**	**Open Balance April 1, 2022**	**Close Balance March 31, 2023**
Electric Utility Plant			
1	Gross plant at cost	774.9	775.2
2	Less: accumulated depreciation	-	9.3
3	Net plant for rate base	774.9	765.9
4	Average net plant for rate base		770.4
5	Construction work in progress		n/a
6	Average net utility plant		770.4
Working Capital			
7	Cash working capital		n/a
8	Materials and Supplies Inventory		n/a
9	Total working capital		n/a
10	Total rate base		770.4

OEB QUARTERLY REPORT – Q2 2019

UPPER CANADA TRANSMISSION, INC.
(d/b/a NextBridge Infrastructure)

East-West Tie Line
Quarterly Construction Progress Report

Reporting Period: February 11, 2019 to June 30, 2019

Date Submitted: August 30, 2019

- In its Decision and Order dated August 7, 2013 (Designation Decision), the Ontario Energy Board (OEB or Board) named Upper Canada Transmission, Inc. (UCT), doing business as NextBridge Infrastructure (NextBridge), as the designated transmitter for the development of the East-West Tie transmission line (EWT Project or Project).

- On July 31, 2017, NextBridge submitted an application for leave to construct (LTC) the EWT Project, pursuant to section 92 of the Ontario Energy Board Act (OEB Act). On February 11, 2019, the OEB issued a Decision and Order approving the LTC application and amending the conditions of UCT's Electricity Transmission Licence to authorize it to proceed to the construction, expansion or reinforcement of the transmission system for the EWT Project, pursuant to a directive to the OEB issued by the Minister of Energy, Northern Development and Mines and approved by Order in Council 52/2019 (OIC), dated January 30, 2019.

- On February 11, 2019, the OEB amended NextBridge's electricity transmission licence to include conditions requiring NextBridge to report to the IESO on the progress, timeliness and cost-effectiveness of the EWT Project and provide such information that the OEB may from time to time require.

- On July 29, 2019, the OEB issued a letter outlining NextBridge's reporting requirements pursuant to sections 14.1 and 13.3 of its transmission licence.

- In accordance with the OEB's letter dated July 29, 2019, NextBridge will report quarterly on the 15th business day of each January, April, July, and October, with the exception of this first quarterly report, which is due on August 30, 2019. NextBridge will continue reporting until the EWT Project is in-service and land restoration activities have been completed.

This report is organized as follows:

1	**Summary of the EWT Project Progress to June 30, 2019**	A detailed summary of the status of the EWT Project, including work completed during the reporting period, overall progress, cost and construction schedule updates, and emerging risks. Where applicable, impacts from changes to Hydro One Network Inc.'s (HONI's) station work will be noted. This section includes: • Table of Key Project Statuses; • Table of Activities in the Work Fronts (WFs) for the Reporting Period; and • Summary of Activities within the Reporting Period.
2	**Construction Schedule Update**	Construction milestones for the Project were identified in NextBridge's responses to Procedural Order #3, filed May 3, 2018 and updated September 24, 2018. This section provides an overview of the permitting and approval/authorization requirements as they relate to the Construction Schedule and includes: • Project Map; • Table of Updated Milestones; and • Permit and Approval/Authorization Requirements by WF. Where applicable, impacts from changes to HONI's station work will be noted.
3	**Construction Cost Update**	Period-specific cost summaries providing details for each cost category in NextBridge's Project cost budget, including: • Actual Spent; • Percentage of budgeted costs spent to date; • Updated forecast; and • Material forecast variance (if applicable). This section also includes a Project Cost Update Summary and associated rationale for forecast variance and associated mitigating measures for negative forecast variances.
4	**Risk Management**	A summary of risks that have occurred or could potentially occur during construction, including a discussion of potential impacts on schedule, cost or scope, and potential options for mitigating or eliminating the risk. This section includes: • Risk Management Issues, Potential Impacts, and Mitigation Measures Table.

1. Summary of the EWT Project Progress During Reporting Period

Table of Key Project Statuses

Key Status	Summary
Stage of Construction	**Preliminary construction activities have commenced** • Activities in preparation of construction of the EWT Project have begun and right of way clearing is expected to commence in September, 2019.
Costs	**NextBridge undertook a re-budgeting effort upon the OEB issuing a Decision and Order aproving the LTC Application** • Construction costs for the EWT Project are forecasted to be on budget as compared to the LTC application.
Schedule	**Construction schedule is broken down into 11 WFs** • Transmission line right of way clearing is planned to commence on WFs 1 and 7, and continue to WFs 2 and 8 respectively.
Emerging Risk	**Permit and access requests are on track but potential approval delays could present schedule risks** • NextBridge is making continuous efforts with the applicable parties and governmental agencies, including Ministry of the Environment, Conservation, and Parks (MECP), Reserves and with Ministry of Natural Resources and Forestry (MNRF), Fisheries and Oceans Canada, Canada Wildlife Service, NAV Canada, and Transport Canada, in order to maintain the current schedule.
Indigenous Activities	**Engagement continuing** • NextBridge representatives attended technical briefings and other Project-related meetings and discussions.

Table of Activities In Work Fronts[1] for the Reporting Period

	Env. Permits	Land-ROW[2]	Land-Access[3]	Clearing	Construction
Work Front 7	Packages submitted	37%	57%	-	Access drawings approved by HONI
Work Front 8	Packages submitted	99.8%	32%	-	Access drawings approved by HONI
Work Front 1	Packages submitted	97%	75%	-	Access drawings approved by HONI
Work Front 9	Packages submitted	100%	69%	-	-
Work Front 2	Packages submitted	69%	94%	-	Access drawings approved by HONI
Work Front 3	Packages submitted	91%	86%	-	Nipigon camp site preliminary preparation activities commenced
Work Front 6	Packages submitted	88%	33%	-	-
Work Front 4	Packages submitted	100%	0%	-	-
Work Front 5	Packages submitted	93%	81%	-	-
Work Front 11	Packages submitted	38%	62%	-	-
Work Front 10	Packages submitted	66%	14%	-	-

1 This is the currently proposed order of strategic Work Front execution and is subject to change.

2 Percentage of linear distance of route acquired in kilometers. Unencumbered Provincial Crown Land (Unpatented Land, Conservation Reserves, Parks) are assumed secured, but are still subject to receiving Provincial Government approvals.

3 Percentage of parcels with construction access requirements acquired. Construction access requirements on unencumbered Provincial Crown Land (Unpatented Land, Conservation Reserves, Parks) are subject to receiving Provincial Government approvals.

Summary of Activities Within Reporting Period

Environment

- Species at Risk (SAR)
  - Continued to hold positive discussions with MECP.
  - Anticipated permit approvals for all SAR except bat hibernacula and caribou – September 1, 2019.
  - Anticipated permit approvals for bat hibernacula and caribou – December 1, 2019.
  - Strategic WF permitting/execution approach allows working outside of species' restricted activity periods to minimize potential environmental impacts and disruption to Project schedule.
- WF Packages
  - Package submissions for WFs 1, 2, and 7 are anticipated in August 2019.
  - Permit application approvals are expected to allow right of way clearing work to commence September 1, 2019.
  - Continued productive discussions with MECP on Parks / MNRF on work and land use permits, etc.
- Permitting Requirements
  - Continued consultation with MECP, MNRF, Fisheries and Oceans Canada, Canada Wildlife Service, NAV Canada, and Transport Canada regarding the Environmental Assessment (EA) and upcoming permitting requirements.
- EA Conditions
  - Internal and contractor resources have been deployed to ensure continued compliance with the conditions of the EA Approval.
- Detailed Project Plans (DPPs)
  - Developed and submitted DPPs and associated permit applications for multiple construction WFs that provide the pre-construction, construction, and operation activities to be undertaken for the Project.
    - Key values of interest to MNRF and MECP were incorporated into the DPPs and permit applications.

- Environment-Related Indigenous Discussions
  - Continued solicitation and incorporation of feedback and Traditional Ecologic Knowledge information provided by First Nation and Métis communities and agencies.
  - Documented and responded to inquiries received from First Nations and Métis with respect to the Project.

Land

- Privately Held Land
  - Negotiated settlement with additional property owners resulting in removal of 10 of the original 23 parcels from the expropriation application.
- Government Land and Permits
  - Continued engagement with Ministry of Transportation, Infrastructure Ontario, and HONI to acquire land and/or obtain permits.
  - Worked with the MNRF to establish schedule details for the submission of concurrent permit applications[4] based on current construction schedule.
  - Crown land disposition applications for WFs 1 and 7 are expected to be submitted in August 2019.
  - Applications for all construction WFs are on track for submission prior to the Post-LTC Decision Baseline Target Date.
  - Received Council approval from the Town of Marathon and Municipality of Shuniah on June 10, 2019 and June 11, 2019, respectively, for required land agreements.
  - Continued engagement with third party utility and rail companies to secure required access and overhead crossing approvals.
  - Agreement on approximately 20% of required third party crossings have been completed.
- General Updates
  - Continued legal surveys to support the land optioning and permitting programs.
  - Met with property owners to execute option exercise and easement registration documentation.
  - Approximately 85% of signed option agreements in WFs 1, 7, 8, 9, and 2 have been exercised.
  - Responded to directly affected property owner and Crown interest holder inquiries, as required.

[4] Includes Crown Land Disposition Application

Regulatory

- Expropriation Application
  - On April 17, 2019, NextBridge filed an application with the OEB, pursuant to section 99 of the OEB Act, to expropriate 23 parcels.
  - An amended expropriation application was filed on June 10, 2019, removing 10 of the original 23 expropriation parcels as well as the request for a short-term lease interest.
  - The Affidavit of Service detailing the delivery results of the Expropriation Application to affected property owners, encumbrancers, and interest holders was filed with the Board on June 11, 2019.

Indigenous Engagement

- Continued Engagement Activities
  - Discussions with the 18 identified First Nation and Métis communities regarding the EWT Project.
    - Discussed next steps in regulatory approvals such as DPPs and associated permits.
  - Hosted group teleconference on February 14, 2019, to provide the 18 identified First Nation and Métis communities with updates regarding the Project, including:
    - The OIC and Ministerial directive (issued January 30, 2019);
    - The OEB approval of the LTC application (issued February 11, 2019);
    - Anticipated EA approval with conditions by MECP; and
    - Plans to move forward with permitting and other regulatory conditions.
- Notifications to the 18 identified First Nation and Métis Communities
  - March 25, 2019
    - That the MECP had provided NextBridge with a Letter of Approval regarding the EA for the EWT Project.
  - April 16, 2019
    - That, as part of the EA approval conditions, NextBridge would be updating the Indigenous Consultation Plan for the EWT Project.
    - NextBridge requested comments on the updated plan by April 29, 2019.
  - May 15, 2019
    - The proposed updates to the geotechnical survey on May 15, 2019.

- June 5, 2019
  - That the Project has started submitting applications for required provincial permits.
  - The website links to access mapping and other relevant documentation.

- Technical Briefings with First Nation and Métis Organization's Staff and Leadership
  - NextBridge hosted two group teleconferences on March 20 and 21, 2019, to provide the 18 identified First Nation and Métis communities with updates regarding the Project.
  - Teleconferences provided an overview of the remaining formal consultation tasks for the Project, including how NextBridge intends to consult on remaining regulatory requirements.

- Staff Meetings
  - Staff meetings were held with consultation representatives.
  - The topics discussed at these meetings included:
    - Updates to the Project regulatory approval process;
    - Updates on construction timelines;
    - Reviews of ongoing offers to develop Capacity Funding Agreements (CFAs) in order for communities to review upcoming DPPs and associated permits;
    - Updates on construction-phase participation, including facilitation opportunities; and
    - Responses to specific inquiries related to pre-construction surveys and assessments.
  - Staff meetings took place with:
    - Red Sky Métis Independent Nation staff meeting on April 1, 2019;
    - Pays Plat First Nation Chief and staff meeting on April 1, 2019;
    - Fort William First Nation staff meeting on April 1, 2019;
    - Long Lake #58 First Nation staff meeting on April 2, 2019;
    - Michipicoten First Nation staff meeting on April 3, 2019;
    - Pic Mobert First Nation staff meeting on April 4, 2019;
    - Biigtigong Nishnaabeg staff meeting on April 4, 2019;
    - Red Rock Indian Band Chief and staff meeting on April 4, 2019;
    - Biinjitiwaabik Zaaging Anishinaabek (BZA) monitor meeting on April 5, 2019;
    - Red Rock Indian Band staff meeting on May 7, 2019;
    - Batchewana First Nation staff meeting on May 15, 2019;
    - Fort William First Nation staff meeting on May 24, 2019;
    - Bingwi Neyaashi Anishinaabek community meeting on May 25, 2019;

  - Fort William First Nation community meeting on June 24, 2019;
  - Red Rock Indian Band staff meeting on June 25, 2019; and
  - Michipicoten First Nation teleconference meeting on June 25, 2019.

- CFAs
  - Offered CFAs to the 18 identified First Nation and Métis communities to ensure adequate resources to continue with engagement on the Project during the construction phase.

Community/Municipal Engagement

- Continued Engagement Activities
  - Project team hosted an information booth and presented a Project update to delegates of the Northwestern Ontario Municipal Association Conference in Thunder Bay from April 24 to 26, 2019.
  - Sponsored the Thunder Bay Chamber of Commerce Prosperity Northwest forum and participated as a panel member on the Energy Infrastructure Panel on June 5, 2019.

- Pre-Construction Open Houses
  - Hosted fifth and final required round of open houses from May 6 to 9, 2019 in:
    - Thunder Bay;
    - Dorion;
    - Nipigon;
    - Terrace Bay;
    - Marathon;
    - White River; and,
    - Wawa.
  - Notification of the open houses was published in local newspapers, broadcast on local radio, posted on the Project web site, and hard copies of the notification were mailed to the Project mailing list.
    - The notification and information provided at the open houses are posted on the Project web site and can be found at http://www.nextbridge.ca/project_info

- Complaint Resolution Protocol
  - Drafted and submitted to the MECP for approval.
  - Complaint Protocol was added to NextBridge website and can be found at http://www.nextbridge.ca/project_info/public-record-documents
- Community Investment Funding
  - Provided support to two community initiatives.
  - Additional funding opportunities are currently under review.

Engineering & Construction

- HONI Engagement and Coordination
  - Continued discussion on the design of existing transmission line crossings and HONI's crossing requirements.
  - Continued discussions related to the execution of agreements with HONI regarding facility upgrades are in progress.
  - Negotiating Construction Cost Recovery Agreement.
  - Discussion regarding Overhead Crossing Designs: Adjustments & T1M crossings.
- Materials
  - Awarded tower supply contract to vendor SARA Energy.
  - Evaluation of conductor, Optical Ground Wire (OPGW) and Overhead Ground Wire (OHGW) vendors are in progress.
- Detailed Engineering
  - Progressing to meet construction schedule.

2. Construction Schedule Update

A. Project Map

B. Updated Milestones

Following the OEB Decision and Order approving the LTC application the February 11, 2019, milestone dates were revised to meet a new construction schedule based on the new in-service date. Target dates from the LTC application are included in the below table to illustrate the variances which were made during the revision. During the LTC application, the Project was planned to be executed by separating the Project into six segments. These six segments were susequently revised into 11 WFs. In subsequent reports, the Target dates from the LTC application will be removed and future variances will be defined in the "Variance Reason/Potential Impact" column.

Activity	Target Date in Leave to Construct Application[5]	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Regulatory				
Oral Hearing Start	October 2, 2018	Completed		
OEB LTC Decision and Order	December 31, 2018	Completed		
OEB approval of authority to expropriate	October 2019	September 2019		
Register approved Plan of Expropriation and issue relevant Expropriation Act Notices/Offers	December 2019	December 2019		
Obtain possession of expropriated lands for construction purposes	March 2020	March 2020		

[5] The column titled, "Target Date in Leave to Construct Application" is included in this report for reference and will be removed in subsequent reports.

[6] Schedule dates were revised to meet a new construction schedule following the Leave to Construct award based on the new in-service date.

Activity	Target Date in Leave to Construct Application[5]	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Environmental[7]				
Approval of the Amended EA	February 2019	Completed	Completed	
Approval by MECP of Permit to Take Water	1Q 2019	4Q 2019		
Approval by MECP of ECA - Camp Wastewater	1Q 2019	2Q 2020		
Approval by MNRF of Water Crossing Permits	1Q 2019	3Q 2019 to Q1 2020		
Approval by MECP of Species at Risk Permits (Bat maternity roosts, Eastern whip-poor-will)	1Q 2019	3Q 2019		
Approval by MECP of Species at Risk Permits (Caribou, Bat hibernacula)	1Q 2019	4Q 2019		
Approval of ECCC SARA Bat hibernacula and caribou permit	1Q 2019	4Q 2019		
Approval of MECP Provincial Park & Conservation Reserve Management Plan Amendments	1Q 2019	4Q 2019		
Lakehead Region Conservation Authority Permit	1Q 2019	3Q 2019		

[7] Apart from the EA which has been issued, based on the WF approach to construction, not all permits are needed at start of construction on the Project as some WFs will have all necessary permits to start construction.

Activity	Target Date in Leave to Construct Application[5]	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Transport Canada Section 67 for Transport Canada Lands	1Q 2019	3Q-4Q 2019		
Transport Canada Navigation Protection Act Canada permit	1Q 2019	3Q-4Q 2019		
Fisheries and Oceans Canada Navigable Waters Permit	1Q 2019	3Q 2019 to 1Q 2020		
Indigenous Service Canada Section 67 for Reserve Lands	1Q 2019	3Q-4Q 2019		
Infrastructure Ontario Class Environmental Assessment	1Q 2019	4Q 2019		
MTCS - Historical and Cultural Resources acceptance	1Q 2019	4Q 2019		
Land Acquisition				
Substantial completion of signing of option agreements	2Q 2019	Complete		
Crown Land Disposition Application filed	1Q 2019	3Q-4Q 2019		
Third party Crossing agreements complete	1Q 2019	3Q-4Q 2019		
MNRF approval of Crown Lease/Land Use Permits	1Q 2019	3Q 2019 to 1Q 2020		
MNRF approval of Crown Land Work Permits	1Q 2019	3Q 2019 to 1Q 2020		
MTO approval of Land Use and Building Permits	1Q 2019	3Q-4Q 2019		

Activity	Target Date in Leave to Construct Application[5]	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
MTO approval of Entrance Permits	1Q 2019	3Q-4Q 2019		
MTO approval of Encroachment Permits	1Q 2019	3Q-4Q 2019		
Indigenous Relations				
Indigenous Service Canada approval of Land Related Permits	1Q 2019	4Q 2019		
HONI - Related				
HONI approves Longitudinal Access	1Q 2019	3Q 2019		
HONI Approves Transmission Crossing Application	1Q 2019	3Q 2019		
NextBridge files Sec 101 Application (If not approved by HONI)	1Q 2019	3Q-4Q 2019		
HONI Substations commissioned[8]	4Q 2020	4Q 2021		
Engineering & Construction				
Commence Clearing & Access	June 2019	3Q 2019		
Commence Geotech and Foundations	3Q 2019	4Q 2019		

[8] Per Exhibit B, Tab 11, Schedule 1 of Hydro One Station work LTC application.

Activity	Target Date in Leave to Construct Application[5]	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Commence Towers Assembly	3Q 2019	4Q 2019		
Commence Towers Erection	4Q 2020	1Q 2020		
Commence Conductor Stringing	1Q 2020	2Q 2020		
Work Front 1 - Commence Clearing & Access	N/A[9]	3Q 2019		
Work Front 1 - Commence Geotech and Foundations	N/A	4Q 2019		
Work Front 1 - Commence Towers Assembly	N/A	4Q 2019		
Work Front 1 - Commence Towers Erection	N/A	1Q 2020		
Work Front 1 - Commence Conductor Stringing	N/A	1Q 2020		
Work Front 2 - Commence Clearing & Access	N/A	1Q 2020		
Work Front 2 - Commence Geotech and Foundations	N/A	1Q 2020		
Work Front 2 - Commence Towers Assembly	N/A	1Q 2020		

[9] Segments have been revised to WFs.

Activity	Target Date in Leave to Construct Application[5]	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Work Front 2 - Commence Towers Erection	N/A	1Q 2020		
Work Front 2 - Commence Conductor Stringing	N/A	2Q 2020		
Work Front 3 - Commence Clearing & Access	N/A	1Q 2020		
Work Front 3 - Commence Geotech and Foundations	N/A	1Q 2020		
Work Front 3 - Commence Towers Assembly	N/A	2Q 2020		
Work Front 3 - Commence Towers Erection	N/A	2Q 2020		
Work Front 3 - Commence Conductor Stringing	N/A	3Q 2020		
Work Front 4 - Commence Clearing & Access	N/A	2Q 2020		
Work Front 4 - Commence Geotech and Foundations	N/A	2Q 2020		
Work Front 4 - Commence Towers Assembly	N/A	3Q 2020		
Work Front 4 - Commence Towers Erection	N/A	3Q 2020		
Work Front 4 - Commence Conductor Stringing	N/A	3Q 2020		

Activity	Target Date in Leave to Construct Application[5]	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Work Front 5 - Commence Clearing & Access	N/A	1Q 2020		
Work Front 5 - Commence Geotech and Foundations	N/A	1Q 2020		
Work Front 5 - Commence Towers Assembly	N/A	4Q 2020		
Work Front 5 - Commence Towers Erection	N/A	1Q 2021		
Work Front 5 - Commence Conductor Stringing	N/A	1Q 2021		
Work Front 6 - Commence Clearing & Access	N/A	1Q 2020		
Work Front 6 - Commence Geotech and Foundations	N/A	1Q 2020		
Work Front 6 - Commence Towers Assembly	N/A	1Q 2020		
Work Front 6 - Commence Towers Erection	N/A	1Q 2020		
Work Front 6 - Commence Conductor Stringing	N/A	3Q 2020		
Work Front 7 - Commence Clearing & Access	N/A	1Q 2020		
Work Front 7 - Commence Geotech and Foundations	N/A	2Q 2020		

Activity	Target Date in Leave to Construct Application[5]	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Work Front 7 - Commence Towers Assembly	N/A	3Q 2020		
Work Front 7 - Commence Towers Erection	N/A	3Q 2020		
Work Front 7 - Commence Conductor Stringing	N/A	4Q 2020		
Work Front 8 - Commence Clearing & Access	N/A	1Q 2020		
Work Front 8 - Commence Geotech and Foundations	N/A	3Q 2020		
Work Front 8 - Commence Towers Assembly	N/A	4Q 2020		
Work Front 8 - Commence Towers Erection	N/A	4Q 2020		
Work Front 8 - Commence Conductor Stringing	N/A	1Q 2021		
Work Front 9 - Commence Clearing & Access	N/A	1Q 2020		
Work Front 9 - Commence Geotech and Foundations	N/A	3Q 2020		
Work Front 9 - Commence Towers Assembly	N/A	4Q 2020		
Work Front 9 - Commence Towers Erection	N/A	4Q 2020		

Activity	Target Date in Leave to Construct Application[5]	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Work Front 9 - Commence Conductor Stringing	N/A	2Q 2021		
Work Front 10 - Commence Clearing & Access	N/A	3Q 2020		
Work Front 10 - Commence Geotech and Foundations	N/A	3Q 2020		
Work Front 10 - Commence Towers Assembly	N/A	4Q 2020		
Work Front 10 - Commence Towers Erection	N/A	1Q 2021		
Work Front 10 - Commence Conductor Stringing	N/A	3Q 2021		
Work Front 11 - Commence Clearing & Access	N/A	3Q 2020		
Work Front 11 - Commence Geotech and Foundations	N/A	3Q 2020		
Work Front 11 - Commence Towers Assembly	N/A	1Q 2021		
Work Front 11 - Commence Towers Erection	N/A	2Q 2021		
Work Front 11 - Commence Conductor Stringing	N/A	3Q 2021		
Project Construction Substantially Complete	4Q 2020	4Q 2021		

Activity	Target Date in Leave to Construct Application[5]	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Project Commissioning Commences	4Q 2020	4Q 2021		
Project Commissioning Complete - In Service	December 31, 2020	4Q 2021		
Final acceptance and release of General Contractor	2Q 2021	4Q 2021		

C. Permit and Approval/Authorization Requirements by Work Front

Work Front	Major Permits and Approvals/Authorizations[10]	Target Date
7	2 Species at Risk, 30 Water Body Crossings, 17 Overhead Crossings, 3 Work and Land Use, 49 Access	September 2019
8	3 Species at Risk, 27 Water Body Crossings, 16 Overhead Crossings, 4 Work and Land Use, 265 Access	September 2019
1	3 Species at Risk, 143 Water Body Crossings (78 local), 47 Overhead Crossings 4 Work and Land Use, 68 Access	September 2019
9	2 Species at Risk, 53 Water Body Crossings, 35 Overhead Crossings 4 Work and Land Use, 92 Access	September 2019
2	2 Species at Risk, 26 Water Body Crossings, 11 Overhead Crossings 4 Work and Land Use, 68 Access	September 2019
3	3 Species at Risk, 51 Water Body Crossings, 46 Overhead Crossings 6 Work and Land Use,1 Phase I ESA, 82 Access	September 2019
6	4 Species at Risk (including Caribou), 70 Water Body Crossings (2 federal), 60 Overhead Crossings, 3 Work and Land Use,1 Phase I ESA, 134 Access	December 2019

[10] The number of Major Permits and Approvals/Authorizations are subject to change

Work Front	Major Permits and Approvals/Authorizations[10]	Target Date
4	2 Species at Risk, 21 Water Body Crossings, 3 Overhead Crossings 4 Work and Land Use, 89 Access	November 2019
5	2 Species at Risk, 77 Water Body Crossings, 8 Overhead Crossings 3 Work and Land Use, 110 Access	December 2019
11	2 Species at Risk, 90 Water Body Crossings, 25 Overhead Crossings 3 Work and Land Use, 66 Access	November 2019
10	2 Species at Risk, 101 Water Body Crossings, 8 Overhead Crossings 4 Work and Land Use, 92 Access	November 2019

3. Construction Cost Update

A. Project Cost Update Summary

Construction costs for the EWT Project 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.

After the issuance of the LTC, NextBridge undertook a re-budgeting effort based on the in-service date change from Q4 2020 to Q4 2021. The re-budgeting effort incorporated the timing of Indigenous and stakeholder consultation, environmental studies, permits, approvals, and authorizations to support the new in-service date.

As a result of the re-budgeting effort, NextBridge identified that many of the cost breakdowns contained within the originally filed LTC application budget from July 31, 2017, could be more efficiently tracked during the construction phrase of the Project. For example, Indigenous consultation and participation activities in communities were combined to better reflect the nature of engagement on a community-by-community basis, instead of by activity. The combination of categories is expected to provide increased clarity on the tracking of the forecasted costs.

B. Project Cost Update Table

Cost Categories For Nextbridge's Construction Costs Reporting		Actuals Spent		Budget			Forecast Budget Variance		
		A Spent This Reporting Period $	B Total Spent To Date $	C Budget Per Ltc Application $	D=C-B Budget Remaining	E=D/C*100 Budget Remaining %	F Forecast Budget Change $	G Forecast Budget Change %	Reasons For Change
Engineering & Construction		**22,634,270**	**42,463,456**	**572,761,388**	**530,297,932**	**93%**	**614,267,289**	**7%**	**Revised based on in-service date**
1	Engineering, Design and Procurement			19,342,245					
2	Materials and Equipment			89,408,231					
8	Site Clearing, Access			107,463,339					
9	Construction			356,547,573					
Environmental & Remediation Activities		**149,233**	**6,175,783**	**26,929,260**	**20,753,477**	**77%**	**31,277,866**	**16%**	**Revised based on in-service date**
3	Environmental and Regulatory Approvals			13,030,561					
10	Site Remediation			13,898,699					
Indigenous Activities		**4,113,085**	**7,739,100**	**20,211,000**	**12,471,900**	**62%**	**23,653,555**	**17%**	**Revised based on in-service date**
5	Indigenous Economic Participation			7,000,000					
6	Indigenous Consultation			13,211,000					
4	**Land Rights (excludes Aboriginal)**	**2,051,478**	**5,295,676**	**23,830,512**	**18,534,836**	**78%**	**23,830,512**	**0%**	
7	**Other Consultation**	**98,087**	**398,337**	**2,530,194**	**2,131,857**	**84%**	**2,530,194**	**0%**	
11	**Contingency**	**-**	**-**	**49,399,445**	**49,399,445**	**100%**	**102,382**	**-100%**	**Allocation of Contingency**
12	**Regulatory**	**16,922**	**2,307,694**	**5,405,078**	**3,097,384**	**57%**	**5,405,078**	**0%**	
13	**EWT Management**	**328,575**	**2,947,504**	**4,900,644**	**1,953,140**	**40%**	**4,900,644**	**0%**	
Total Project Spend		**29,391,650**	**67,327,550**	**705,967,521**	**638,639,971**	**90%**	**705,967,521**	**0%**	
14	**Interest During Construction (IDC)[1]**	**715,917**	**3,729,748**	**31,003,000**	**27,273,252**	**88%**	**31,003,000**	**0%**	
Total Construction Costs[2] [3]		**30,107,568**	**71,057,298**	**736,970,521**	**665,913,223**	**90%**	**736,970,521**	**0%**	

[1] IDC has not been re-forecasted as interest rates will vary based on the OEB prescribed rates
[2] On the record (EB-2017-0182)
[3] Development Costs eligible for consideration as construction costs of $5.3 MM not reflected in column B. (OEB Decision, December 20, 2018)

C. Project Cost Update Summary by Department

Engineering & Construction (E&C)

The LTC E&C budget was established based on an Engineering, Procurement, and Construction (EPC) contract, which was predicated on a December 2020 in-service date. As noted in the OEB LTC hearings, a delay in starting construction would result in an increase to the E&C budget, primarily due to an EPC price change resulting from the delay of the in-service date. More specifically, due to the delay in LTC approval, NextBridge missed the first winter of construction that was planned, which has resulted in delaying construction. Additionally, the OEB's directive for NextBridge to align the in-service date with Hydro One's station work schedule (Q4 2021) has resulted in further delay of construction. These delays in construction have resulted in an EPC contract price increase.

Environment & Remediation Activities

The EA was approved in March of 2019 and contains conditions that increased the Environmental budget for surveys, permitting work, and pre-construction activities. NextBridge has also been in discussions with the MECP on mitigation measures for SAR in the Project area. Although these permits have not yet been issued, the forecasted increases in the Environmental budget associated with these mitigation measures, including a translocation program for caribou have been included.

Indigenous Activities

The extended time frame for the approval of the LTC application and associated extended in-service date resulted in budget variances for the Indigenous Consultation and Participation budgets. Consultation, participation, and outreach activities continued after the LTC application was filed and will continue as part of the Project construction phase until Q4 2021 to meet the legal obligations of the Crown. The extended period of consultation has increased the originally forecasted amount of support to be provided to communities for consultation.

The following items were also identified as resulting in a budgetary increases for Indigenous activities:

- The support requirements increased for Indigenous job training and preparation prior to the start of construction.
- As a condition of the approval of the amended EA, the Indigenous environmental monitoring requirements increased.
- In the Federal government agreement to cross the reserves of the two First Nations, payments which were originally expected to be paid out after the in-service date, are now due prior to the in-service date.

Land Rights (Non-Indigenous)

The Land Rights budget is not expected to change when compared to the LTC application budget.

Other Consultation

The Other Consultation budget is not expected to change when compared to the LTC application budget.

Regulatory

The Regulatory budget is not expected to change when compared to the LTC application budget.

EWT Management

The EWT Management budget is not expected to chance compared to the LTC application budget.

4. Risk Management

A. Risk Management Issues, Potential Impacts, and Mitigation Measures

Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
MECP delay in issuing Caribou SAR permit		• Delay in receipt of the caribou permit will force schedule compression in later years to meet the in-service date • Delay in issuance of the permit past December 1, 2019 may require the Project to work in restricted activity periods that were planned to be avoided		• Schedule risk can be mitigated through compression of construction activities in 2020-2021
Agency delay in issuance of other environmental permit(s)		• Delay in issuance of required approvals listed in table 2C to start clearing would increase cost due to the schedule compression required to mitigate schedule slip		• WF approach is designed to allow staggered issuance of permit approvals to facilitate staging of the start of construction and the start of construction in multiple segments simultaneously

Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
Delay in access to private, provincial, and federal lands		• Lands not accessible in time for construction commencement date will affect Project schedule • Private lands not accessible through expropriation • Public lands not accessible through MNRF process • Federal lands not accessible through reserve crossing permits		• Pursue regulatory avenues available (e.g. expropriation with OEB, provincial mining recorder order) where access is not granted; establish work around/ accommodation plan for "no access" parcels in construction planning • Work with government on public and federal land access
Delay in HONI station work	Unknown[11]	• If stations are not ready for energization it will delay project in-service date		• Communication and coordination with HONI during construction
Delay in accessing HONI's crossings of access roads and transmission lines		• Significant portions of lands not accessible in time for access road construction and stringing across HONI right of way lands will affect project schedule		• Continue to attempt to resolve crossing and access issues with HONI, and, in the alternative, file a Section 101 application with the OEB for approval of required crossings

[11] This risk is dependent on HONI and the current status is only known by HONI.

Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
Legal Challenges		• Parties may file applications for judicial review or appeal of OEB decisions or other permit approvals and seek to stay construction • Risk has materialized in a current challenge from BZA First Nation • There may be some cost risk involved with defending these legal challenges		• Continue to proactively engage with First Nation and Métis communities, landowners, and all other stakeholders in order to identify and address concerns
Public Protests and/or Displays of Project Opposition		• Potential for reputational impacts, but is unlikely to prevent forward progress given provincial approvals have been obtained		• Additional discussion and attempts to satisfy concerns
Labour Strikes		• Potential for labour actions and disruption/shutdown of construction activities, which could lead to cost and schedule impacts • Potential for media coverage and undesirable project optics		• Follow Project labour protocols as per master agreement with Canadian Union of Skilled Workers (CUSW) • Foster and maintain good relations and communication with CUSW and its members. Be cognizant of and manage potential for other unions to approach and recruit any non-CUSW members

OEB QUARTERLY REPORT – Q4 2019

UPPER CANADA TRANSMISSION, INC.
(d/b/a NextBridge Infrastructure)

East-West Tie Line
Quarterly Construction Progress Report

Reporting Period: July 1, 2019 to September 30, 2019

Date Submitted[1]: November 8, 2019

- In its Decision and Order dated August 7, 2013 (Designation Decision), the Ontario Energy Board (OEB or Board) named Upper Canada Transmission, Inc. (UCT), doing business as NextBridge Infrastructure (NextBridge), as the designated transmitter for the development of the East-West Tie transmission line (EWT Project or Project).

- On July 31, 2017, NextBridge submitted an application for leave to construct (LTC) the EWT Project, pursuant to section 92 of the Ontario Energy Board Act (OEB Act). On February 11, 2019, the OEB issued a Decision and Order approving the LTC application and amending the conditions of UCT's Electricity Transmission Licence to authorize it to proceed to the construction, expansion or reinforcement of the transmission system for the EWT Project, pursuant to a directive to the OEB issued by the Minister of Energy, Northern Development and Mines and approved by Order in Council 52/2019 (OIC), dated January 30, 2019.

- On February 11, 2019, the OEB amended NextBridge's Electricity Transmission Licence to include conditions requiring NextBridge to report to the IESO on the progress, timeliness and cost-effectiveness of the EWT Project and provide such information that the OEB may from time to time require.

- On July 29, 2019, the OEB issued a letter outlining NextBridge's reporting requirements pursuant to sections 14.1 and 13.3 of its Electricity Transmission Licence.

- In accordance with the OEB's letter dated July 29, 2019, NextBridge will report quarterly on the 15th business day of each January, April, July, and October, with the exception of the first quarterly report, which was submitted on August 30, 2019. NextBridge will continue reporting until the EWT Project is in-service and land restoration activities have been completed.

[1] NextBridge was granted an extension to file its quarterly report on November 8, 2019 by the OEB in a letter dated October 17, 2019.

This report is organized as follows:

1	**Summary of the EWT Project Progress to September 30, 2019**	A detailed summary of the status of the EWT Project, including work completed during the reporting period, overall progress, cost and construction schedule updates, and emerging risks. Where applicable, impacts from changes to Hydro One Network Inc.'s (HONI's) station work will be noted. This section includes: • Table of Key Project Statuses; • Table of Activities in the Work Fronts (WFs) for the Reporting Period; and • Summary of Activities within the Reporting Period.
2	**Construction Schedule Update**	Construction milestones for the Project were identified in NextBridge's responses to Procedural Order #3, filed May 3, 2018 and updated September 24, 2018. This section provides an overview of the permitting and approval/authorization requirements as they relate to the Construction Schedule and includes: • Project Map • Table Milestone Updates; and • Permit and Approval/Authorization Requirements by WF. Where applicable, impacts from changes to HONI's station work will be noted.
3	**Construction Cost Update**	Period-specific cost summaries providing details for each cost category in NextBridge's Project cost budget, including: • Actual Spent; • Percentage of budgeted costs spent to date; • Updated forecast; and • Material forecast variance (if applicable). This section also includes a Project Cost Update Summary and associated rationale for forecast variance and associated mitigating measures for negative forecast variances.
4	**Risk Management**	A summary of risks that have occurred or could potentially occur during construction, including a discussion of potential impacts on schedule, cost or scope, and potential options for mitigating or eliminating the risk. This section includes: • Risk Management Issues, Potential Impacts, and Mitigation Measures Table.

5	**OEB Requests**	In a letter dated October 10, 2019 the OEB requested information pertaining to ongoing items as well as Report-specific matters. • Ongoing items have been addressed throughout this Report. • Report-specific matters can be found in the attached appendix.

1. Summary of the EWT Project Progress During Reporting Period

A. Table of Key Project Statuses

Key Status	Summary
Stage of Construction	**Construction activities have commenced** • Transmission line right of way (ROW) clearing commenced in September on WF 1 in and is expected to continue through WFs 7, 2, 6 and 8, respectively. • Additional information on this topic can be found in Section 1. B. below.
Costs	**NextBridge undertook a re-budgeting effort upon the OEB issuing a Decision and Order approving the LTC Application** • Construction costs for the EWT Project are forecasted to be on budget as compared to the LTC application. • Additional information on this topic can be found in Section 3. below.
Schedule	**Permit and access requests are on track but potential approval delays could present schedule risks** • NextBridge is making continuous efforts with the applicable parties and governmental agencies, including Ministry of the Environment, Conservation, and Parks (MECP), Ministry of Natural Resources and Forestry (MNRF), Ministry of Energy, Northern Development and Mines (MENDM), Ministry of Transportation, and Infrastructure Ontario (MTO), Fisheries and Oceans Canada (DFO), Canada Wildlife Service (CWS), NAV Canada, Transport Canada, and others, in order to maintain the current schedule. • Additional information on this topic can be found throughout this Report.
Emerging Risk	**Lead-up to Federal Government Elections and impacts of potential changes in Ministerial appointments** • The dissolution of the 42nd Canadian Parliament in September 2019 marked the commencement of the upcoming general Federal Election on October 21, 2019. • During the lead-up to the Federal election, decisions on permits and approvals from Federal agencies temporarily halt. • NextBridge is in the process of seeking a number of permits from various Federal agencies, such as NAV Canada, Transport Canada, Indigenous Affairs Canada, and others.

Key Status	Summary
	• Upon the conclusion of the general Federal Election, it is possible that Members of Parliament change, which could lead to Ministerial changes. • These conditions place uncertainty in the timing of post-election decisions and approvals, which could impact construction execution plans. • The Project team is working on mitigating the potential realization of this risk by continuing engagement with the relevant permitting agencies to ensure timely approval of the required permit post-election and evaluating construction execution plans in impacted areas.
Indigenous Activities	**Engagement continuing** • NextBridge continues to engage with the 18 Indigenous communities with an interest in the Project. • Engagement highlights include robust consultations on permitting including notifications, permitting workshops and the provision of capacity funding for communities to retain third party experts if required. • Section 28.2 Permit negotiations are continuing with the two communities in which the Project crosses First Nations lands. • NextBridge representatives organized Indigenous Facilitator training and has launched the Indigenous Facilitator Program which will support representatives from seven communities to be present on-site during construction. • Capacity funding agreements for the construction phase of the Project have been offered to all 18 Indigenous communities and progress has been made on finalizing several agreements. • Additional information on this topic can be found in Section 1. C. below.
HONI Coordination	**Coordination and engagement continuing** • NextBridge continues to engage with HONI on multiple fronts. • Positive progress has been made in relation to longitudinal (land) access and transmission line crossing agreements. • Additional information on this topic can be found in Section 1. C. below.

B. Table of Activities In Work Fronts[2] for the Reporting Period

	Environmental Permit Submissions	Land-ROW[3]	Land-Access[4]	Clearing Progress	Construction
Work Front 1	• Detailed Project Plan (DPP) package submitted. • All related permit applications submitted.	97%	92%	7%	• Access drawings approved by HONI. • 48% flagging completed. • 7% clearing completed. • 6% road construction completed. • 20% bridge installations completed.
Work Front 7	• DPP package re-submitted[5]. • All related permit applications submitted.	63%	95%	-	• Access drawings approved by HONI.
Work Front 2	• DPP Package submitted. • Related application permit submissions are in preparation.	69%	94%	-	• Access drawings approved by HONI.
Work Front 6	• DPP Package submitted. • Related application permit submissions	88%	37%	-	

[2] This is the currently proposed order of strategic WF execution and is subject to change.

[3] Percentage of linear distance of route acquired in kilometers. Unencumbered Provincial Crown Land (Unpatented Land, Conservation Reserves, Parks) are assumed secured, but are still subject to receiving Provincial Government approvals.

[4] Percentage of parcels with construction access requirements acquired. Construction access requirements on unencumbered Provincial Crown Land (Unpatented Land, Conservation Reserves, Parks) are subject to receiving Provincial Government approvals.

[5] Comments were received from the MNRF in regards to the submission of the DPP for WF 7 and the DPP package was re-submitted based on this feedback.

	Environmental Permit Submissions	Land-ROW[3]	Land-Access[4]	Clearing Progress	Construction
	are in preparation.				
Work Front 8	• DPP Package submitted. • Related application permit submissions are in preparation.	99.8%	32%	-	• Access drawings approved by HONI.
Work Front 3	• DPP Package submitted. • Related application permit submissions are in preparation.	91%	89%	-	• Nipigon camp site preliminary preparation activities commenced.
Work Front 9	• DPP Package in preparation and expected to be submitted in next reporting period. • Related application permit submissions are in preparation.	100%	69%	-	
Work Front 10	• DPP Package in preparation and expected to be submitted in next reporting period. • Related application permit submissions are in preparation.	66%	14%	-	
Work Front 4	• DPP Package in preparation and expected to be submitted in next reporting period. • Related application permit submissions	100%	50%	-	

	Environmental Permit Submissions	Land-ROW[3]	Land-Access[4]	Clearing Progress	Construction
	are in preparation.				
Work Front 5	• DPP Package in preparation and expected to be submitted in next reporting period. • Related application permit submissions are in preparation.	93%	81%	-	
Work Front 11	• DPP Package in preparation and expected to be submitted in next reporting period. • Related application permit submissions are in preparation.	38%	66%	-	

C. Summary of Activities Within Reporting Period

Environment

- Species at Risk (SAR)
  - Continued positive discussions with MECP, CWS and DFO.
  - Received MECP letter of approval for all non-fish SAR except bat hibernacula and caribou in September 2019.
  - Anticipating MECP permit for bat hibernacula and caribou by December 1, 2019, based on recent discussions.
  - Anticipating DFO letter of approval for fish between October and December 2019 based on recent discussions.
  - Anticipating CWS record of consultation between October and December 2019 based on recent discussions.
  - Strategic WF permitting/execution approach allows the project to maximize working outside of the most possible species' restricted activity periods to minimize potential environmental impacts and disruption to Project schedule.
- DPPs
  - DPPs for WFs 1, 2, 3, 6, 7 and 8 were submitted during this reporting period.
    - Feedback from the MNRF was incorporated into the re-submission of the DPP package for WF 7.
- WF Packages
  - Submitted associated WF Packages for multiple construction WFs and Provincial Park/Conservation Reserves that provide the pre-construction, construction and operation activities to be undertaken for the Project.
  - Package submissions for WFs 1 and 7 occurred in August and September 2019, and revised packages to address agency comments were resubmitted in late September.
  - Permit application approvals received allowed limited ROW clearing work to commence in September 2019.
  - Continued productive discussions with;
    - MECP on Provincial Parks and Conservation Reserves management plan amendments; and

    - MNRF on work and land use permits, etc.

- Permitting Requirements
  - Continued consultation with MECP, MNRF, DFO, CWS and other agencies regarding the Environmental Assessment (EA) and upcoming permitting requirements.

- EA Conditions
  - Internal and contractor resources have been deployed to ensure continuous compliance with the conditions of the EA Approval, including;
    - NextBridge Construction Compliance staff;
    - Valard Construction Monitors and Qualified Professionals (e.g. Fisheries Biologist);
    - Indigenous Facilitators;
    - NextBridge EA Compliance Monitors (Third Party Owner's Representatives); and
    - Others.
  - An updated Construction Environmental Protection Plan and Operational Environmental Management Plan were submitted and approved in 2Q 2019.
  - A draft comprehensive Construction Compliance Matrix was developed and is undergoing internal review and refinement.

- Environment-Related Indigenous Discussions
  - Continued solicitation and incorporation of feedback and Traditional Ecologic Knowledge information provided by First Nation and Métis communities and agencies.
  - Documented and responded to inquiries received from First Nations and Métis with respect to the Project.
  - Supported multiple Permit Workshops and conference calls with First Nations and Métis representatives and their consultants.
  - Supported the first of many Indigenous Facilitator training sessions.

Land

- Privately Held Land
  - Negotiated settlement with one additional property owner resulting in reduction of parcels included in amended expropriation application.

  - NextBridge continues to work with the remaining property owners included in the expropriation application to reach a negotiated settlement.

- Meetings with property owners to execute option exercise and easement registration documentation.

  - All signed option agreements in WFs 1, 2, 3, 7, 8, 9 and 11 have been exercised and NextBridge has commenced scheduling meetings with the remaining property owners in WFs 5, 6 and 10.

- Government Land and Permits
  - Continued engagement with MTO and Infrastructure Ontario to acquire land rights and/or obtain permits.
  - Obtained entrance and encroachment permit approvals from the MTO for WFs 1 and 7.
    - Permit applications for all other WFs are under review by the MTO with the remaining approvals expected by the Post-LTC Decision Baseline Target Date.
  - Adjustment to construction execution plan resulted due to delay in receiving Grant of Easement from the MTO.
    - NextBridge continues to work with the MTO to resolve the matter and obtain final agreements.
  - Crown land disposition applications for WFs 1 and 7 were submitted to the MNRF in August 2019.
    - Amended Crown land disposition applications for WF1 and WF 7 were resubmitted to incorporate MNRF comments.
    - These Crown land disposition apps are part of the WF packages mentioned in the Environment section above.
  - Applications for remaining construction WFs are on track for submission to meet the Post-LTC Decision Baseline Target Date.
  - Continued engagement with third party utility and rail companies to secure required access and overhead crossing approvals.
  - Agreements securing approximately 20% of required third party crossings have been completed.
- General Updates

- Continued legal surveys to support the land optioning and permitting programs.

- Responded to directly affected property owner and Crown interest holder inquiries, as required.

Regulatory

- Expropriation Application
  - On July 22, 2019, the OEB issued a Procedural Order in relation to the Expropriation Application that NextBridge filed on April 17, 2019.
    - In accordance with the Procedural Order, on July 29, 2019, the OEB staff issued to NextBridge a series of written interrogatory questions.
    - NextBridge replied to the written interrogatories and filed its Argument in Chief on August 6 and August 9, 2019, respectively, and on August 14, 2019, the OEB Staff filed a written submission.
  - On September 12, 2019, the OEB granted NextBridge's Expropriation Application, subject to conditions, allowing NextBridge to expropriate permanent and temporary interests in 12 parcels of land owned by 6 property owners.

Indigenous Engagement

- Continued Engagement Activities
  - Discussions with the 18 identified First Nation and Métis communities regarding the EWT Project are continuing.
  - Hosted permitting workshops that were offered to all 18 Indigenous groups in August and October with four separate events held;
    - August 7th – Métis Nation of Ontario;
    - August 8th – Bamkushwada Limited Partnership Communities;
    - August 9th – Red Sky Métis Independent Nation; and
    - August 22nd – Teleconference workshop for which invites were provided to all other Indigenous groups.
- Notifications to the 18 identified First Nation and Métis Communities
  - July 18, 2019
    - Notification that WF 1 Detailed Project Plan is available for download and review.

- August 2, 2019
  - Notification that WF 8 Detailed Project Plan is available for download and review.
  - A reminder was also provided that WFs 1 and 7 are available.
- September 5, 2019
  - Notification that WF 3 Detailed Project Plan is available for download and review.
- September 6, 2019
  - Notification which explained that construction was slated to begin in September 2019 with WFs 1, 7 and 8 being the first to start subject to permitting requirements.
- September 9, 2019
  - Notification provided that an overall benefit plan for SAR bat hibernacula was being submitted and sought feedback.
- September 16, 2019
  - Notification that WF 6 Detailed Project Plan is available for download and review.
  - Notice was also provided that WF 2 had been posted since August 9th.
- Technical Briefings with First Nation and Métis Organization's Staff and Leadership.

- Staff Meetings
  - Staff meetings and teleconferences are being held regularly with communities when required.
  - The focus of engagement for this period has mainly related to;
    - Permitting;
    - Section 28.2 / access negotiations; and
    - The Indigenous Facilitator Program.
- Capacity Funding Agreements (CFAs)
  - Offered CFAs to the 18 identified First Nation and Métis communities to ensure adequate resources to continue with engagement on the Project during the construction phase.
    - Progress is being made in signing of agreements.

Community/Municipal Engagement

- Continued Engagement Activities
  - Letters were sent to the project mailing list between September 4 and 6, 2019, informing them of the availability of the DPPs and of the anticipated construction start and schedule.
  - DPPs were posted to the Project website as they were finalized.
    - The Overarching DPP and DPPs for WFs 1, 2, 7 and 8 were available as of the end of the reporting period.
  - A Facebook group was established for the Project and made public during the reporting period.
    - This tool will be used to provide timely Project-related updates and to share posts relating to the Project from other Facebook pages and groups.
  - Invitations were sent to municipal elected officials in the Project area to attend a ribbon cutting ceremony planned for October 2, 2019.
  - Monitored the Project email address and hotline for Project inquiries.
  - Signage highlighting the Project hotline phone number and email address were prepared for posting at construction work camps and other strategic locations.
    - The signs are being used to communicate how Project-related questions can be submitted and potential issues reported.
- Pre-Construction Municipal Meetings
  - Met with each municipality during the week of August 12, 2019, to provide a project update including anticipated construction timing and road use agreements.
    - Discussions also included permitting for worker camps, timber assessments and local opportunities during construction.
    - The meeting with Terrace Bay was a Special Meeting of Council and a presentation was also made to Dorion Committee of the Whole.
    - Meetings with other municipalities were held with municipal staff.
- Project Website

- Project website was updated to make important information easier to find.
- The home page now includes information on construction timing and steps, employment and contracting opportunities, safety tips during construction, contact information, complaint form download and link to the DPPs page where they can be downloaded.

- Complaint Resolution Process
  - No formal complaints were submitted during this reporting period.
- Community Investment
  - Provided support to three community initiatives.
  - Additional funding opportunities are currently under review.

Engineering & Construction

- Materials
  - Awarded conductor supply contract to vendor General Cable.
  - Awarded Overhead Ground Wire (OHGW) supply contract to vendor Conex Cable.
  - Awarded Optical Ground Wire (OPGW) supply contract to vendor SFPOC.
  - Awarded tower supply contract to vendor SA-RA Energy.
- Detailed Engineering
  - Progressing to meet construction schedule.
  - Performing Grounding Studies.

Coordination Efforts with HONI

- Overview of Key Negotiations, Agreements and Coordination Efforts Between NextBridge and HONI
  - Continued discussions related to the execution of agreements with HONI regarding facility upgrades.
  - Discussions with HONI regarding the negotiation of the Construction Cost Recovery Agreement.
- Status and Changes to Access Road and Transmission Line Crossings
  - Continued engagement with HONI to acquire land rights and/or obtain permits.

- Obtained approval from HONI for longitudinal (land) access associated with WFs 3, 4, 5, 6, 9, 10 and 11.
- Met with HONI and IESO regarding overhead transmission line crossing designs.
    - HONI is now open to NextBridge crossing T1M lines.
    - NextBridge reached a tentative agreement with HONI on outstanding crossing items and is working towards securing agreements in writing.
    - Evaluating crossing approvals received from HONI.

- Other Material Developments, Issues or Risks Related to the Coordination Between NextBridge and HONI
    - No other material developments or issues to report during this period.
    - Risks related to the Coordination efforts between NextBridge and HONI can be found below in Section 4. A.

2. Construction Schedule Update

A. Project Map

B. Milestone Updates

Following the OEB Decision and Order approving the LTC application the February 11, 2019, milestone dates were revised to meet a new construction schedule based on the new in-service date. Updates on the progess of these milestones are found in the table below.

Activity	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Regulatory			
Oral Hearing Start	Completed		
OEB LTC Decision and Order	Completed		
OEB approval of authority to expropriate	Completed		
Register approved Plan of Expropriation and issue relevant Expropriation Act Notices/Offers	December 2019		
Obtain possession of expropriated lands for construction purposes	March 2020		
Environmental[7]			
Approval of the Amended EA	Completed		

[6] Schedule dates were revised to meet a new construction schedule following the Leave to Construct award based on the new in-service date.

[7] Apart from the EA which has been issued, based on the WF approach to construction, not all permits are needed at start of construction on the Project as some WFs will have all necessary permits to start construction.

Activity	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Approval by MECP of Permit to Take Water	4Q 2019	N/A	A Permit to Take Water is no longer anticipated to be required and this row will be removed for the next reporting period.
Approval by MECP of ECA - Camp Wastewater	2Q 2020		
Approval by MNRF of Water Crossing Permits	3Q 2019 to Q1 2020		
Approval by MECP of Species at Risk Permits (Bat maternity roosts, Eastern whip-poor-will)	Completed		
Approval by MECP of Species at Risk Permits (Caribou, Bat hibernacula)	4Q 2019		
Approval of ECCC SARA Bat hibernacula and caribou permit	4Q 2019		
Approval of MECP Provincial Park & Conservation Reserve Management Plan Amendments	4Q 2019		
Lakehead Region Conservation Authority Permit	Completed		
Transport Canada Section 67 for Transport Canada Lands	3Q-4Q 2019		
Transport Canada Navigation Protection Act Canada permit	3Q-4Q 2019		
Fisheries and Oceans Canada Navigable Waters Permit	3Q 2019 to 1Q 2020		
Indigenous Service Canada Section 67 for Reserve Lands	3Q-4Q 2019		

Activity	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Infrastructure Ontario Class Environmental Assessment	4Q 2019		
MTCS - Historical and Cultural Resources acceptance	4Q 2019		
Land Acquisition			
Substantial completion of signing of option agreements	Completed		
Crown Land Disposition Application filed	3Q-4Q 2019		
Third party Crossing agreements complete	3Q-4Q 2019		
MNRF approval of Crown Lease/Land Use Permits	3Q 2019 to 1Q 2020		
MNRF approval of Crown Land Work Permits	3Q 2019 to 1Q 2020		
MTO approval of Land Use and Building Permits	3Q-4Q 2019		
MTO approval of Entrance Permits	3Q-4Q 2019		
MTO approval of Encroachment Permits	3Q-4Q 2019		
Indigenous Relations			
Indigenous Service Canada approval of Land Related Permits	4Q 2019		

Activity	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
HONI - Related			
HONI approves Longitudinal Access	Approved		
HONI Approves Transmission Crossing Application	3Q 2019	4Q 2019	A tentative agreement was reached in 3Q 2019 and is now expected to be concluded in writing in 4Q 2019.
NextBridge files Sec 101 Application (If not approved by HONI)	4Q 2019		
HONI Substations commissioned[8]	4Q 2021		
Engineering & Construction			
Commence Clearing & Access	Commenced		
Commence Geotech and Foundations	4Q 2019		
Commence Towers Assembly	4Q 2019		
Commence Towers Erection	1Q 2020		
Commence Conductor Stringing	2Q 2020		

[8] Per Exhibit B, Tab 11, Schedule 1 of Hydro One Station work LTC application.

Activity	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Work Front 1 - Commence Clearing & Access	Commenced		
Work Front 1 - Commence Geotech and Foundations	4Q 2019		
Work Front 1 - Commence Towers Assembly	4Q 2019		
Work Front 1 - Commence Towers Erection	1Q 2020		
Work Front 1 - Commence Conductor Stringing	1Q 2020		
Work Front 2 - Commence Clearing & Access	1Q 2020		
Work Front 2 - Commence Geotech and Foundations	1Q 2020		
Work Front 2 - Commence Towers Assembly	1Q 2020		
Work Front 2 - Commence Towers Erection	1Q 2020		
Work Front 2 - Commence Conductor Stringing	2Q 2020		
Work Front 3 - Commence Clearing & Access	1Q 2020		
Work Front 3 - Commence Geotech and Foundations	1Q 2020		
Work Front 3 - Commence Towers Assembly	2Q 2020		

Activity	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Work Front 3 - Commence Towers Erection	2Q 2020		
Work Front 3 - Commence Conductor Stringing	3Q 2020		
Work Front 4 - Commence Clearing & Access	2Q 2020		
Work Front 4 - Commence Geotech and Foundations	2Q 2020		
Work Front 4 - Commence Towers Assembly	3Q 2020		
Work Front 4 - Commence Towers Erection	3Q 2020		
Work Front 4 - Commence Conductor Stringing	3Q 2020		
Work Front 5 - Commence Clearing & Access	1Q 2020		
Work Front 5 - Commence Geotech and Foundations	1Q 2020		
Work Front 5 - Commence Towers Assembly	4Q 2020		
Work Front 5 - Commence Towers Erection	1Q 2021		
Work Front 5 - Commence Conductor Stringing	1Q 2021		
Work Front 6 - Commence Clearing & Access	1Q 2020		

Activity	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Work Front 6 - Commence Geotech and Foundations	1Q 2020		
Work Front 6 - Commence Towers Assembly	1Q 2020		
Work Front 6 - Commence Towers Erection	1Q 2020		
Work Front 6 - Commence Conductor Stringing	3Q 2020		
Work Front 7 - Commence Clearing & Access	1Q 2020		
Work Front 7 - Commence Geotech and Foundations	2Q 2020		
Work Front 7 - Commence Towers Assembly	3Q 2020		
Work Front 7 - Commence Towers Erection	3Q 2020		
Work Front 7 - Commence Conductor Stringing	4Q 2020		
Work Front 8 - Commence Clearing & Access	1Q 2020		
Work Front 8 - Commence Geotech and Foundations	3Q 2020		
Work Front 8 - Commence Towers Assembly	4Q 2020		
Work Front 8 - Commence Towers Erection	4Q 2020		

Activity	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Work Front 8 - Commence Conductor Stringing	1Q 2021		
Work Front 9 - Commence Clearing & Access	1Q 2020		
Work Front 9 - Commence Geotech and Foundations	3Q 2020		
Work Front 9 - Commence Towers Assembly	4Q 2020		
Work Front 9 - Commence Towers Erection	4Q 2020		
Work Front 9 - Commence Conductor Stringing	2Q 2021		
Work Front 10 - Commence Clearing & Access	3Q 2020		
Work Front 10 - Commence Geotech and Foundations	3Q 2020		
Work Front 10 - Commence Towers Assembly	4Q 2020		
Work Front 10 - Commence Towers Erection	1Q 2021		
Work Front 10 - Commence Conductor Stringing	3Q 2021		
Work Front 11 - Commence Clearing & Access	3Q 2020		
Work Front 11 - Commence Geotech and Foundations	3Q 2020		

Activity	Post-LTC Decision Baseline Target Date[6]	Revised Date	Variance Reason/Potential Impact
Work Front 11 - Commence Towers Assembly	1Q 2021		
Work Front 11 - Commence Towers Erection	2Q 2021		
Work Front 11 - Commence Conductor Stringing	3Q 2021		
Project Construction Substantially Complete	4Q 2021		
Project Commissioning Commences	4Q 2021		
Project Commissioning Complete - In Service	4Q 2021		
Final acceptance and release of General Contractor	4Q 2021		

C. Permit and Approval/Authorization Requirements by Work Front

Work Front	Remaining Major Permits and Approvals/Authorizations[9]	Target Date
1	1 Species at Risk, 65 Water Body Crossings (78 local received), 32 Overhead Crossings 4 Work Permit and Land Use Permit, 0 Access	September 2019
7	0 Species at Risk, 30 Water Body Crossings, 13 Overhead Crossings, 3 Work Permit and Land Use Permit, 0 Access	October 2019
2	0 Species at Risk, 26 Water Body Crossings, 5 Overhead Crossings 4 Work Permit and Land Use Permit, 24 Access	October 2019
6	2 Species at Risk (including Caribou), 70 Water Body Crossings (2 federal), 60 Overhead Crossings, 3 Work Permit and Land Use Permit,1 Phase I ESA, 437 Access	December 2019
8	0 Species at Risk, 27 Water Body Crossings, 16 Overhead Crossings, 4 Work Permit and Land Use Permit, 19 Access	November 2019
3	1 Species at Risk, 51 Water Body Crossings, 34 Overhead Crossings 6 Work Permit and Land Use Permit,1 Phase I ESA, 291 Access	November 2019
9	0 Species at Risk, 53 Water Body Crossings, 32 Overhead Crossings 4 Work Permit and Land Use Permit, 146 Access	November 2019
10	0 Species at Risk, 101 Water Body Crossings, 7 Overhead Crossings 4 Work Permit and Land Use Permit, 314 Access	November 2019
4	0 Species at Risk, 21 Water Body Crossings, 3 Overhead Crossings 4 Work Permit and Land Use Permit, 242 Access	November 2019
5	1 Species at Risk, 77 Water Body Crossings, 8 Overhead Crossings 3 Work Permit and Land Use Permit, 312 Access	December 2019

[9] The number of Major Permits and Approvals/Authorizations are subject to change as access plans evolve.

Work Front	Remaining Major Permits and Approvals/Authorizations[9]	Target Date
11	2 Species at Risk, 90 Water Body Crossings, 25 Overhead Crossings 3 Work Permit and Land Use Permit, 286 Access	December 2019

3. Construction Cost Update

A. Project Cost Update Summary

Construction costs for the EWT Project are forecasted to be on budget when compared to the LTC application budget. 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.

After the issuance of the LTC, NextBridge undertook a re-budgeting effort based on the in-service date change from 4Q 2020 to 4Q 2021. The re-budgeting effort incorporated the timing of Indigenous and stakeholder consultation, environmental studies, permits, approvals, and authorizations to support the new in-service date.

As a result of the re-budgeting effort, NextBridge identified that many of the cost breakdowns contained within the originally filed LTC application budget from July 31, 2017, could be more efficiently tracked during the construction phrase of the Project. For example, Indigenous consultation and participation activities in communities were combined to better reflect the nature of engagement on a community-by-community basis, instead of by activity. The combination of categories is expected to provide increased clarity on the tracking of the forecasted costs.

B. Project Cost Update Table

Cost Categories for NextBridge's Construction Costs Reporting		Actuals Spent		Budget			Forecast Budget Variance			
		A Spent This Reporting Period $	B Total Spent To Date $	C Budget Per LTC Application $	D=C-B Budget Remaining $	E=D/C*100 Budget Remaining %	F Forecast Budget Change $	G Forecast Budget Change %	H Revised Total Budget $	Reasons For Change
Engineering & Construction		**32,561,784**	**75,025,240**	**572,761,388**	**497,736,148**	**87%**	**41,505,901**	**7%**	**614,267,289**	**Revised based on in-service date**
1	Engineering, Design and Procurement	1,184,629	5,190,984	19,342,245	14,151,261	73%				
2	Materials and Equipment	4,367,708	4,367,708	89,408,231	85,040,523	95%				
8	Site Clearing, Access	20,159,761	22,279,561	107,463,339	85,183,778	79%				
9	Construction	6,849,687	43,186,987	356,547,573	313,360,586	88%				
Environmental & Remediation Activities		**2,446,630**	**8,622,413**	**26,929,260**	**18,306,847**	**68%**	**4,348,606**	**16%**	**31,277,866**	**Revised based on in-service date**
3	Environmental and Regulatory Approvals	2,446,630	8,622,413	13,030,561	4,408,148	34%				
10	Site Remediation	-	-	13,898,699	13,898,699	100%				
Indigenous Activities		**1,002,050**	**8,741,151**	**20,211,000**	**11,469,849**	**57%**	**3,442,555**	**17%**	**23,653,555**	**Revised based on in-service date**
5	Indigenous Economic Participation	529,235	4,275,107	7,000,000	2,724,893	39%				
6	Indigenous Consultation	472,815	4,466,044	13,211,000	8,744,956	66%				
4	**Land Rights (excludes Aboriginal)**	**3,359,701**	**8,655,376**	**23,830,512**	**15,175,136**	**64%**	-	**0%**	**23,830,512**	
7	**Other Consultation**	**58,617**	**456,954**	**2,530,194**	**2,073,240**	**82%**	-	**0%**	**2,530,194**	
11	**Contingency**	-	-	**49,399,445**	**49,399,445**	**100%**	**(49,297,063)**	**-100%**	**102,382**	**Allocation of Contingency**
12	**Regulatory**	**407,328**	**2,715,022**	**5,405,078**	**2,690,056**	**50%**	-	**0%**	**5,405,078**	
13	**EWT Management**	**312,449**	**3,259,953**	**4,900,644**	**1,640,691**	**33%**	-	**0%**	**4,900,644**	
Total Project Spend		**40,148,559**	**107,476,110**	**705,967,521**	**598,491,412**	**85%**	-	**0%**	**705,967,521**	
14	**Interest During Construction (IDC)[1]**	**868,906**	**4,598,654**	**31,003,000**	**26,404,346**	**85%**	-	**0%**	**31,003,000**	
Total Construction Costs[2 3]		**41,017,466**	**112,074,763**	**736,970,521**	**624,895,758**	**85%**	-	**0%**	**736,970,521**	

1 IDC has not been reforecasted as interest rates will vary based on the OEB prescribed rates
2 On the record (EB-2017-0182)
3 Development Costs eligible for consideration as construction costs of $5.3 MM not reflected in column B. (OEB Decision, December 20, 2018)

C. Project Cost Update Summary by Department

Engineering & Construction (E&C)

The Project cost forecast for this department has not changed since the last reporting period.

Environment & Remediation Activities

The Project cost forecast for this department has not changed since the last reporting period.

Indigenous Activities

The Project cost forecast for this department has not changed since the last reporting period.

Land Rights (Non-Indigenous)

The Project cost forecast for this department has not changed since the last reporting period.

Other Consultation

The Project cost forecast for this department has not changed since the last reporting period.

Regulatory

The Project cost forecast for this department has not changed since the last reporting period.

EWT Management

The Project cost forecast for this department have not changed since the last reporting period.

4. Risk Management

A. Risk Management Issues, Potential Impacts and Mitigation Measures

Risk Item #	Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
1	**MECP delay in issuing caribou and bat hibernacula SAR permit**		• Delay in receipt of the caribou and bat hibernacula permit will force schedule compression in later years to meet the in-service date • Delay in issuance of the permit past December 1, 2019, may require the Project to work in restricted activity periods that were planned to be avoided		• Schedule risk can be mitigated through compression of construction activities in 2020-2021
2	**Agency delay in issuance of other environmental permit(s)**		• Delay in issuance of required approvals listed in table 2.C. to start clearing would increase cost due to the schedule compression required to mitigate schedule slip		• WF approach is designed to allow staggered issuance of permit approvals to facilitate staging of the start of construction and the start of construction in multiple segments simultaneously

Risk Item #	Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
3	**Delay in access to private, provincial, and federal lands**		• Lands not accessible in time for construction commencement date will affect Project schedule ○ Private lands not accessible through expropriation ○ Public lands not accessible through MNRF process ○ Federal lands not accessible through reserve crossing permits		• Pursue regulatory avenues available (e.g. expropriation with OEB, provincial mining recorder order) where access is not granted; establish work around/ accommodation plan for "no access" parcels in construction planning • Work with government on public and federal land access
4	**Delay in HONI station work**	Unknown[10]	• If stations are not ready for energization it will delay Project in-service date		• Communication and coordination with HONI during construction
5	**Delay in accessing HONI's crossings of access roads and transmission lines**		• Significant portions of lands not accessible in time for access road construction and stringing across HONI		• Continue to work with HONI to resolve crossing and access issues • Engagement with HONI

[10] This risk is dependent on HONI and the current status is only known by HONI.

Risk Item #	Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
			ROW lands will affect Project schedule		has led to crossing approvals and further discussion on allowing NextBridge to cross the HONI T1M lines • A Section 101 application could also be filed with the OEB for approval of required crossings if required

Risk Item #	Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
6	**Legal Challenges**		• Parties may file applications for judicial review or appeal of OEB decisions or other permit approvals and seek to stay construction • Risk has materialized in a current challenge from BZA First Nation • There may be some cost risk involved with defending these legal challenges		• Continue to proactively engage with First Nation and Métis communities, landowners and all other stakeholders in order to identify and address concerns
7	**Public Protests and/or Displays of Project Opposition**		• Potential for reputational impacts, but is unlikely to prevent forward progress given provincial approvals have been obtained		• Additional discussion and attempts to satisfy concerns

Risk Item #	Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
8	**Labour Strikes**		• Potential for labour actions and disruption/shutdown of construction activities, which could lead to cost and schedule impacts • Potential for media coverage and undesirable project optics		• Follow Project labour protocols as per master agreement with Canadian Union of Skilled Workers (CUSW) • Foster and maintain good relations and communication with CUSW and its members. Be cognizant of and manage potential for other unions to approach and recruit any non-CUSW members • Media response would be developed to provide public response

APPENDIX A

A. Introduction

In its October 10, 2019, letter to NextBridge, the OEB noted that according to the Quarterly Report filed on August 30, 2019, NextBridge had allocated 99.8% of its $49 million contingency. To better understand the impact of this allocation on the overall budget and potential future Project cost increases, the OEB directed NextBridge in this Quarterly Report to provide ". . . a detailed explanation of what it is doing to actively manage its budget, reduce risks, and contain costs, including mitigating any potential cost increases for the East-West Tie Project."

In response to the OEB's direction, and to provide context, upon receiving the LTC in February of 2019, NextBridge engaged all cost category disciplines in the following activities:

- Updating the construction schedule to meet an October 2021 in-service date (ISD); and
- Re-budgeting based on the new construction start date and the new ISD.

The revision of the construction schedule and re-budgeting exercise informed the OEB Quarterly Report submitted on August 30, 2019. That was the first and only Quarterly Report submitted to the OEB since April 2019.

As part of the re-budgeting activities, in order to contain costs and mitigate risks, NextBridge undertook the following actions:

- As required by the OEB, NextBridge coordinated with HONI to align the new ISD of 4Q 2021 with the ISD for the HONI substations.
- Based on the new ISD, the construction schedule was updated to maximize the efficiency of working seasons and construction in environmentally sensitive areas including SAR habitat.
- Based on the new construction schedule, NextBridge aligned the individual department team leads' cost categories with the updated schedule and adjusted deliverables to the new ISD, including the identification and mitigation of risks associated with the new ISD.
- NextBridge also assessed current progress versus the updated construction schedule.
    - In some instances, to meet the revised construction schedule, activity duration needed to be modified.
    - For example, the environmental permitting schedule needed to be updated based on the conditions in the approved EA for additional stakeholder and Indigenous review of DPPs.

- To further mitigate risks and control costs, NextBridge assessed resource needs and made changes in order to be more efficient during construction.
    - For example, the general contractor was chosen to perform the environmental permitting work since they were already in the field for construction.
    - This approach mitigated the risks associated with the need to coordinate the timing of obtaining required environmental permits in time to ensure construction could proceed without interruption.
    - As a cost control measure, this approach reduced additional training and mobilization requirements.
- All cost category discipline leads and teams worked with NextBridge's Project Director and the Project Management Office to detail their costs, contracts, and timing of spend based on this effort.

B. Allocation of Contingency

During the re-budgeting and updating of the construction schedule, NextBridge proactively allocated contingency funds to cost category disciplines based on a forecasted risk allocation, rather than waiting for the actual expenditure to be incurred to allocate the contingency. The allocation of contingency took into account the new ISD, known contracted rates, forecasted costs and actual costs spent to date. Therefore, while the contingency was allocated in a proactive manner, it was with the understanding that known costs (both spent and contracted) would be actively managed so as 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.

C. Cost Management

Monitoring and Reporting

With the new Project ISD and known contracted rates (discussed below), forecasted costs, and actual costs spent to date, NextBridge is focused on construction execution and monitoring for risk mitigation and cost control. NextBridge also uses the following process to report to the OEB on its progress on a quarterly basis.

On a monthly basis the following activities are performed by the Project Management Office and cost category discipline leads to monitor, record and control costs and mitigate Project risks:

- Cost accounting is maintained by NextBridge's Project Management Office.
- Costs are compared on a budget versus actual basis to identify any variances.
    - Variances are used by the Project Management Office to maintain cost tracking.

- The Project Management Office meets with the cost category discipline lead 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 budget review assesses:

  - Cost performance;

  - Schedule performance;

  - Identification of new risk factors;

  - Any major changes to forecast; and

  - Vendor performance.

- The Project Management Office and the cost category discipline lead also monitor vendor costs against the contractual amounts including purchase orders (POs) where a comparison of work progress and payments is performed to ensure appropriate billing.

- The Project Management Office identifies variations identified and any overall Project cost impacts and reports these findings to the Project Director. The Project Director then uses the information to ensure all key Project milestones are being completed as planned and costs are being controlled. If there are outstanding questions that need to be discussed further, the Project Director and Project Management Office schedule meetings with the affected discipline team leads to review the risks, the potential for cost changes and mitigation plans. In addition to cost monitoring, and to ensure Project progress and risk mitigation, the Project Director is also actively tracking and reviewing each discipline's practices including:

  - Reviewing performance measures (e.g. land procured, permits obtained, work fronts progression, construction milestones, etc.);

  - Schedule performance;

  - Risk management plans; and

  - Change management practices (detailed below).

- The Project Director holds regular meetings to monitor overall progress and actively identify any cross functional discipline issues that need addressing or could introduce new risks to the Project.

- Based on the above, any newly identified cost variances or risks will be reported in the OEB quarterly reports.

This monitoring and reporting allows NextBridge to manage the expected budget as most costs are now essentially fixed for the majority of activities.

Procurement Processes

As of 4Q 2019, nearly 90% of construction costs have been contracted, which reduces future volatility in pricing and ensures resource availability due to the contracts having an agreed upon price and negotiated scope of work. The scope of work has been developed by an experienced supply chain team and the NextBridge cost category discipline lead's specific Project knowledge, both of which have been applied to reduce Project risks and costs.

Examples of effective procurement processes to contain costs and mitigate risks include:

- E&C
    - Securing a fixed price engineering, procurement, and construction (EPC) contract with the general contractor that assigns the risk for certain aspects of the Project including labor cost changes, weather impacts during construction, sub-surface risk mitigation, and material costs.
    - Allocation of contingency to allow for the renegotiation of unit rates for a 4Q 2021 ISD.
- Indigenous Engagement
    - The majority of the expected CFAs with Indigenous groups have been executed, making previously unknown costs more certain.
- Environment
    - The majority of activities have been contracted with the general contractor, which includes a revised work scope as a result of the approved Amended EA.

In order to improve cost certainty, NextBridge has competitively bid the following fixed price contracts:

- Steel Pole Structures;
- Towers;
- Conductor;
- Overhead ground wire;
- Optical ground wire;
- EPC; and
- Environmental activities, such as preparing DPPs, obtaining work permits, and obtaining a variety of environmental permits such as waterbody crossing permits and SAR permits.

NextBridge entered into these fixed contracts as a cost containment measure to reduce the likelihood of significant budget increases to the Project.

Change Management Practices

A significant cost management tool is the change management practice that NextBridge employs. While NextBridge has not processed, nor has knowledge of any pending change orders since the re-budgeting effort, it is important to detail this cost containment process in the event change orders are processed in the future. Under this change management practice, costs for work cannot exceed the set contract amount for the above activities unless a change order is approved.

NextBridge follows the below process where change orders must comply to ensure costs are managed appropriately:

- Coordination with supply chain subject matter experts to ensure the change order was not a part of the original scope of work.
- The cost category discipline lead and supply chain representative(s) perform a thorough review of the scope of work to determine the evolution of the change that occurred and how it related to the original scope of work.
- If the cost category discipline lead determines that a change order should be proposed, they must provide the Project Director with:
    - The reason for the change;
    - The criticality of this change to Project completion;
    - The issue(s) that caused the change;
    - An analysis from the supply chain team of the scope of work and proposed change;
    - The modified new work scope with new risk mitigations that help avoid future changes; and
    - An evaluation of alternatives including an evaluation that there is no other less costly course of action.

The change order will not be approved until the cost category discipline leads adheres to the Budget Variance Memorandum Policy outlined below.

Budget Variance Memorandum Policy and Procedure (Attachment A)

NextBridge is committed to containing its costs for the Project. As noted above, NextBridge is accomplishing this goal by securing contracts for nearly 90% of the construction costs, which, in turn, reduces the likelihood for budget increases. Since the Project was re-budgeted for the new ISD, NextBridge implemented a cost containment tool to review and control proposed budget increases. The cost containment tool is used prior to any increases in change orders. The tool is a Budget Variance Memorandum Policy and Procedure which requires cost category discipline leads to notify the Project Director of a potential budget increases related to their portion of the Project's budget.
After providing notification to the Project Director, the discipline lead is required to provide a detailed memorandum to the Project Director which identifies the need for the budget increase and

provides a thorough analysis of the drivers and justification for the proposed budget increase. The discipline lead then meets with NextBridge's Project Director, Senior Project Manager, Senior Director of Business Management, Senior Director of Engineering and Construction, Manager of Project Controls and Managing Attorney to:

- Review and discuss the request for a budget increase; and
- Obtain a decision on whether the request for a budget increase will be approved.

As a cost containment measure, the Project Director will only allow an increase to a cost category's budget if it is critical to constructing and operating the Project.

Reached Agreement with HONI to Cross HONI's Existing T1M Line

During the LTC hearing, NextBridge proposed (in its response to Staff IRR #12) to cross HONI's existing T1M line. HONI objected to NextBridge crossing its T1M line due to reliability concerns, and, instead, proposed that the T1M would have to be relocated, which would have resulted in additional costs of approximately $1 to $3 million[11]. Recently, HONI and NextBridge worked with the IESO to come to a verbal agreement that would allow NextBridge to cross HONI's existing T1M line, provided that certain operational criteria are met. HONI's confirmation that T1M may be crossed without relocation furthers NextBridge's efforts to contain and manage costs, and NextBridge is expecting to secure this agreement in writing in 4Q, 2019.

[11] See Revised EB-2017-0364 HONI Lake Superior Link TC2 Thursday May 17 2018 p. 263.

D. Risk Register

In addition to the cost management practices above, the active management of the budget is also facilitated by the understanding and maintenance of a risk register. In order to maintain the overall project cost estimate provided in the last Reporting Period, the monitoring of risks and the reduction of potential likelihood of the realization of risks is ongoing. In addition to the risk management issues, potential impacts and mitigation measures reported in Section 4. A. of this Quarterly Report, the following risks, including many which were reported in the LTC Interrogatory #50[12] are also being actively managed in order to mitigate cost and schedule risk.

Risk Item #	Risk Item Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
1	Specific siting changes (route or soil conditions)		• Impacts to engineering design • Impacts on timing for acquiring necessary land rights and/or permits if new owners are encountered		Mitigation • Finalized route in the Project development process to allow for adequate time to consult on and perform required studies of the impacted areas • Worked with land services on design options • Ensured schedule allows for engineering adjustment of design and route • Signed fixed price contract with contractor to mitigate cost risk • Conducted geotechnical investigations to further mitigate risk

[12] Filed: 2018-09-24 EB-2017-0182/EB-2017-0194/EB-2017-0364 Exhibit I.NextBridge.STAFF.50. Risk Items 3, 20 and 28 from Interrogatory #50 have been removed as they are no longer valid. Risk Items 1, 2, 4, 5, 6, 7, 8 and 24 from Interrogatory #50 have been consolidated into new risk items and are now being tracked in Section 4. A. of the Quarterly OEB Report.

Risk Item #	Risk Item Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
					• Mitigation has been effective and continues to be implemented
2	Landowners claim mineral or mining rights delays land acquisition		• Impacts to schedule and costs associated with acquiring required land rights		Mitigation • Limited exposure to future mining rights issues through continued consultation efforts • NextBridge developed an approach to compensate for these types of interests and continues to work towards obtaining required consent agreements and easements where required • Purchased land in fee simple where required • Mining Land Tribunal mediations are taking place in order to acquire outstanding land rights • Rerouting is still being considered where required • Mitigation has been effective and continues to be implemented
3	Archaeological sites encountered		• Impacts to the construction schedule and costs due to delays from additional unknown archaeological assessment(s)		Mitigation • Stage 1 and Stage 2 archeological work was completed to mitigate risk by identifying archaeological sites to confirm presence within the proposed corridor • Engaged local Indigenous monitors to

Risk Item #	Risk Item Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
					review structure locations • Moved footprint and structures when possible to avoid known areas of archaeological potential • Developed working relationship with regulators to determine required mitigation measures • Preplanned for unforeseen occurrences through an unexpected discovery mitigation plan incorporated into the Construction Environmental Protection Plan (CEPP) • Schedule and cost risks are expected to be contained and/or minimized through implementation of the contingency plan in the CEPP • Mitigation has been effective and continues to be implemented
4	Transmission structure fabrication quality and timely deliveries		• Delays on the fabrication of structures and deliveries could impact Project schedule • Quality requirements of structures must be met in order to ensure durability and longevity of infrastructure		Mitigation • Implemented early procurement strategy which considered multiple supplier bases and reviewed on site Quality Assurance / Quality Control program • Applying sound project management practices to manage supplier • Close coordination with suppliers and contractors to avoid schedule delays

Risk Item #	Risk Item Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
					• Holding weekly conference calls with fabricators to ensure design and delivery compliance • NextBridge procured structures well before they were required for construction to mitigate risk • Mitigation has been effective and continues to be implemented
5	Material supply fabrication quality and delivery (rock anchors, insulators, conductor, OPGW/ OHGW, etc.)		• Delays on the fabrication of materials and deliveries could impact Project schedule • Quality requirements of materials must be met in order to ensure durability and longevity of infrastructure		Mitigation • Developed an early stage strategic sourcing and storage plan to mitigate material risk • Material supplier awards have been completed for conductor, OPGW and OHGW • Contracts for these services have been awarded • Mitigation has been effective and continues to be implemented
6	Ensure adequate structure Grounding		• Grounding requirements must be met in order to ensure durability and longevity of infrastructure		Mitigation • Flash density studies performed to identify lightening frequency and intensity • Prepared implementation of counterpoise measures in the event the design required them • Conducted soil resistivity studies • Decided to use lightning arresters to meet

Risk Item #	Risk Item Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
					OEB minimum technical requirements • Mitigation measure of early studies indicated need for changes to structures • This risk has been mitigated in the design through the use of lightning arresters consistent with mitigation plan • Lighting arrester usage was incorporated into the EPC contract to minimize potential cost risks • Mitigation has been effective and continues to be implemented
7	Civil work (clearing, access, pad prep & foundations) needs to be completed in timely order to support structure delivery and installation		• Delays the completion of civil work could impact Project schedule		Mitigation • Secure civil services contracts early with multiple contractors Impact • Risk was realized • Despite securing civil services early as planned, a risk to the schedule of completing this work may be impacted by delayed permitting • Reconfiguring workforce allotments to mitigate schedule risk • Mitigation has been effective and continues to be implemented
8	Uncertain subsurface conditions could		• Delays the completion of geotechnical work could impact Project		Mitigation • Desktop study and field observations completed

Risk Item #	Risk Item Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
	affect foundation installations (Geotechnical work)		schedule		• Alternative foundation options prepared for all conditions, each with differing cost implications • Signed fixed price contract with contractor to mitigate cost risk • Geotechnical investigations have been completed to date to mitigate risk • Mitigation has been effective and continues to be implemented
9	Reluctance of utilities or railroad to grant line energization without cathodic mitigation in place		• In-service delays could result if agreements are not reached in a timely fashion		Mitigation • Identified facility locations and initiated discussions with owners early so that locations and mitigation plans could be determined • NextBridge continues to consult with utilities, including Hydro One (HONI) and CP Rail • Mitigation has been effective and continues to be implemented
10	Increase in equipment and material costs		• Costs could rise if not mitigated through appropriate controls		Mitigation • Strategically implemented early Project phase procurement strategy to secure potential future price increases • Developed plan for escalation • The General Contractor now assumes pricing risk for equipment and material costs

Risk Item #	Risk Item Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
					• Mitigation has been effective and continues to be implemented
11	Weather or seasonal conditions affect construction		• Cost increases and schedule delays could result from adverse weather conditions encountered during construction		Mitigation • Scheduled resources and activities around positive and negative weather events. • Alternative construction methodologies and associated cost implications were investigated • Contingency increased to account for likely weather scenarios • Construction plan incorporates seasonality to mitigate risk • Mitigation has been effective and continues to be implemented
12	Highway / Road Repairs		• Damage to highways and roads resulting from the transportation of equipment and materials could increase costs to the Project • Timely accessibility to roads is required to ensure Project schedule adherence		Mitigation • Identified road use and access requirements early • Developed alternative delivery routes and methods to allow for avoidance of vulnerable roads • Where no alternatives routes existed, consulted with owners / authorities to ensure alternative access availability based on schedule coordination as required

Risk Item #	Risk Item Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
					• Significant engagement with Ministry of Transportation and municipalities for access routes has mitigated risk • Currently entering into road use agreements with municipalities • Potential road damages as a result of the works of the EPC will be the responsibility of the EPC • Mitigation has been effective and continues to be implemented
13	Having adequate and qualified construction resources available to meet Commercial Operation Date (COD)		• Schedule delays could result if adequate and qualified construction resources are not available to meet COD		Mitigation • Developed a strategic sourcing plan with large transmission contractors familiar with this type of construction early in order to mitigate labour risk • Analyzed local labour markets and develop active strategy to engage the local workforce • Worked with Indigenous partners to develop skilled Indigenous work force capabilities • Secured capable contractors to facilitate construction schedule • Contractor familiar with this type of construction has been contracted and is working with local communities and contractors, including Indigenous

Risk Item #	Risk Item Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
					resources, and has begun awarding work and construction activities utilizing these local assets • 190 participants in the Indigenous training program graduated from their applicable courses • Mitigation has been effective and continues to be implemented
14	Having available helicopter resources which will be used for over 80% of line construction		• Cost increases and schedule delays could result if adequate helicopter resources are not available to meet COD		Mitigation • Significantly limited the amount of helicopter work required • Secured EPC contractor with required helicopter resources available in advance • Ensured lay down and tower erection areas are available and multiple crews are engaged to fabricate structures and minimize helicopter down time • Contractor's preferred installation plans will minimize use of heavy-lift helicopters given the ground access planned • Mitigation has been effective and continues to be implemented
15	Reluctance of Independent Electricity System Operator (IESO)		• Timely crossing agreements are required in order to facilitate timely construction activities to		Mitigation • Identified all crossing locations early • Began consent discussions with HONI early • Minimized crossings through route

Risk Item #	Risk Item Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
	to grant transmission line clearances to perform crossing activities		avoid schedule delays		alignment • Developed pulling plan to possibly work around if required • Redirected work to other locations where possible mitigation plan continues to be implemented • Discussions are continuing with HONI • Mitigation has been effective and continues to be implemented
16	Concrete availability		• Adequate concrete resources are required in order to avoid scheduling delays and unanticipated cost increases		Mitigation • Foundations were designed to minimize concrete requirements • Material sourcing plan was developed to mitigate risk • Material availability to contractor is more than adequate • Mitigation has been effective and continues to be implemented
17	Hunting Season		• Working around active hunting areas could pose safety risks for workers and cause potential schedule delays		Mitigation • Dealing directly with local hunting guides to provide them with updated construction information during hunting season • Mitigation has been effective and continues to be implemented
18	Offsite service power and T1		• Inability to establish communication at construction trailers		Mitigation • Engaged early with local utilities and communities to gauge capabilities to

Risk Item #	Risk Item Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
	communications installed at construction trailers		using existing technology and infrastructure could cause cost impacts		support needs • Rural locations appeared to require significant work to provide service of both power and communications • Diesel generators and satellite communications were considered • Contractor selected camp locations with required services available nearby • Camps will now be located in close proximity to municipal services to mitigate this risk • Mitigation has been effective and continues to be implemented
19	Contracts and Price Changes due to uncertain Project work scope aspects		• Cost increases could result • Schedule delays could result		Mitigation • Implemented an early stage procurement strategy to secure potential future price increases • Nearly 90% of construction costs are already contracted on a PO • Minimal amounts of costs subject to future negotiation, inflation or other variability • In addition to costs contracted on PO's, the majority of Indigenous agreements have been executed which further reduces future variability and exposure

Risk Item #	Risk Item Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
					• Mitigation has been effective and continues to be implemented

ATTACHMENT A

Version 2.0 10/2019

NextBridge Budget Variance Authorization Request Memorandum Policy and Procedure

Scope

This policy and procedure applies to NextBridge's East-West Tie Project ("Project").

Purpose

This policy sets forth the analysis and process for reviewing a request to increase a Business Unit's budget for the Project.

Process

1. Timeline for Budget Variance Authorization Request Memorandum: A Team Lead shall draft a Budget Variance Authorization Request Memorandum ("BVAR Memorandum") within the following timeline, if possible:
    a. within five days of the Project Director determining that the applicable Business Unit's request for an increase is beyond that Business Unit's total budget for the Project; and,
    b. at least ten business days before the Business Unit's budget increase is required.

2. Distribute Budget Variance Authorization Request Memorandum to Distribution List: The Team Lead requesting the budget variance will distribute the BVAR Memorandum to the Distribution List.

3. Organize Meeting to Discuss Budget Variance Authorization Request Memorandum: The Director of Development in Business Management will organize a meeting for the Distribution List to discuss the BVAR Memorandum with the Team Lead. If possible, this meeting should take place a minimum of five (5) business days after the Team Lead distributed the BVAR Memorandum to the Distribution List. If necessitated by time constraints or other factors, and at the discretion of the NextBridge Project Director, this formal meeting requirement may be eliminated in favor of emailed decision from the NextBridge Project Director to the Team Lead and Distribution List.

4. Decision to Approve, Deny, or Modify Budget Variance Authorization Request Memorandum: During its meeting with the Team Lead, the Distribution List shall evaluate the BVAR Memorandum and provide a recommendation to approve, deny, or modify the BVAR Memorandum. Any request for a Business Unit to increase its budget by 10% or $100,000, whichever is smaller, will be brought before the Board of Directors for a decision. After the Board of Directors renders its decision, the Team Lead and Distribution List will be notified of the decision.

5. Location of Approved Budget Variance Authorization Memorandum: All BVAR Memorandums (including any emailed decision, the minutes from Team Lead's meeting with Distribution List, and any Board of Directors decision regarding a BVAR Memorandum) shall be kept in the Budget Variance Authorization Request Memorandum folder on the NextBridge SharePoint.

6. Team Leads and Distribution List: The Team Leads and Distribution List are included in Exhibit A. Any questions regarding additional persons who should be added to the Distribution List should be directed to [redacted], NextBridge Project Director, and [redacted], Business Management.

7. Budget Variance Authorization Memorandum Template: The BVAR Memorandum template is attached as Exhibit B. Please direct any questions regarding the BVAR Memorandum Template to [redacted], Business Management.

Exhibit A

Team Leads:

Business Units	*Team Leaders*
First Nation and Metis	[redacted]
Environmental	[redacted]
Land	[redacted]
Engineering & Construction	[redacted]
Operations and Maintenance	[redacted]
Regulatory	[redacted]

Distribution List:

Distribution List	*Required to Review Budget Variance Authorization Request Memorandum*
[redacted], NextBridge Project Director	x
[redacted], Managing Attorney	x
[redacted] NextBridge Senior Project Manager	x
[redacted] Senior Director NEET Business Management	x
[redacted], Manager Project Controls & Scheduling	X
[redacted] Senior Director Engineering & Construction	x
[redacted] Director of Development Business Management	x

Exhibit B

INTERNAL MEMORANDUM - October 2019 FORM	
To:	
Prepared By:	
Date:	
Project Name:	
Budget Variance Amount:	
Managing Attorney:	

BUDGET VARIANCE AUTHORIZATION REQUEST MEMORANDUM

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5.5. APPENDIX I –

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   Provide background information regarding the need for the Budget Variance Authorization Request.

   1.2. Conclusion

   Provide recommendation to address the issue that may require an increase to the East-West Tie budget.

   1.3. Options

   - Do Nothing
   - Proposed Activity
   - Any Other Option

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OEB QUARTERLY REPORT – Q3 2020

UPPER CANADA TRANSMISSION, INC.
(d/b/a NextBridge Infrastructure)

East-West Tie Line
Quarterly Construction Progress Report

Reporting Period: July 1, 2020 to September 30, 2020

Date Submitted: October 22, 2020

- In its Decision and Order dated August 7, 2013 (Designation Decision), the Ontario Energy Board (OEB or Board) named Upper Canada Transmission, Inc. (UCT), doing business as NextBridge Infrastructure (NextBridge), as the designated transmitter for the development of the East-West Tie transmission line (EWT Project or Project).

- On July 31, 2017, NextBridge submitted an application for leave to construct (LTC) the EWT Project, pursuant to section 92 of the Ontario Energy Board Act (OEB Act). On February 11, 2019, the OEB issued a Decision and Order approving the LTC application and amending the conditions of UCT's Electricity Transmission Licence to authorize it to proceed to the construction, expansion, or reinforcement of the transmission system for the EWT Project, pursuant to a directive to the OEB issued by the Minister of Energy, Northern Development and Mines and approved by Order in Council 52/2019 (OIC), dated January 30, 2019.

- On February 11, 2019, the OEB amended NextBridge's Electricity Transmission Licence to include conditions requiring NextBridge to report to the Independent Electricity System Operator (IESO) on the progress, timeliness, and cost-effectiveness of the EWT Project and provide such information that the OEB may from time to time require.

- On July 29, 2019, the OEB issued a letter outlining NextBridge's reporting requirements pursuant to sections 14.1 and 13.3 of its Electricity Transmission Licence.

- In accordance with the OEB's letter dated July 29, 2019, NextBridge is required to report quarterly on the 15th business day of each January, April, July, and October. NextBridge will continue to file such quarterly reports until the EWT Project is in-service and land restoration activities have been completed.

This report is organized as follows:

1	**Summary of the EWT Project Progress to June 30, 2020**	A detailed summary of the status of the EWT Project, including work completed during the reporting period, overall progress, cost and construction schedule updates, and emerging risks. Where applicable, impacts from changes to Hydro One Network Inc.'s (HONI's) station work will be noted. This section includes: • Table of Key Project Statuses; • Table of Activities in the Work Fronts (WFs) for the Reporting Period; and • Summary of Activities within the Reporting Period.
2	**Construction Schedule Update**	Construction milestones for the Project were identified in NextBridge's responses to Procedural Order #3, filed May 3, 2018 and updated September 24, 2018. NextBridge provided a letter to the OEB on September 3, 2020, to request an amendment to the in-service date (ISD) within the approved amended Leave to Construct Application to March 31, 2022. This section provides an overview of the updated milestones based on the permitting and approval/authorization requirements as they relate to the newly proposed Construction Schedule and includes: • Project Map • Updated Table of Milestone Updates; and • Permit and Approval/Authorization Requirements by WF. Where applicable, impacts from changes to HONI's station work will be noted.
3	**Construction Cost Update**	Period-specific cost summaries providing details for each cost category in NextBridge's Project cost budget, including: • Actual spent; • Percentage of budgeted costs spent to date; • Updated forecast; and • Material forecast variance (if applicable). This section also includes a Project Cost Update Summary and associated rationale for forecast variance and associated mitigating measures for negative forecast variances.
4	**Risk Management**	A summary of risks that have occurred or could potentially occur during construction, including a discussion of potential impacts on schedule, cost, or scope, and potential options for mitigating or eliminating the risk. This section includes: • Risk Management Issues, Potential Impacts, and Mitigation Measures Table.
5	**Reference Materials**	This report includes references to a correspondence related to a proposed amendment to the ISD. • Copies of related correspondence can be found in this section.

1. Summary of the EWT Project Progress During Reporting Period

A. Table of Key Project Statuses

Key Status	Summary
Stage of Construction	**Construction activities are ongoing in all work fronts** - Stringing activities started July 29, 2020. - Additional information on this topic can be found in Section 1. B. below.
Costs	**NextBridge continues to maintain focus on the budget and tracks updates monthly.** - Construction costs for the EWT Project are forecasted to be on budget as compared to the LTC application. - Costs associated with the COVID-19 Global Pandemic have not been estimated in their entirety and may not be known until well after construction is completed and the COVID-19 Global Pandemic is resolved. - Additional information on this topic can be found in Section 3. below.
Schedule	**Construction activities are ongoing in all work fronts** - The majority of permits have been obtained allowing for all construction phases to work simultaneously across the project. - NextBridge is working closely with contractor and associated regulators to obtain remaining outstanding permits. - Clearing and access activities ramped up when the September 1, 2020, clearing window opened. • Crews have cleared over 549 hectares and built over 119km of access road in September 2020. - NextBridge is making continuous efforts with the applicable parties and governmental agencies, including Ministry of the Environment, Conservation, and Parks (MECP), Ministry of Natural Resources and Forestry (MNRF), Ministry of Energy, Northern Development and Mines (MENDM), Ministry of Transportation (MTO), Infrastructure Ontario (IO), Fisheries and Oceans

Key Status	Summary
	Canada (DFO), Canada Wildlife Service (CWS), Environment and Climate Change Canada (ECCC), NAV Canada, Indigenous Services Canada (ISC), Transport Canada (TC), Indigenous engagement, and others, in order to maintain the current schedule. - Due to the temporary suspension of the construction of the Project due to COVID-19 precautions in April 2020, the Project construction schedule has been evaluated for impacts. - On September 3, 2020, NextBridge submitted a Notice to the OEB advising the Board that it proposed a change in construction schedule for the East-West Tie Line to reflect a change to the ISD of the East-West Tie Line from the 4Q 2021 to March 31, 2022. - Additional information on this topic can be found throughout this Report.
Emerging Risks	**Impacts of COVID-19 Global Pandemic on the Project.** Construction Impacts - NextBridge and its Indigenous and local partners consider the health and safety of their employees, contractors, and the general public to be their top priority. - NextBridge has continued taking additional steps to monitor the daily safety of workers on site, including screening new workers and workers who have recently travelled, modifying accommodations and travel of workers, providing additional cleaning and PPE resources, and daily temperature checks of everyone on site. - Weekly calls are held with the construction team to review COVID-19 impacts and discuss the need for further mitigation measures on site. Permitting and Authorization Impacts - During the temporary suspension of construction activities, NextBridge continued to work with applicable ministries, agencies, and Indigenous communities to acquire remaining outstanding permits and authorizations. - At this time, many ministries, agencies, and Indigenous communities are also facing impacts due to the COVID-19 Global Pandemic, including office closures, and may not be able to process NextBridge's requests in a timely manner.

Key Status	Summary
	• These impacts have been considered in the updated Project construction schedule.
Indigenous Activities	**Engagement Continuing** - NextBridge continues to engage with the 18 identified Indigenous communities in the Project area. - Engagement highlights include robust consultations on emerging information associated with culturally significant sites, provincial parks, and conservation reserve specific permitting, Indigenous facilitator program re-launch, ongoing monitoring of COVID-19 discussions, Caribou SAR permits and Section 28.2 Permits. - Ongoing engagement continues on capacity funding agreement for communities to retain third party experts or other engagement costs, where required. - Section 28.2 Permit process has concluded with Michipicoten First Nation and finalization of agreements are continuing with the one remaining community in which the Project crosses Pays Plat First Nations lands and progressing well towards conclusion. - Final negotiations have been completed with Pic Mobert First Nation, NextBridge, and the Federal Government on securing approvals for access requirements over ATR Lands where the Project requires temporary use. • NextBridge and Pic Mobert have nearly completed an agreement related to the cultural and historic issues which were raised by the community related to the White Lake and Nursery Lake areas • Mitigation plans are being developed to be put into place to minimize impacts, ensure the protection of cultural resources in the area to allow a modified construction plan to move forward in 4Q 2020. - NextBridge and its partners have officially relaunched the Indigenous Facilitator Program which was suspended in mid-March as a result of the COVID-19 Global Pandemic. • Currently, all seven communities have their facilitators back out in the field in a newly structured program being administered by Supercom Industries that ensures safety and compliance with COVID-19 safety protocols.

Key Status	Summary
	- NextBridge continues to be engaged with the six proximate Bamkushwada Limited Partnership (BLP) communities during the COVID-19 decision making process. - Additional information on this topic can be found in Section 1. C. below.
HONI Coordination	- NextBridge continued engagement and coordination activities with HONI on multiple fronts. - HONI approval was received for easements on the Lakehead and Marathon Transformer Stations (TSs). - HONI is completing its stakeholder review of the Wawa Transformer Station updated design drawings, related to the previously identified demarcation of the Project and expansion of their TS footprint which necessitated design changes. • NextBridge expects to finalize outstanding items regarding the Wawa TS lands with HONI in 4Q 2020. - Commenced discussions on Connection Facilities Agreement. - In response to correspondence received from the IESO[1] and OEB[2], discussions commenced with HONI to coordinate activities around the updated Project construction schedule. • A meeting has been scheduled between NextBridge and HONI in early October 2020. - NextBridge continued discussions with HONI regarding; • Outage Scheduling; • Overall Project schedule; • The latest draft of the Construction Cost Recovery Agreement including NextBridge suggested edits and comments; and, • The associated terms and conditions. - Additional information on this topic can be found in Section 1. C. below.

[1] A copy of the correspondence from the IESO can be found in Section 5 Appendix B

[2] A copy of the correspondence from the OEB can be found in Section 5 Appendix D

B. Table of Activities In Work Fronts[3] for the Reporting Period

Work Front	Environmental Permit Submissions	Land-ROW[4]	Land-Access[5]	Clearing Progress	Construction
1	• Detailed Project Plan (DPP) package submitted and 30-day review period has concluded. • Received easement agreement with HONI for Lakehead TS. • The easement agreement is undergoing closing and registration. • Completion expected in early 4Q 2020.	100%	100%	99%	• 99% tower assembly completed. • 99% tower foundations completed. • 41% of towers erected. • 69% of conductor strung.
7	• DPP package re-submitted[6] and 30-day review period has concluded. • Related permit applications submitted and received. • Minor permit amendments awaiting approval.	100%	100%	85%	• 85% tower assembly completed. • 85% foundations completed. • 74% access completed. • 27% of towers erected.
2	• DPP Package submitted and 30-day review period has concluded. • Related permit applications submitted and received.	100%	100%	100%	• 92% tower assembly completed. • 92% foundations completed. • 100% access completed. • 83% of towers erected.
6	• DPP Package submitted and 30-day review period has concluded.	100%	100%	90%	• 32% structures assembled.

[3] This is the currently proposed order of strategic WF execution and is subject to change.

[4] Percentage of linear distance of route acquired in kilometers. Unencumbered Provincial Crown Land (Unpatented Land, Conservation Reserves, Parks) are assumed secured, but are still subject to receiving Provincial Government approvals.

[5] Percentage of parcels with construction access requirements acquired. Construction access requirements on unencumbered Provincial Crown Land (Unpatented Land, Conservation Reserves, Parks) are subject to receiving Provincial Government approvals.

[6] Comments were received from the MNRF in regards to the submission of the DPP for WF 7 and the DPP package was re-submitted based on this feedback.

Work Front	Environmental Permit Submissions	Land-ROW[4]	Land-Access[5]	Clearing Progress	Construction
	• All related permit applications have been received. • Awaiting MECP approval for amended OBP to support all season access road construction.				• 36% foundations installed. • 89% access completed.
8	• DPP Package submitted and 30-day review period has concluded. • All related permits have been received. • Minor permit amendments awaiting approval.	100%	100%	66%	• No access to Pic Mobert ATR lands. • 56% access completed. • 33% structures assembled. • 26% foundations installed.
3	• DPP Package submitted and 30-day review period has concluded. • Kama Cliffs Conservation Reserve DPP has been approved. • All other related permit applications received. • Minor permit amendments awaiting approval.	100%	100%	91%	• Nipigon camp re-opened in June 2020. • 61% tower assembly completed. • 87% access completed. • 59% foundations installed. • 31% of towers erected.
9	• DPP Package submitted and 30-day review period has concluded. • All related permit applications received. • Minor permit amendments are awaiting approval.	100%	100%	80%	- 82% access completed. - 61% towers assembled. - 70% foundations completed.
5	• DPP Package submitted and 30-day review period has concluded. • All permit applications have been received. • All season crossing applications	96%	100%	30%	• Further site plan changes required to approve MNRF aggregate site permit. • No access to Pays Plat

Work Front	Environmental Permit Submissions	Land-ROW[4]	Land-Access[5]	Clearing Progress	Construction
	have been approved. • Minor permit amendments are awaiting approval.				Reserve lands. • 36% of access completed.
4	• DPP Package submitted and 30-day review period has concluded. • All MNRF permit applications have been submitted and approved. • Minor permit amendments awaiting approval.	100%	100%	46%	• 40% of access completed.
11	• DPP Package submitted and 30-day review period has concluded. • Permit applications have been submitted and approved. • Permit applications have been received. • Minor permit amendments are awaiting approval.	74%	100%	28%	• 18% of access completed.
10	• DPP Package submitted and 30-day review period has concluded. • Permit applications have been submitted. • Permit applications have been partially received. • Minor permit amendments are awaiting approval.	100%	100%	-	

C. Summary of Activities Within Reporting Period

Environment

- Species at Risk (SAR)
  - Received Overall Benefits Permit (OBP) for SAR from the MECP on December 24, 2019.
    - The OBP included multiple conditions requiring actions to avoid impact to SAR and mitigate for impacts to habitat.
  - The pre-construction conditions are being met and the post construction activities are in the process of being reviewed to understand the scope of the requirements.
  - NextBridge is seeking an amendment to allow all season access to be constructed in Caribou nursery habitat with an anticipated approval of 4Q 2020.
    - Although NextBridge does not intend to use all season access this winter, an approved amendment is being obtained in to mitigate potential other force majeure events occurring (e.g. increased COVID 19 infections) which could jeopardize the schedule.
  - The federal SARA Permit has been received.
- DPPs
  - DPPs have been submitted on all WFs.
  - All DPPs for Provincial Parks and Conservation Reserves have been submitted.
- WF Packages
  - Permit applications for all WFs were submitted.
  - Permits were issued for all WFs.
    - Some minor amendments related to watercourse crossing permits and access changes are being submitted across the Project as the need arises.
  - Continued productive discussions with:
    - MECP on Provincial Parks and Conservation Reserves work and land use permits, etc.; and,
    - MNRF on work and land use permits, etc.
- Permitting Requirements
  - Continued consultation with MECP, MNRF, DFO, CWS and other agencies regarding the Environmental Assessment (EA) and upcoming permitting requirements.
- EA Conditions

- Internal and contractor resources have been deployed to ensure continuous compliance with the conditions of the EA Approval using a comprehensive Construction Compliance Matrix for tracking purposes.
- NextBridge submitted an Annual Compliance Report outlining the results of the 2019 compliance monitoring program on May 27, 2020, to the Director of the Environmental Assessment and Permissions Branch of the MECP.
    - The final Report was approved by the Agency on August 25, 2020.

- Environment-Related Indigenous Discussions
    - Continued solicitation and incorporation of feedback and Traditional Ecologic Knowledge information provided by Indigenous communities and agencies.
    - Documented and responded to inquiries received from Indigenous communities with respect to the Project.

- Indigenous Facilitator Program
    - Indigenous Facilitators have been present along the right of way (ROW) since the commencement of construction, up until the temporary suspension of the Indigenous Facilitator Program on March 24, 2020.
    - This measure was taken in response to the evolving COVID-19 Global Pandemic and requirements for social distancing.
    - Planning was completed and the program relaunched in a phased in approach that saw all communities have their facilitator back in the field by fall 2020.
    - The newly structured program ensures that COVID-19 protocols are adhered to and upholds safety as a top priority.
    - NextBridge continues to work with Project partners and Indigenous communities to improve the Indigenous Facilitator Program structure and delivery.

Land

- Privately Held Land
    - Executed agreements with the Township of Nipigon to finalize easements on affected Township owned lands.

- Government Land and Permits
    - Obtained outstanding work permit approvals from the MNRF for WF 10.
    - Remaining work permits for WF 11 are still pending and expected to be issued by the MNRF in 4Q 2020.

- NextBridge continues to work with the MNRF to amend a site plan of permitted aggregate pit on Crown land in WF 5 to allow for the crossing of the Project.
- NextBridge continues to work with the MNRF to support the surrender of certain lands administered by Transport Canada and held by Her Majesty the Queen, in the Right of Canada to the Province of Ontario.
    - The lands are in WF 11 and are needed for the Project.
    - The MNRF expects to complete this process by the end of 4Q 2020.
- Continued engagement with third party utility and rail companies and secured remaining required access and overhead crossing approvals.
- 100% of required third party crossings have been secured.

- Finalized Acquisition with Outstanding Mining Leaseholders
    - NextBridge completed negotiations with all outstanding mining leaseholders and obtained the required consent agreements and easements required for the Project.

- General Updates
    - Continued legal surveys to support the land acquisition and permitting programs.
    - Responded to and tracked directly affected property owner and Crown interest holder inquiries and complaints regarding construction activities.
    - Obtained settlements with property owners and Crown interest holders pertaining to damage and disturbance claims as a result of construction activities.
    - Supported the acquisition of alternate worker camp and storage locations required for construction.

Regulatory

- Rate Case
    - NextBridge expects to submit a Rate Case Application to the OEB in Q4 2020.

- Mining and Land Tribunal (MLT) Proceedings
    - All proceedings have been successfully concluded and references will be removed from next Report.

Indigenous Engagement

- Continued Engagement Activities
    - NextBridge has documented and responded to inquiries and questions received from Indigenous communities with respect to the Project.

- Ongoing engagement has promoted open dialogue with communities.
- During the late summer the Project engagement team conducted a socially distanced tour of the ROW and met with all six BLP communities to participate in cultural ceremonies, conclude agreements and negotiations, and attend other engagement activities to ensure ongoing relationship building.
- NextBridge is regularly engaged with interested communities consulting on Project permitting, construction progress and other topics that arise during this phase of the Project.
- Biinjitiwabik Zaaging Anishnabek (BZA) Engagements
    - BZA continues to pursue an appeal and judicial review on the issuance of the LTC and OIC to NextBridge.
    - NextBridge, the Crown and BZA are in the final stages of negotiations related to the withdrawal of the proceedings.
- Pic Mobert Engagement
    - NextBridge remains engaged with Pic Mobert on the development of a mitigation plan for construction in the area of White Lake and Nursery Lake to ensure risk of impacts to cultural/traditional resources is minimized.
    - NextBridge and Pic Mobert are working through a process whereby an alternative crossing option will be engineered to avoid the placement of any structures on the island in White Lake in an effort to avoid cultural impacts up to and including the potential for burials on the sacred island.
    - While the construction contract anticipated skipping certain areas for potential cultural issues, the length of delay and potential design changes for crossing of White Lake may result in increased cost to NextBridge.
    - NextBridge anticipates re-commencement of construction activities in the area noted above in late fall 2020 once the First Nation lifts the Stop Work Order issued.
    - NextBridge is in the final stages of completing the Federal permit required to allow for ROW access over Pic Mobert ATR lands and expects those permits in fall 2020.
- NextBridge concluded work with Michipicoten First Nation (MFN) required to secure the Federal permit to traverse the ROW.
    - NextBridge, MFN and the Federal government fully executed the permit on June 30, 2020, and construction activities are commencing on Reserve lands in fall 2020.
- Pays Plat Engagements
    - NextBridge concluded the Federal 28.2 permit required to construct the line over Pays Plat Reserve lands in fall 2020.
    - Pre-construction activities have commenced.

- Capacity Funding Agreements (CFAs)

- CFAs had previously been offered to the 18 identified Indigenous communities to ensure adequate resources to continue with engagement on the Project during the construction phase.
- Progress has been made on finalizing all agreements where requested.
  - In some cases, communities were not interested in additional capacity funding.
- NextBridge continues to provide Project information to communities whether a CFA is in place or not.

- Impacts of COVID-19 Global Pandemic on Indigenous Communities
  - NextBridge continues to engage regularly with Indigenous communities on the impacts of COVID-19.
  - Generally, feedback from Indigenous communities has largely been positive related to the protocols NextBridge has implemented to ensure the safety of communities.

Community/Municipal Engagement

- Continued Engagement Activities
  - Finalized agreement with the Township of Nipigon and Rendezvous Ski Club for trail replacement/relocation.
  - Engaged with Township of White River and Township of Dorion during ROW tour of Indigenous communities and municipalities from August 31 to September 4, 2020.
  - Provided statement and photos to the Marathon Mercury regarding the purpose of the ROW tour to Indigenous communities and municipalities.
  - Conducted interview with a Dougall Media reporter on September 4, 2020, regarding construction progress, the purpose of the ROW tour, and community investment donations to the Township of Dorion.
  - Attained approval from the Township of White River to construct a camp at an alternate location in the Township.
  - At request of Township of Terrace Bay, confirmed that two parcels of highway commercial land would not be needed for the Project and the option to lease the lands could be terminated, permitting potential development on the parcels by an interested party.
  - Construction awareness signs continue to be posted on the ROW as construction crews progress and gain access.
  - Posted 2019 Compliance Report to the Project website.
  - Project Facebook Group continued to grow steadily with approximately 120 members as of the end of Reporting Period.
  - Monitored the Project email address and hotline for Project inquiries.

- Complaint Resolution Process
  - No formal complaints were submitted during this Reporting Period.

Engineering & Construction

- Materials
  - All deliveries of conductor, Optical Ground Wire, Overhead Ground Wire, and transmission towers were completed in Thunder Bay and continue to be delivered to the Marathon laydown yard.
    - Deliveries of towers continued to be slowed due to leftover backup from earlier CN rail blockades in February 2020, along with protests at the port of Montreal.
    - Alternate delivery options continue to be evaluated.

- Construction
  - Clearing and access crews have been working since the clearing window opened on September 1, 2020.
  - NextBridge expects to complete all clearing and access work by the end of spring 2021.
  - Additional foundation crews were engaged in activities in the summer to complete all available cleared sites in advance of new ones being cleared.
    - This initiative proved successful as crews were able to triple their historical monthly production.
    - Foundation crews began ramping down in September while focus moved to geotechnical investigations.
  - An additional erection crew was recently added to help close the gap between erected and assembled towers.
  - The first stringing span of 15 structures was completed on July 29, 2020.
    - Since the start of stringing activities, crews have completed approximately 40 km of conductor installation on over 100 structures.

- Detailed Engineering
  - Transmission line design Issued for Construction Review packages for all WFs have been issued and Issued for Construction packages are being issued as ROW is cleared and ground-truthing is being performed.
  - NextBridge is developing a plan to measure the high frequency tower resistance on a sample size of towers in order to validate grounding assumptions.
  - Working with vendors to supply lighting and marking for 35 towers which has been prescribed by Transport Canada.

- NextBridge requested and has received rationale from Transport Canada confirming its newly-proposed requirements.
- Transport Canada's newly-proposed requirements are related to the installation of lights and application of safety paint on a selection of towers.
- Through a competitive bidding process Drake lighting has been selected to supply the tower lights prescribed by Transport Canada.
- The majority of the lights prescribed by Transport Canada fall under the Canadian Aviation Regulations SOR/96-433 Part VI General Operating and Flight Rules-601.25 and are required at the discretion of the Minister who has determined these towers to be hazardous to air navigation.

- Conducting a feasibility study of a potential bypass of a HONI transmission line outside of the Wawa TS to mitigate the need for an extended outage period.

Coordination Efforts with HONI

- Status and Changes to Access Road and Transmission Line Crossings
  - Continued engagement with HONI to acquire necessary land rights and/or obtain permits.
  - Obtained amended approvals from HONI for longitudinal (land) access associated with WF8.
  - Met with HONI and IESO regarding overhead transmission line crossing designs and outages.
  - Obtained the land agreements associated with Lakehead and Marathon TS.
  - The land agreements associated with the Wawa TSs are outstanding.
    - NextBridge revised design drawings to incorporate HONI feedback for the Lakehead, Marathon, and Wawa TSs which has delayed the approval of these land agreements.
    - Expect to execute the Wawa TS agreement by the end of 4Q 2020.
    - Work sequence has been adjusted to address timing of land agreements and no schedule impacts are expected as a result of this outcome.

- Overview of Key Negotiations, Agreements, and Coordination Efforts Between NextBridge and HONI
  - Continued discussions related to HONI's Staging Plan which includes the coordination of facility upgrades with cable connections and outage requirements.
  - Discussions with HONI regarding the negotiation of the Construction Cost Recovery Agreement (CCRA).
    - NextBridge and HONI continued reviewing feedback and comments on the preliminary draft of the CCRA in 3Q 2020.
    - The CCRA and associated Terms and Conditions are under internal review and will undergo additional reviews by both parties in 4Q 2020.

- Commenced discussions on Connection Facilities Agreement.
- September 2021 is the current completion target date for the Connection Facilities Agreement, as discussed with HONI.
- As per letters received by NextBridge from the IESO dated August 28, 2020[7], and from the OEB on September 24, 2020[8], a schedule coordination meeting has been arranged with HONI on October 6, 2020.
    - A draft copy of the updated construction schedule[9] will be provided to HONI in advance of the meeting.

- Other Material Developments, Issues, or Risks Related to the Coordination Between NextBridge and HONI
    - NextBridge expects to conclude Grant of Easements for all three TSs with HONI by the end of 4Q 2020.
    - HONI is currently completing its stakeholder review of the updated design drawings for the Wawa Transformer Station, for the previously identified issue related to the demarcation of the Project and expansions of HONI's TS footprints that necessitated design changes at the TS lands.
        - This issue has delayed the finalization of land rights for the EWT Project on HONI TS lands, but is not expected to impact Project schedule at this time.

Risks related to the Coordination efforts between NextBridge and HONI can be found below in Section 4. A.

Registration Process with IESO

- NextBridge started the entity registration process with IESO as required by the IESO membership rules.
    - Target date for completion of registration process is in Q1 2021.

COVID-19 Global Pandemic

- On March 23, 2020, NextBridge provided an Intermediate Notice to the Board that, in order to help contain the spread of COVID-19, NextBridge was temporarily closing the work camps associated with the construction of the Project for the safety and health of the workers.

- After additional discussions with the local municipalities and Indigenous communities in Northwestern Ontario regarding the possible spread of COVID-19 and its potential impact on the

[7] A copy of the letter can be found in Section 5 Appendix B

[8] A copy of the letter can be found in Section 5 Appendix D

[9] A copy of the letter can be found in Section 2.B.

safety and health of its workers and communities, NextBridge decided to temporarily suspend all construction activities as of April 3, 2020.

- NextBridge, in consultation with local municipalities and Indigenous communities and under the advisement of local health authorities, resumed limited construction activities on May 19, 2020.

- NextBridge has since resumed all construction activities on the Project, and has subsequently made a request to the OEB[10] for an amendment to the ISD within the approved amended Leave to Construct Application to be changed to March 31, 2022, based on an updated construction schedule.

- The OEB responded to the requested amendment to the ISD within the approved amended Leave to Construct Application on March.

- NextBridge is tracking incremental construction costs related to the COVID-19 Global Pandemic and requested the Board to approve the creation of a subaccount of Account 2055 to do so in its April 22, 2020 letter to the Board.

Risks related to the COVID-19 Global Pandemic can be found below in Section 4. A.

[10] A copy of this correspondence can be found in Section 5 Appendix C

2. Construction Schedule Update

A. Project Map

B. Milestone Updates Table

On July 22, 2020, NextBridge submitted a letter[11] to the IESO, requesting confirmation that there is no unacceptable risk to reliability if the East-West Tie Line comes into service on March 31, 2022. The IESO responded on August 28, 2020 [12] that: "…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." On September 3, 2020, NextBridge by letter[13] advised the OEB that NextBridge proposed a change in construction schedule for the East-West Tie Line to reflect a change to the ISD of the East-West Tie Line from 4Q 2021 to March 31, 2022. The OEB responded by letter[14] on September 24, 2020, and requested, "…NextBridge and Hydro One to work towards ensuring the timely connection of stations and lines. The OEB also expects NextBridge will advise the OEB when the project schedules have been aligned and will include the necessary supporting details." and "…provide detailed information on its budget and schedule changes resulting from delays in obtaining permit approvals, the COVID-19 pandemic, and any other factors. The OEB asks that an up-to-date cost estimate and detailed schedule be provided in NextBridge's next quarterly report to be filed in October 2020."

In order to provide an understanding of the details of the proposal to change the ISD to March 31, 2022, NextBridge undertook an internal scheduling exercise where previously-reported milestone dates were revised to meet a new construction schedule based on the new proposed ISD. Post-LTC Decision Baseline Target Dates and the most recently reported revisions to those dates are included in the below table adjecent to Proposed Revised Dates Based on New ISD to illustrate the variances which are expected to exist with the newly proposed ISD. In subsequent reports, the Revised Date from 2Q 2020 Reporting Period will be removed and future variances will be defined in the "Variance Reason/Potential Impact" column.

The following updated construction schedule resulted from this internal scheduling exercise, and subsequently it will be shared with HONI in early October to support alignment of Project schedules. NextBridge and HONI have discussed continuing regular update meetings to ensure that schedules will be aligned to meet a March 31, 2022 ISD.

[11] A copy of the letter can be found in Section 5 Appendix A

[12] A copy of the letter can be found in Section 5 Appendix B

[13] A copy of the letter can be found in Section 5 Appendix C

[14] A copy of the letter can be found in Section 5 Appendix D

Activity	Post-LTC Decision Baseline Target Date	Revised Date from 2Q 2020 Reporting Period	Proposed Revised Dates Based on New ISD	Variance Reason/Potential Impact
Regulatory				
Oral Hearing Start	Completed			
OEB LTC Decision and Order	Completed			
OEB approval of authority to expropriate	September 2019			- Completed in 3Q 2019
Register approved Plan of Expropriation and issue relevant Expropriation Act Notices/Offers	December 2019	1Q 2020		- Completed in 1Q 2020
Obtain possession of expropriated lands for construction purposes	March 2020			- Completed in 1Q 2020
Environmental[15]				
Approval of the Amended EA	Completed			
Approval by MECP of ECA - Camp Wastewater	2Q 2020			
Approval by MNRF of Water Crossing Permits	3Q 2019 to Q1 2020	3Q 2020	4Q 2020	- The vast majority of permits have been received for all WFs, however a small number are outstanding in WFs 10 and 11 - Bridge amendment applications are being submitted on an as needed basis as construction starts in new WFs.
Approval by MECP of Species at Risk Permits (Bat maternity roosts, Eastern whip-poor-will)	3Q 2019			- Completed in 3Q 2019

[15] Apart from the EA which has been issued, based on the WF approach to construction, not all permits are needed at start of construction on the Project as some WFs will have all necessary permits to start construction.

Activity	Post-LTC Decision Baseline Target Date	Revised Date from 2Q 2020 Reporting Period	Proposed Revised Dates Based on New ISD	Variance Reason/Potential Impact
Approval by MECP of Species at Risk Permits (Caribou, Bat hibernacula)	4Q 2019			- Completed in 4Q 2019
Approval of ECCC SARA Bat hibernacula and caribou permit	4Q 2019	3Q 2020		- Completed in 3Q 2020
Approval of MECP Provincial Park & Conservation Reserve Management Plan Amendments	4Q 2019			- Completed in 4Q 2019
Lakehead Region Conservation Authority Permit	3Q 2019			- Completed in 3Q 2019
Transport Canada Section 67 for Transport Canada Lands	3Q-4Q 2019		4Q 2020	- Section 67 application is required and is expected to be received in 4Q 2020.
Transport Canada Navigation Protection Act Canada permit	3Q-4Q 2019	3Q 2020		- Complete in 3Q 2020.
Fisheries and Oceans Canada Letters of Advice	3Q 2019 to 1Q 2020	3Q 2020		- Complete in 3Q 2020.
Indigenous Service Canada Section 67 for Reserve Lands	3Q-4Q 2019	3Q 2020		- Completed in 3Q 2020.
Infrastructure Ontario Class Environmental Assessment	4Q 2019	1Q 2020		- Completed in 1Q 2020.
MHSTCI– Heritage, Sport, Tourism and Cultural Industries acceptance	4Q 2019	3Q 2020	4Q 2020	- Additional archeological field work will now be required in the 2020 Fall field season. - Revised milestone date not anticipated to impact construction schedule.
Land Acquisition				
Substantial completion of signing of option agreements	Completed			

Activity	Post-LTC Decision Baseline Target Date	Revised Date from 2Q 2020 Reporting Period	Proposed Revised Dates Based on New ISD	Variance Reason/Potential Impact
Crown Land Disposition Application filed	3Q-4Q 2019			- Completed in 4Q 2019
Third party Crossing agreements complete	3Q-4Q 2019	3Q 2020		- Completed in 3Q 2020.
MNRF approval of Crown Lease/Land Use Permits	3Q 2019 to 1Q 2020	2Q 2020		- Completed in 2Q 2020.
MNRF approval of Crown Land Work Permits	3Q 2019 to 1Q 2020	3Q 2020		- Completed in 3Q 2020.
MTO approval of Land Use and Building Permits	3Q-4Q 2019	1Q 2020		- Completed in 1Q 2020.
MTO approval of Entrance Permits	3Q-4Q 2019	1Q 2020		- Completed in 1Q 2020.
MTO approval of Encroachment Permits	3Q-4Q 2019	1Q 2020		- Completed in 1Q 2020.
Indigenous Relations				
Indigenous Service Canada (ISC) approval of Land Related Permits	4Q 2019	2Q 2020	4Q 2020	- NextBridge is finalising negotiations with Pays Plat First Nation and the Federal government and anticipates approvals in 4Q 2020. - Revised milestone date is not anticipated to impact the construction schedule.
HONI - Related				
HONI approves Longitudinal Access	3Q 2019			- Completed in 3Q 2019.
HONI Approves Transmission Crossing Application	3Q 2019	3Q 2020	4Q 2020	- Additional time required to finalize agreement at Lakehead TS. - Milestone substantially complete.

Activity	Post-LTC Decision Baseline Target Date	Revised Date from 2Q 2020 Reporting Period	Proposed Revised Dates Based on New ISD	Variance Reason/Potential Impact
				- Revised milestone date not anticipated to impact construction schedule.
NextBridge files Sec 101 Application (If not approved by HONI)	4Q 2019	N/A	4Q 2020	- HONI has approved the majority of the HONI line crossings including the crossing of the T1M lines. - NextBridge continues to work with HONI regarding one outstanding overhead crossing agreement at the Lakehead TS and expects to receive this agreement in 4Q 2020. - Accordingly, a Section 101 application will likely not be required.
HONI Substations commissioned[16]	4Q 2021		TBD	- The coordination of schedules with HONI is underway. - The revised date will be populated once it has been confirmed by HONI.
Engineering & Construction				

[16] Per Exhibit B, Tab 11, Schedule 1 of Hydro One Station work LTC application.

Activity	Post-LTC Decision Baseline Target Date	Revised Date from 2Q 2020 Reporting Period	Proposed Revised Dates Based on New ISD	Variance Reason/Potential Impact
Commence Clearing & Access	3Q 2019			- Commenced in 3Q 2019.
Commence Geotech and Foundations	4Q 2019			- Commenced in 4Q 2019.
Commence Towers Assembly	4Q 2019			- Commenced in 4Q 2019.
Commence Towers Erection	1Q 2020			- Commenced in 1Q 2020.
Commence Conductor Stringing	2Q 2020	3Q 2020		- Commenced in 3Q 2020.
Work Front 1 - Commence Clearing & Access	3Q 2019			- Commenced in 3Q 2019.
Work Front 1 - Commence Geotech and Foundations	4Q 2019			- Commenced in 4Q 2019.
Work Front 1 - Commence Towers Assembly	4Q 2019			- Commenced in 4Q 2019.
Work Front 1 - Commence Towers Erection	1Q 2020			- Commenced in 1Q 2020.
Work Front 1 - Commence Conductor Stringing	1Q 2020	3Q 2020		- Commenced in 3Q 2020.
Work Front 2 - Commence Clearing & Access	1Q 2020			- Commenced in 1Q 2020.
Work Front 2 - Commence Geotech and Foundations	1Q 2020	2Q 2020		- Commenced in 2Q 2020.
Work Front 2 - Commence Towers Assembly	1Q 2020	2Q 2020		- Commenced in 2Q 2020.
Work Front 2 - Commence Towers Erection	1Q 2020	3Q 2020		- Commenced in 3Q 2020.
Work Front 2 - Commence Conductor Stringing	2Q 2020	3Q 2020	4Q 2020	
Work Front 3 - Commence Clearing & Access	1Q 2020			- Commenced in 1Q 2020.
Work Front 3 - Commence Geotech and Foundations	1Q 2020	2Q 2020		- Commenced in 2Q 2020.
Work Front 3 - Commence Towers Assembly	2Q 2020			- Commenced in 2Q 2020.
Work Front 3 - Commence Towers Erection	2Q 2020	3Q 2020		- Commenced in 3Q 2020.
Work Front 3 - Commence Conductor Stringing	3Q 2020		3Q 2021	
Work Front 4 - Commence Clearing & Access	2Q 2020	3Q 2020		- Commenced in 3Q 2020.
Work Front 4 - Commence Geotech and Foundations	2Q 2020	3Q 2020	2Q 2021	
Work Front 4 - Commence Towers Assembly	3Q 2020		2Q 2021	
Work Front 4 - Commence Towers Erection	3Q 2020		3Q 2021	
Work Front 4 - Commence Conductor Stringing	3Q 2020		4Q 2021	
Work Front 5 - Commence Clearing & Access	1Q 2020			- Commenced in 1Q 2020.

Activity	Post-LTC Decision Baseline Target Date	Revised Date from 2Q 2020 Reporting Period	Proposed Revised Dates Based on New ISD	Variance Reason/Potential Impact
Work Front 5 - Commence Geotech and Foundations	1Q 2020	2Q 2020		- Commenced in 2Q 2020.
Work Front 5 - Commence Towers Assembly	4Q 2020		1Q 2021	
Work Front 5 - Commence Towers Erection	1Q 2021		1Q 2021	
Work Front 5 - Commence Conductor Stringing	1Q 2021		4Q 2021	
Work Front 6 - Commence Clearing & Access	1Q 2020			- Commenced in 1Q 2020.
Work Front 6 - Commence Geotech and Foundations	1Q 2020			- Commenced in 1Q 2020.
Work Front 6 - Commence Towers Assembly	1Q 2020			- Commenced in 1Q 2020.
Work Front 6 - Commence Towers Erection	1Q 2020	4Q 2020	1Q 2021	
Work Front 6 - Commence Conductor Stringing	3Q 2020		1Q 2022	
Work Front 7 - Commence Clearing & Access	1Q 2020			- Commenced in 4Q 2019.
Work Front 7 - Commence Geotech and Foundations	2Q 2020			- Commenced in 1Q 2020.
Work Front 7 - Commence Towers Assembly	3Q 2020			- Commenced in 1Q 2020.
Work Front 7 - Commence Towers Erection	3Q 2020			- Commenced in 3Q 2020.
Work Front 7 - Commence Conductor Stringing	4Q 2020		2Q 2021	
Work Front 8 - Commence Clearing & Access	1Q 2020			- Commenced in 1Q 2020.
Work Front 8 - Commence Geotech and Foundations	3Q 2020			- Commenced in 3Q 2020.
Work Front 8 - Commence Towers Assembly	4Q 2020			- Commenced in 3Q 2020.
Work Front 8 - Commence Towers Erection	4Q 2020		2Q 2021	
Work Front 8 - Commence Conductor Stringing	1Q 2021		3Q 2021	
Work Front 9 - Commence Clearing & Access	1Q 2020			- Commenced in 1Q 2020.
Work Front 9 - Commence Geotech and Foundations	3Q 2020			- Commenced in 3Q 2020.
Work Front 9 - Commence Towers Assembly	4Q 2020			- Commenced in 3Q 2020.
Work Front 9 - Commence Towers Erection	4Q 2020		3Q 2021	
Work Front 9 - Commence Conductor Stringing	2Q 2021		3Q 2021	
Work Front 10 - Commence Clearing & Access	3Q 2020			- Commenced in 3Q 2020.
Work Front 10 - Commence Geotech and Foundations	3Q 2020		2Q 2021	

Activity	Post-LTC Decision Baseline Target Date	Revised Date from 2Q 2020 Reporting Period	Proposed Revised Dates Based on New ISD	Variance Reason/Potential Impact
Work Front 10 - Commence Towers Assembly	4Q 2020		3Q 2021	
Work Front 10 - Commence Towers Erection	1Q 2021		4Q 2021	
Work Front 10 - Commence Conductor Stringing	3Q 2021		4Q 2021	
Work Front 11 - Commence Clearing & Access	3Q 2020			- Commenced in 3Q 2020
Work Front 11 - Commence Geotech and Foundations	3Q 2020		1Q 2021	
Work Front 11 - Commence Towers Assembly	1Q 2021		1Q 2021	
Work Front 11 - Commence Towers Erection	2Q 2021		4Q 2021	
Work Front 11 - Commence Conductor Stringing	3Q 2021		1Q 2022	
Project Construction Substantially Complete	4Q 2021		1Q 2022	
Project Commissioning Commences	4Q 2021		1Q 2022	
Project Commissioning Complete - In Service	4Q 2021		1Q 2022	
Final acceptance and release of General Contractor	4Q 2021		1Q 2022	

C. Permit and Approval/Authorization Requirements by Work Front Table

Work Front	Remaining Major Permits and Approvals/Authorizations[17]	Original Target Date Reported in 1st OEB Quarterly Report	Revised Target Date	Variance Reason/Potential Impact
1	0 Species at Risk 0 Water Body Crossings 0 Overhead Crossings 0 Work Permit and Land Use Permit 0 Access	September 2019		
7	0 Species at Risk 0 Water Body Crossings 0 Overhead Crossings 0 Work Permit and Land Use Permit 0 Access	September 2019	May 2020 → August 2020	• No major permits or approvals/authorizations outstanding in this WF at this time. • Known schedule impacts have been assessed and incorporated into the updated construction schedule.
2	0 Species at Risk 0 Water Body Crossings 0 Overhead Crossings 0 Work Permit and Land Use Permit 0 Access	September 2019	January 2020	• No major permits or approvals/authorizations outstanding in this WF at this time. • Known schedule impacts have been assessed and incorporated into the updated construction schedule.
6	1 Species at Risk Amendment (including Caribou) 0 Water Body Crossings 0 Overhead Crossings	December 2019	May 2020 → November 2020	• Awaiting agency approval of amended Overall Benefit Permit to allow construction of all season access roads if needed.

[17] The number of Major Permits and Approvals/Authorizations are subject to change as access plans evolve.

Work Front	Remaining Major Permits and Approvals/Authorizations[17]	Original Target Date Reported in 1st OEB Quarterly Report	Revised Target Date	Variance Reason/Potential Impact
	0 Work Permit and Land Use Permit 1 Phase I ESA 0 Access			• Known schedule impacts have been assessed and incorporated into the updated construction schedule.
8	0 Species at Risk 0 Water Body Crossings 0 Overhead Crossings 4 Work Permit and Land Use Permit 5 Access	September 2019	May 2020 → November 2020	• Awaiting necessary federal permits and approvals on Pic Mobert ATR lands as mentioned earlier in the Report. • Awaiting approval for Pic Mobert ATR Land from ISC in order to apply for necessary work permit. • Known schedule impacts have been assessed and incorporated into the updated construction schedule.
3	0 Species at Risk 2 Water Body Crossings 0 Overhead Crossings 4 Work Permit and Land Use Permit 1 Phase I ESA 3 Access	September 2019	May 2020 → October 2020	• Awaiting necessary provincial permits and approvals. • Known schedule impacts have been assessed and incorporated into the updated construction schedule.
9	0 Species at Risk 1 Water Body Crossings 0 Overhead Crossings 1 Work Permit and Land Use Permit 0 Access	September 2019	October 2020	• Awaiting necessary provincial permits and approvals. • Known schedule impacts have been assessed and incorporated into the updated construction schedule.

Work Front	Remaining Major Permits and Approvals/Authorizations[17]	Original Target Date Reported in 1st OEB Quarterly Report	Revised Target Date	Variance Reason/Potential Impact
5	0 Species at Risk 2 Water Body Crossings 0 Overhead Crossings 2 Work Permit and Land Use Permit 0 Access	December 2019	May 2020 → October 2020	• Awaiting necessary provincial permits and approvals. • Known schedule impacts have been assessed and incorporated into the updated construction schedule.
4	0 Species at Risk 2 Water Body Crossings 0 Overhead Crossings 2 Work Permit and Land Use Permit 0 Access	November 2019	May 2020 → October 2020	• Awaiting necessary provincial permits and approvals. • Known schedule impacts have been assessed and incorporated into the updated construction schedule.
10	0 Species at Risk 3 Water Body Crossings 0 Overhead Crossings 4 Work Permit and Land Use Permit 2 Access	November 2019	May 2020 → October 2020	• Awaiting necessary provincial permits and approvals. • Known schedule impacts have been assessed and incorporated into the updated construction schedule.
11	0 Species at Risk 4 Water Body Crossings 0 Overhead Crossings 5 Work Permit and Land Use Permit 2 Access	December 2019	May 2020 → October 2020	• Awaiting necessary provincial permits and approvals. • Known schedule impacts have been assessed and incorporated into the updated construction schedule.

3. Construction Cost Update

A. Project Cost Update Summary

Construction costs for the EWT Project are forecasted to be on budget when compared to the LTC application budget. 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. However, at this point in time the costs related to the COVID-19 Global Pandemic are unknown.

B. Project Cost Update Table

Cost Categories for NextBridge's Construction Costs Reporting		Actuals Spent		Budget			Forecast Budget Variance			
		A Spent This Reporting Period $	B Total Spent To Date $	C Budget Per LTC Application $	D=C-B Budget Remaining	E=D/C*100 Budget Remaining %	F Forecast Budget Change $	G Forecast Budget Change %	H Revised Total Budget	Reasons For Change
Engineering & Construction		**95,084,019**	**305,996,709**	**572,761,388**	**266,764,679**	**47%**	**41,505,901**	**7%**	**614,267,289**	**Revised based on in-service date**
1	Engineering, Design and Procurement	843,824	6,718,158	19,342,245	12,624,087	65%	(10,808,892)	-56%	8,533,353	
2	Materials and Equipment	8,756,688	42,361,934	89,408,231	47,046,297	53%	(22,538,717)	-25%	66,869,514	
8	Site Clearing, Access	28,339,917	83,664,617	107,463,339	23,798,722	22%	33,169,524	31%	140,632,863	
9	Construction	57,143,589	173,252,000	356,547,573	183,295,573	51%	41,683,986	12%	398,231,559	
Environmental & Remediation Activities		**1,884,778**	**16,318,987**	**26,929,260**	**10,610,273**	**39%**	**4,620,902**	**17%**	**31,550,162**	**Revised based on in-service date**
3	Environmental and Regulatory Approvals	1,302,033	15,702,526	13,030,561	(2,671,965)	-21%	6,066,463	47%	19,097,024	
10	Site Remediation	582,745	616,461	13,898,699	13,282,238	96%	(1,445,561)	-10%	12,453,138	
Indigenous Activities		**2,350,239**	**15,606,953**	**20,211,000**	**4,604,047**	**23%**	**3,442,555**	**17%**	**23,653,555**	**Revised based on in-service date**
5	Indigenous Economic Participation	935,148	6,667,201	7,000,000	332,799	5%	2,730,452	39%	9,730,452	
6	Indigenous Consultation	1,415,091	8,939,752	13,211,000	4,271,248	32%	712,103	5%	13,923,103	
4	**Land Rights (excludes Aboriginal)**	**1,128,845**	**16,778,207**	**23,830,512**	**7,052,305**	**30%**	**0**	**0%**	**23,830,512**	
7	**Other Consultation**	**114,639**	**1,136,677**	**2,530,194**	**1,393,517**	**55%**	**0**	**0%**	**2,530,194**	
11	**Contingency**	-	-	**49,399,445**	**49,399,445**	**100%**	**(49,399,445)**	**-100%**	-	**Allocation of Contingency**
12	**Regulatory**	**262,697**	**3,875,667**	**5,405,078**	**1,529,411**	**28%**	**(0)**	**0%**	**5,405,078**	
13	**EWT Management**	**248,836**	**4,081,786**	**4,900,644**	**818,858**	**17%**	**(0)**	**0%**	**4,900,644**	
Total Project Spend		**101,074,053**	**363,794,985**	**705,967,521**	**342,172,536**	**48%**	**169,913**	**0%**	**706,137,434**	
14	**Interest During Construction (IDC)[1]**	**2,062,290**	**10,832,030**	**31,003,000**	**20,170,970**	**65%**	-	**0%**	**31,003,000**	
Total Construction Costs [2 3 4]		**103,136,344**	**374,627,015**	**736,970,521**	**362,343,506**	**49%**	**169,913**	**0%**	**737,140,434**	

1 IDC has not been reforecasted as interest rates will vary based on the OEB prescribed rates
2 On the record (EB-2017-0182)
3 Development Costs eligible for consideration as construction costs of $5.3 MM not reflected in column B. (OEB Decision, December 20, 2018)
4 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

C. Project Cost Update Summary by Department

Engineering & Construction (E&C)

- The Project cost forecast for this department has not changed since the last reporting period.
- However, there was a cost shift from category #8 Site Clearing, Access to #9 Construction to reflect updated work scope.
- The recently revised construction schedule allowed for a reduction in funds allocated to bridges (in category #8 Site Clearing, Access), which was used to offset a scope refinement in #9 Construction.

Environment & Remediation Activities

- The Project cost forecast for this department has slightly increased since the last reporting period, and was mostly funded by the remaining contingency.
  - Category #3 Environmental and Regulatory Approvals is due to incremental stage 2 archaeology required at White Lake.
  - Category #10 Site Remediation has increased as the requirements of the OBP have been finalized, as well as the timing of the activities that will be part of the construction stage.

Indigenous Activities

- The Project cost forecast for this department has not changed since the last reporting period.

Land Rights (Excludes Aboriginal Engagement)

- The Project cost forecast for this department has not changed since the last reporting period.

Other Consultation

- The Project cost forecast for this department has not changed since the last reporting period.

Regulatory

- The Project cost forecast for this department has not changed since the last reporting period.

EWT Management

- The Project cost forecast for this department has not changed since the last reporting period.

D. OEB Consultation on the Deferral Account – Impacts Arising from the COVID-19 Emergency

- On April 22, 2020, in a separate submittal, NextBridge requested that the OEB issue an order approving a subaccount to Construction Work in Progress – Electric (CWIP) account 2055 to track COVID-19 costs.

- NextBridge has requested that the subaccount be made effective March 23, 2020 when NextBridge first notified the Board of the impact of COVID-19 on construction.

- On May 28, 2020, NextBridge participated in the preliminary stakeholder meeting hosted by the OEB.

- On June 11, 2020, NextBridge submitted written comments on the draft issues list, specifically, requesting that an issue be added regarding what account should be used for distributors and transmitters currently constructing capital projects.

- On August 14, 2020, the OEB issued an Issues List in letter sent to all registered stakeholders concerning the Consultation of the Deferral Account – Impacts Arising from the COVID-19 Emergency.

- On September 24, 2020, the OEB issued a letter to all Licensed Electricity Distributors and Transmitters and all Rate-Regulated Natural Gas Distributors which notified recipients of the commissioning of two expert studies, one of which is applicable to the East-West Tie;
    - London Economics International (LEI) will be undertaking a *COVID-19 Impact Study* to assess the near- and long-term impacts of the COVID-19 pandemic on Ontario's energy sector and identify implications for the OEB's regulatory policy response to energy sector evolution.

4. Risk Management

A. Risk Management Issues, Potential Impacts and Mitigation Measures

Risk Item #	Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
1	**Agency delay in issuance of other environmental permit(s)**	↓	• Recent office closures and remote work environments due to the COVID-19 global pandemic has slowed permit issuance.	↓	• WF approach is designed to allow staggered issuance of permit approvals to facilitate staging of the start of construction in multiple segments simultaneously. • Modified work sequence to maintain clearing activities, foundation installation, and tower assembly progress. • Delays experienced to date were analyzed as part of the updated scheduling exercise to determine if there were any schedule impacts to the construction schedule. • The updated construction schedule can be found in

*Change in colour level from previous Report is denoted with arrows where "↑" indicates an increase in risk and "↓" indicates a decrease in risk.

Low | Medium / Moderate | High | Unknown

Risk Item #	Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
					Section 2.B. and potential cost impacts have been incorporated in Section 3.A.
2	**Delay in access to private, provincial, and federal lands**	↓	• Lands not accessible in time for construction commencement date will affect Project schedule. ○ Private lands not accessible through expropriation. ○ Public lands not accessible through MNRF process. ○ Federal lands not accessible through Reserve crossing permits.		• Pursue regulatory avenues available (e.g. expropriation with OEB, provincial mining recorder order) where access is not granted. • Establish work around/ accommodation plan for “no access” parcels in construction planning. • Work with government on public and federal land access.
3	**Delay in HONI station work**		• If stations are not ready for energization it will delay Project in-service date.		• Communication and coordination with HONI during construction. • Updated construction schedule will be reviewed with HONI in 4Q 2020 to ensure coordination.

*Change in colour level from previous Report is denoted with arrows where “↑” indicates an increase in risk and “↓” indicates a decrease in risk.

Low | Medium / Moderate | High | Unknown

Risk Item #	Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
					• HONI will report to the OEB on any updates to its station work schedule
4	**Delay in accessing HONI's crossings of access roads and transmission lines**		• Significant portions of lands not accessible in time for access road construction and stringing across HONI ROW lands will affect Project schedule.		• Continue to work with HONI and IESO to resolve crossing and access issues. • While a Section 101 application will likely not be required, this option remains in the event that NextBridge is unable to reach agreement on all required crossings.

Risk Item #	Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
5	**Legal challenges**		• Parties may file applications for judicial review or appeal of OEB decisions or other permit approvals and seek to stay construction. • Risk has materialized, as BZA First Nation has filed both a judicial review of the Jan 30, 2019 Order in Council and an appeal of the Dec 20, 2018 and Feb 11, 2019 OEB decisions. • There may be some cost risk involved with defending these legal challenges.		• Continue to proactively engage with First Nation and Métis communities, landowners and all other stakeholders in order to identify and address concerns. • Actively engaged in continued negotiations with BZA related to the judicial review and appeal. • Commit to addressing concerns at any point, even post issuance of permits and engage communities on an issue by issue basis.
6	**Public protests and/or displays of Project opposition**		• Potential for reputational impacts but is unlikely to prevent forward progress given provincial approvals have been obtained. • Potential for reputation impact of continuing construction activities during COVID-19		• Additional discussion and attempts to satisfy concerns. • Attentive and responsive to local needs related to COVID-19, such as premature closure of work camps and temporary suspension of construction

*Change in colour level from previous Report is denoted with arrows where "↑" indicates an increase in risk and "↓" indicates a decrease in risk.

Low | Medium / Moderate | High | Unknown

Risk Item #	Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
			• Potential for reputation impact related to burning of wood on ROW.		viewed favourably by local communities. • Detailed Management Plan developed by Valard coupled with consultation with Local Health Units and communities provided confidence that appropriate measures being taken to protect communities and workers. • Timely and effective response to concerns regarding wood burning activities on the ROW through media statements and direct communication with communities.

Risk Item #	Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
7	**Labour strikes**		• Potential for labour actions and disruption/shutdown of construction activities, which could lead to cost and schedule impacts. • Potential for media coverage and undesirable project optics.		• Follow Project labour protocols as per master agreement with Canadian Union of Skilled Workers (CUSW). • Foster and maintain good relations and communication with CUSW and its members. • Be cognizant of and manage potential for other unions to approach and recruit any non-CUSW members. • Media response would be developed to provide public response as appropriate.

Risk Item #	Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
8	**Delays in acquisition/resolution of mining leaseholders' interests**		• Impacts to schedule and costs associated with timely acquisition/resolution of required interests.	↓	• NextBridge resolved the remaining mining leaseholders' rights in 3Q 2020. • This risk item will be removed in the next Reporting Period
9	**Delay in resolution of overhead crossing agreement for existing utility**	↓	• Impacts to schedule and costs associated with timely acquisition/resolution of required interests.	↓	• NextBridge resolved the outstanding overhead crossing agreement in 3Q 2020. • This risk item will be removed in the next Reporting Period
10	**COVID-19 Global Pandemic**		• Global pandemic caused the shutdown of work camps and temporary suspension of construction activities which are expected to lead to cost and schedule impacts. • Potential for workers testing positive for COVID-19, while		• Developed COVID-19 Task Force to ensure the safety of staff, contractors, subcontractors, partners, and the general public and mitigate the impacts of the pandemic on the Project. • All construction activities

Risk Item #	Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
			working in communities where health facilities are limited.		resumed in 3Q 2020 • Working with tower vendor to mitigate potential delivery delay impacts. • Indigenous and stakeholder engagement continues in order to address concerns as they arise. • The risk to the construction schedule is expected to be mitigated through the updated ISD date; however, the duration and total associated impacts of the COVID-19 Global Pandemic are unknown at this time.
11	**Difficulty to obtain timely outages to cross existing transmission lines**		• The Project crosses several existing transmission lines, some of which require outages in order to perform construction works. • Timing and duration of outages may not align with construction schedule		• Working closely with HONI to obtain outage coordination information and schedules. • Conducting a feasibility study of a potential bypass of an existing HONI line which may mitigate this risk. • NB has engaged and will

Risk Item #	Risk Description	Likelihood of Risk Occurring (High, Medium, Low)	Description of Impact of the Risk on the Project	Risk on the Project (High, Medium, Low)	Mitigation of Risk and/or Impact
			activities.		work with the IESO to coordinate outages.

5. Reference Materials

APPENDIX A

Letter from NextBridge to the IESO Requesting Evaluation of New Proposed ISD

July 22, 2020

Ahmed Maria
Director, Transmission Planning
Independent Electricity System Operator
1600-120 Adelaide Street West
Toronto, ON M5H 1T1

Dear Mr. Maria,

NextBridge Infrastructure LP ("NextBridge") is writing today to request that the Independent Electricity System Operator ("IESO") confirm that there is no unacceptable risk to reliability if the East-West Tie Line comes into service on March 31, 2022. NextBridge is considering the potential for construction costs avoidance that could result if it is provided with the flexibility to extend construction to March 31, 2022.

Due to the potential impacts to the health and safety of its construction workers, NextBridge temporarily suspended all construction activities on April 3, 2020 and resumed again on May 19, 2020, resulting in the loss of over six weeks of winter construction. Since resuming construction, NextBridge has been working on its construction schedule in order to ensure the project will be in service for October 28, 2021, which per the Ontario Energy Board's ("OEB") February 11, 2019 Order was coordinated with Hydro One Network's ("HONI") projected completion of the station work. A key consideration in this schedule is the seasonal nature of construction that works within timing windows to avoid disturbances to species at risk, like caribou.

Current conditions of the Overall Benefits Permit ("OBP") from the Ministry of Environment Conservation and Parks limit the time NextBridge can work by only using winter roads within the Lake Superior caribou habitat. Building winter roads result in less ground disturbance, are generally less environmentally impactful, and are less costly than building all season roads.

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Due to winter road restriction in the OBP, 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 is 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 project of between $15-$20 million. If acceptable to the IESO, NextBridge's preference would be to avoid these additional costs to customers and, at the same time, comply with the current condition, both of which would be achievable with increased flexibility to extend the in service date to March 31, 2022.

1-888-767-3006 | www.NextBridge.ca

NextBridge understands that on July 26, 2018 the IESO filed with the OEB an *Addendum to its Updated Needs Assessment* that continued to recommend that the transmission line be in-service by the end of 2020. However, to align the transmission and station work as required by the OEB, NextBridge and HONI have been working towards an in-service date for the new transmission line would be October 28, 2021. NextBridge will, therefore, not make any decision on moving the current projected October 28, 2021 in-service date until it receives the IESO's opinion related to the reliability risk of a March 31, 2022 in-service date

Please let me know if you have any questions regarding this request.

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Kind Regards,

J. Tidmarsh

Jennifer Tidmarsh
Project Director, NextBridge

CC
Christine Long, Board Secretary, Ontario Energy Board

APPENDIX B

Letter from the IESO to NextBridge Confirming Evaluation of New Proposed ISD

ieso
Connecting Today.
Powering Tomorrow.

Independent Electricity System Operator
1600-120 Adelaide Street West
Toronto, ON M5H 1T1
t 416.967.7474
www.ieso.ca

August 28, 2020

Jennifer Tidmarsh
President NextEra Energy Transmission Canada
NextEra Energy Canada, LP
Suite 1720, 390 Bay Street
Toronto, Ontario
M5H 2Y2

Dear Ms. Tidmarsh:

Re: NextBridge July 22, 2020 letter to the IESO on the In Service Date for the East West Tie Project

On July 23, 2020, the IESO received a letter from NextBridge Infrastructure LP ("NextBridge") requesting that the IESO advise on the risk to reliability if the in service date of the East-West Tie Line Project is delayed from Oct. 28, 2021 to March 31, 2022. This letter provides the IESO's perspective on the reliability risks associated with an in-service date of March 31, 2022.

Background

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.

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IESO Perspective on Reliability Risk

In its June 2018 Addendum to the 2017 Updated Assessment for the Need for the East-West Tie Expansion, as filed in EB-2017-0182, the IESO continued to recommend an in-service date of 2020 for the East-West Tie Line Project, based on applicable planning and reliability criteria. As part of this assessment, the IESO considered a number of potential options for interim measures to address an in-service date beyond 2020 and indicated that it does not support delaying the in-service date beyond the end of 2022 as the increased risk to system reliability and cost uncertainties associated with interim measures are unacceptable beyond this timeframe. An in-service date of March 31, 2022, as described in NextBridge's July 23, 2020 letter, is prior to that date when the IESO would consider a delay to be unacceptable.

Further, the IESO noted in its 2017 Updated Assessment for the Need for the East-West Tie Expansion, as filed in EB-2017-0182, that water conditions have a strong impact on overall supply availability in the Northwest region and the associated capacity need. Specifically, the reliability risk in the Northwest exists when the region is experiencing drought conditions and higher than expected electricity demand. Based on the time of year when drought conditions in the Northwest are likely to occur, the IESO does not expect a significant increase to system reliability risk, or costs for managing such risks, by extending the in-service date of the East-West Tie Line Project from October 28, 2021 to March 31, 2022.

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.

The IESO understands that the Ontario Energy Board will ultimately make the decision on project expenditures and in-service date. From the IESO's perspective, there should be a high degree of confidence that additional delays are unlikely before accepting a March 31, 2022 in-service date. The IESO also recommends that NextBridge confirm any scheduling and cost impacts associated with the Hydro One Station Upgrade Project in light of a possible extension to the in-service date of March 31, 2022.

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Yours truly,

Ahmed Maria
Director, Transmission Planning
Independent Electricity System Operator (IESO)

cc: Robert Reinmuller, Hydro One Networks
Chuck Farmer, IESO
Devon Huber, IESO
Leonard Kula, IESO
IESO Records

APPENDIX C

Letter from NextBridge to the OEB to Request Amendment of ISD Within Leave to Construct Application

September 3, 2020

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

Dear Ms. Long:

Re: EB-2017-0182: Notice of In-Service Date Change

Introduction and Summary

This letter is filed on behalf of Upper Canada Transmission Inc. operating as NextBridge Infrastructure ("NextBridge") in respect to Conditions 3 and 4 of the Ontario Energy Board's (the "Board" or the "OEB") Order dated February 11, 2019, granting Leave to Construct the East-West Tie Line (EB-2017-0182 | EB-2017-0194 | EB-2017-0364). (the "Order").

In summary, NextBridge is advising the Board that, in accordance with Conditions 3 and 4 of the Order, it is proposing a change in construction schedule for the East-West Tie Line to reflect a change to the in-service date of the East-West Tie Line from the fourth quarter of 2021 to March 31, 2022. As described in greater detail below, NextBridge submits that this delay will continue to meet reliability requirements while avoiding increases in construction costs caused by the temporary suspension of construction activities attributable to the potential impacts of the health and safety of its construction workers in April, 2020 due to COVID-19.

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Discussion

Conditions 3 and 4 of the Order provide as follows:

> 3. Independent of any reporting requirements under NextBridge's licence, NextBridge shall advise the OEB of any proposed material change in the NextBridge-EWT Project in respect of routing, construction schedule, necessary environmental approvals, and all other approvals, permits, licences, certificates and rights required to construct the proposed facilities.
>
> 4. NextBridge shall coordinate with Hydro One to align the in-service date of the NextBridge-EWT Project with the in-service date for the Hydro One-Station Upgrades Project.

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With respect to Condition 3, in accordance with the directions in the Independent Electricity System Operator (the "IESO") reliability assessments, NextBridge proposed as set forth in its quarterly reporting that the East-West Tie Line be brought into service in the fourth quarter of 2021.

As NextBridge advised the Board in its July 22, 2020 Report filed herein, "Due to the recent temporary suspension of the construction of the Project due to COVID-19 precautions, the Project execution schedule will be evaluated as construction progresses for impacts. In the event project schedule or construction costs are impacted, NextBridge will explain them in their quarterly report(s)." A copy of that report is provided as Attachment 1.

Also on July 22, 2020, NextBridge wrote the IESO inquiring whether, in light of these delays, the in-service date for the East-West Tie Line could be extended until March 31, 2022 without an adverse impact on reliability. That letter stated:

> Due to the potential impacts to the health and safety of its construction workers, NextBridge temporarily suspended all construction activities on April 3, 2020 and resumed again on May 19, 2020, resulting in the loss of over six weeks of winter construction. . . . Due to winter road restriction in the OBP, 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 is 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 project of between $15-$20 million. If acceptable to the IESO, NextBridge's preference would be to avoid these additional costs to customers and, at the same time, comply with the current condition, both of which would be achievable with increased flexibility to extend the in service date to March 31, 2022.

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NextBridge's Letter to the IESO is provided as Attachment 2.

On August 28, 2020, the IESO responded and concluded that "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." The IESO letter is provided as Attachment 3.

NextBridge is therefore advising the Board that, in accordance with Condition 3 of the Order, it is proposing a change in construction schedule for the East-West Tie Line to reflect an in-service date of March 31, 2022. NextBridge submits that this delay will continue to meet reliability requirements while avoiding unnecessary increases in construction costs.

In accordance with Condition 4 of the Order, NextBridge is coordinating with Hydro One Networks, Inc. ("HONI") to align schedules to extend the in-service date of the East-West Tie line to March 31, 2022, which provides NextBridge additional construction flexibility that could save

customers from increases in construction costs. When the aligning of schedules is complete, NextBridge will notify the OEB.

Conclusion

Based on the unforeseen delay brought about by the suspension of the construction of the Project due to COVID-19, the cost of meeting a fourth quarter 2021 in-service date in light of those delays, and IESO's determination that extending the in-service date of the East-West Tie Line to March 31, 2022 does not present an unacceptable risk to reliability, and in accordance with Conditions 3 and 4 to the Order, NextBridge is hereby advising the Board of the change in construction schedule for the in-service date from the fourth quarter 2021 to March 31, 2022.

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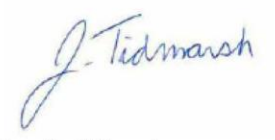
Please advise if the Board has any questions or concerns.

Sincerely,



Jennifer Tidmarsh
Project Director, NextBridge

APPENDIX D

Response from the OEB to NextBridge's Request for Amendment of ISD Within Leave to Construct Application

Ontario Energy Board | Commission de l'énergie de l'Ontario

BY E-MAIL

September 24, 2020

Ms. Jennifer Tidmarsh
Project Director
NextBridge Infrastructure, LP
290 Bay Street, Suite 1720
Toronto, ON M5H 2Y2
Jennifer.Tidmarsh@nexteraenergy.com

Dear Ms.Tidmarsh:

Re: NextBridge Infrastructure LP
Quarterly Report on the East-West Tie Project
Board File No.: EB-2017-0182

The Ontario Energy Board (OEB) acknowledges receipt of the letter from Upper Canada Transmission Inc., operating as NextBridge Infrastructure, LP (NextBridge), dated September 3, 2020 (September Letter), regarding the change to the in-service date for the East-West Tie Project to March 31, 2022.

On July 22, 2020, NextBridge copied the OEB on a letter it sent to the Independent Electricity System Operator (IESO) asking the IESO to confirm that there is no unacceptable risk to reliability if the East-West Tie Project were to come into service on March 31, 2022 – a five month delay from the planned in-service date. The September Letter noted the IESO's confirmation[1], among other things, that a March 31, 2022 in-service date for the East-West Tie Project does not present an unacceptable risk to reliability.

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In the September Letter, NextBridge also stated that it is coordinating with Hydro One Networks Inc. (Hydro One) to align the schedules of the East-West Tie Project and Hydro One Station Upgrades Project for the in-service date of March 31, 2022. Through coordinating efforts and aligning construction schedules, the OEB expects NextBridge

[1] The IESO's response, dated August 28, 2020, to NextBridge's question was included as an attachment to the September Letter.

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and Hydro One to work towards ensuring the timely connection of stations and lines. The OEB also expects NextBridge will advise the OEB when the project schedules have been aligned and will include the necessary supporting details.

As per previous correspondence, the OEB expects NextBridge to provide detailed information on its budget and schedule changes resulting from delays in obtaining permit approvals, the COVID-19 pandemic, and any other factors. The OEB asks that an up-to-date cost estimate and detailed schedule be provided in NextBridge's next quarterly report to be filed in October 2020.

Please direct any questions relating to this matter to David Martinello at David.Martinello@oeb.ca or at 416-440-8142.

COPY

Regards,

Original Signed By

Brian Hewson
Vice President, Consumer Protection & Industry Performance

cc: Devon Huber, IESO, Sr. Manager, Regulatory Affairs
Joanne Richardson, Hydro One Networks Inc., Director, Major Projects and Partnerships

RESPONSE TO OEB REQUEST – FEBRUARY 2020

UPPER CANADA TRANSMISSION, INC.
(d/b/a NextBridge Infrastructure)

East-West Tie Line
Response to OEB Request Dated February 12, 2020 RE: Quarterly Construction Progress Report - Reporting Period - October 1, 2019 to December 31, 2019

Date Submitted: February 26, 2020

On February 12, 2020, the Ontario Energy Board Staff requested that NextBridge Infrastructure, LP (NextBridge) respond to the following questions related to its January 22, 2020 Quarterly Construction Progress Report - Reporting Period: October 1, 2019 to December 31, 2019 for the East-West Tie Project (the Project):

1. In the January Progress Report, NextBridge has reallocated budgets in various cost categories, in some cases for cost categories that were previously assigned contingency funds based on forecasted risks. Please explain, in detail, the reasons for the budget reallocations (i.e., the increases and decreases in budgets for cost categories).

2. According to the January Progress Report, permit and access approval delays have resulted in construction start-up delays, in addition to the delays identified in the previous report. Please provide more information explaining the reasons for the delays to date in receiving permit and access approvals. In addition, please provide the analysis of impacts on the East-West Tie Project's cost and schedule now. If this is not possible at this time, please explain why the analysis can only be completed following the 2020 winter construction season.

3. Please identify the impacts for the East-West Tie Project's costs and schedule under each of the following two scenarios: (i) all necessary approvals are received in February and (b) no necessary approvals are received prior to the end of the 2020 winter construction season.

4. According to the January Progress Report, there may be delays associated with finalizing acquisition with mining claim holders. Please outline the potential implications for the East-West Tie Project's cost and schedule of the Mining and Lands Tribunal hearings for the two outstanding mining claim holders.

To facilitate the review of the additional information provided herein, the updated cost table from the January 22, 2020 report is duplicated below, followed by responses to each of the OEB Staff's questions.

Table 1. Project Cost Update Table

Cost Categories for NextBridge's Construction Costs Reporting		Actuals Spent		Budget			Forecast Budget Variance			
		A Spent This Reporting Period $	B Total Spent To Date $	C Budget Per LTC Application $	D=C-B Budget Remaining	E=D/C*100 Budget Remaining %	F Forecast Budget Change $	G Forecast Budget Change %	H Revised Total Budget	Reasons For Change
Engineering & Construction		**23,967,393**	**98,992,633**	**572,761,388**	**473,768,755**	**83%**	**41,505,901**	**7%**	**614,267,289**	**Revised based on in-service date**
1	Engineering, Design and Procurement	2,043,625	7,234,610	19,342,245	12,107,635	63%	(10,808,892)	-56%	8,533,353	
2	Materials and Equipment	6,874,302	11,242,010	89,408,231	78,166,221	87%	(22,538,717)	-25%	66,869,514	
8	Site Clearing, Access	(13,828,058)	8,451,503	107,463,339	99,011,836	92%	33,828,145	31%	141,291,484	
9	Construction	28,877,524	72,064,511	356,547,573	284,483,062	80%	41,025,365	12%	397,572,938	
Environmental & Remediation Activities		**2,238,277**	**10,860,690**	**26,929,260**	**16,068,570**	**60%**	**4,348,606**	**16%**	**31,277,866**	**Revised based on in-service date**
3	Environmental and Regulatory Approvals	2,238,277	10,860,690	13,030,561	2,169,871	17%	5,894,505	45%	18,925,066	
10	Site Remediation	-	-	13,898,699	13,898,699	100%	(1,545,899)	-11%	12,352,800	
Indigenous Activities		**1,594,089**	**10,335,240**	**20,211,000**	**9,875,760**	**49%**	**3,442,555**	**17%**	**23,653,555**	**Revised based on in-service date**
5	Indigenous Economic Participation	469,237	4,744,344	7,000,000	2,255,656	32%	2,730,362	39%	9,730,362	
6	Indigenous Consultation	1,124,852	5,590,896	13,211,000	7,620,104	58%	712,193	5%	13,923,193	
4	**Land Rights (excludes Aboriginal)**	**2,104,329**	**10,759,706**	**23,830,512**	**13,070,806**	**55%**	-	**0%**	**23,830,512**	
7	**Other Consultation**	**81,700**	**538,655**	**2,530,194**	**1,991,539**	**79%**	-	**0%**	**2,530,194**	
11	**Contingency**	-	-	**49,399,445**	**49,399,445**	**100%**	**(49,297,062)**	**-100%**	**102,383**	**Allocation of Contingency**
12	**Regulatory**	**298,670**	**3,013,692**	**5,405,078**	**2,391,386**	**44%**	-	**0%**	**5,405,078**	
13	**EWT Management**	**255,167**	**3,515,120**	**4,900,644**	**1,385,524**	**28%**	-	**0%**	**4,900,644**	
Total Project Spend		**30,539,626**	**138,015,735**	**705,967,521**	**567,951,786**	**80%**	**49,297,062**	**7%**	**705,967,521**	
14	**Interest During Construction (IDC)[1]**	**1,082,447**	**5,681,100**	**31,003,000**	**25,321,900**	**82%**	-	**0%**	**31,003,000**	
Total Construction Costs[2 3]		**31,622,073**	**143,696,836**	**736,970,521**	**593,273,685**	**81%**	**49,297,062**	**7%**	**736,970,521**	

1 IDC has not been reforecasted as interest rates will vary based on the OEB prescribed rates

2 On the record (EB-2017-0182)

3 Development Costs eligible for consideration as construction costs of $5.3 MM not reflected in column B. (OEB Decision, December 20, 2018)

1. In the January Progress Report, NextBridge has reallocated budgets in various cost categories, in some cases for cost categories that were previously assigned contingency funds based on forecasted risks. Please explain, in detail, the reasons for the budget reallocations (i.e., the increases and decreases in budgets for cost categories).

BUDGET REALLOCATIONS WITHIN ENGINEERING AND CONSTRUCTION (E&C) ACTIVITIES

Cost Category 1) Engineering, Design & Procurement - ($10.8 MM)

- This reduction is a reallocation within the overall E&C budget. This is broken down into: a) reallocation of $5 MM, broken down into $4.3 MM for General Contractor's (GC) Survey (included in #8) and $0.7 MM in escalation of Engineering costs from the original Leave to Construct (LTC) application budget and negotiated into the final GC's contract under the Civil Work (included in #8); and b) reallocation of $5.8 MM from the Engineering budget allocated for foundation engineering as this was negotiated into GC's scope in their contract after the LTC was awarded. (included in #9).

Cost Category 2) Materials and Equipment - ($22.5 MM)

- This reduction is made up of: a) a negotiated reallocation of $12.5 MM of materials into the construction installation line item as a supply and install activity in the GC contract (included in #9), and b) a $10 MM reduction that is forecasted in the remaining NextBridge furnished materials due to successful negotiations on material pricing.

Cost Category 8) Site Clearing Access - $33.8 MM

- This increase is a combination of $23.4 MM broken down into: a) $5 MM from the GC Survey and escalation of Engineering costs referenced in #1 above; and b) $18.4 MM in contingency, all reallocated to the Site Clearing, Access budget in the GC's contract (this reallocation of contingency was necessary to accommodate the transfer of access risk to the GC as negotiated in the terms of the contract); and c) $10.4 MM is a new risk forecasted due to additional requirements to bridge over stream crossings which were otherwise anticipated to use culverts.

Cost Category 9) Construction - $41.0 MM

- This increase is a combination of: a) $39.1 MM increase broken down into $12.5 MM in materials (referenced in cost category 2 above), $5.9 MM in engineering (referenced in cost category 1 above), and $20.7 MM in contingency, all reallocated to the Construction budget in the GC's contract (this reallocation of contingency was necessary to accommodate the transfer of subsurface/foundation risk to the GC negotiated into the terms of the contract); b) a reduction of $3.3 MM in the GC's supply of the line arrestors; and c) $5.6 MM is a new risk forecasted due to the delay in receiving the LTC approval which delayed the forecasted start of construction from the original LTC application date of November 2018 to August of 2019, broken down into $5.4 MM for the GC and $0.2 MM for NextBridge.

BUDGET REALLOCATIONS WITHIN ENVIRONMENT & REMEDIATION ACTIVITIES

Cost Category: 3) Environmental - $5.9 MM

The Amended Environmental Assessment (EA) was approved in March 2019 and contains conditions that increased the Environmental budget for surveys, permitting work, and pre-construction activities.

- Additional studies, site investigation, the creation of a new permitting approach system (i.e. Detailed Project Plans) and documentation development were also required by the government reviewers (which included the Department of Fisheries and Oceans, the Ministry of Natural Resources and Forestry (MNRF), the Ministry of Environment Conservation and Parks) that resulted in expanded requirements in the Amended EA.
- An increase of $2.1 MM was realized due to the direction of government reviewers that requested additional aquatic, bat, acoustic, and avian studies and surveys, as well as multiple rounds of review during the Amended EA process. While the Amended EA was received in March 2019, the additional requirements outlined in the Amended EA required more analysis.
    - Since this was the first EA to be completed in decades for a long, linear project in northern Ontario, several government agencies were unsure of how to evaluate the commitment requirements of the approved Amended EA as they relate to issuing permits. NextBridge worked through multiple rounds of questions to address government concerns and allow the agencies to place the Amended EA conditions into practice in parallel with issuing permits. These collaborative discussions extended the review duration and increased the support activities required for achieving permit approvals.
- An increase of $1.9 MM was realized due to the compression of NextBridge's permitting timeline as a result of the revised timing for the receipt of the Amended EA, which also included new conditions. The Amended EA was issued in March 2019, instead of the originally-contemplated EA approval date in 2018 as per the LTC schedule. The compression of the schedule, paired with the new Detailed Project Plan (DPP) process (discussed in the response to Question #2 below), resulted in NextBridge having to amend the GC contract to allow for the hiring of additional resources to expeditiously complete the new DPP process and permitting requirements to meet the scheduled construction start date.
- An increase of $0.3 MM related to the adjustments by government reviewers to the archeological studies that NextBridge expected to conduct based on the original Project footprint. As part of the Amended EA review process, government reviewers and other stakeholders (including Indigenous communities) encouraged NextBridge to reduce environmental impacts from the Project where possible. In response, NextBridge included minor adjustments to the Project route, permanent and temporary access roads, and temporary workspaces (e.g., laydown yards, storage yards, construction camps and construction easements) in the Amended EA. After the approved Amended EA was issued to NextBridge in March 2019, NextBridge continued to adjust the access routes to ensure optimal and efficient access to Project area and minimize the potential environmental impacts. This incremental cost

was realized for the adjustments to the Project footprint and required additional archaeological studies of those adjustments.

- An increase of $1.6 MM due to increased construction compliance support for the duration of construction was also required. The LTC Budget included construction compliance by the GC in relation to the original EA. However, the Amended EA had significantly more conditions than contemplated in the original EA (815 commitments in the original EA vs. 1061 in the Amended EA) that required the hiring of an additional environmental monitoring firm through NextBridge to meet those conditions.

Cost Category: 10) Site Remediation - ($1.5 MM)

- A forecasted decrease of $1.5 MM based on site remediation due to a portion of the remediation being performed under the GC contract. Although some remediation activities will occur throughout the construction of the Project, most activities will take place once construction is complete and NextBridge will have a clearer understanding of these costs at that time.

BUDGET REALLOCATIONS WITHIN INDIGENOUS ACTIVITIES

Cost Category: 5) Indigenous Economic Participation – $2.7 MM

- An increase of $1.9 MM due to making two additional payments for 28(2) Permits during the construction period. The Project requires two Permits under Subsection 28(2) of the Indian Act 1985 (“Section 28(2) Permits”) to cross Reserve Lands. The fees for these permits were expected to start after the in-service date of the Project, but under direction from the Federal government they are now due to start while NextBridge occupies the Reserve Land during construction.

- A reduction of $0.7 MM was achieved for the Section 28(2) Permit negotiations. NextBridge was able to achieve savings on legal costs associated with the Section 28(2) Permit negotiations. The savings was generated by utilizing NextBridge in-house counsel versus the budgeted external legal.

- An increase to the budget $0.7 MM was realized to support the economic participation agreements with Indigenous communities.
- An increase of $0.8 MM due to additional legal and consultant fees in offering economic participation. Due to the delay in construction start date of 9 months, additional economic participation agreements were needed to provide for Indigenous job training and worker preparation were needed.

Cost Category: 6) Indigenous Consultation – $0.7MM

- In increase of $0.7 MM for Indigenous monitors and community site tours. As a condition of the approval of the Amended EA, the Indigenous Consultation Plan was updated to provide more opportunities for Indigenous communities to monitor the Project.

- To address the requirement of providing opportunities for Indigenous communities to be involved in environmental monitoring activities, it was determined that:
    - Ten full time Indigenous monitors would be employed throughout the construction phase of the Project; and
    - As part of its ongoing Duty to Consult, NextBridge will provide tours of the Project to Indigenous community members.

2. According to the January Progress Report, permit and access approval delays have resulted in construction start-up delays, in addition to the delays identified in the previous report. Please provide more information explaining the reasons for the delays to date in receiving permit and access approvals. In addition, please provide the analysis of impacts on the East-West Tie Project's cost and schedule now. If this is not possible at this time, please explain why the analysis can only be completed following the 2020 winter construction season.

DELAYS TO DATE IN RECEIVING PERMIT AND ACCESS APPROVALS

Delays in receiving permit and access approvals were driven by a number of factors including, but not limited to:

- The implementation of a new Amended EA mandated DPPs permitting approach system, as explained below;
- The unanticipated extended duration of the review and approval period for the Ministry of Natural Resources and Forestry of the DPPs;
- Determination of adequacy of consultation with Biinjitiwabik Zaaging Anishnabek (BZA) by the government which ultimately delayed the permit issuance process; and
- Current restrictions in the Aggregate Act that required an exemption before roads were built which took a number of months and delayed road building.

DPP Process and Review

As part of the conditions of approval of the Amended EA, a new concept was created that required NextBridge to produce DPPs. Twelve DPPs were created; one for the over-arching Project, and then one for each of the eleven Work Fronts (WFs).

The intent of the DDPs is to verify and supplement the information in the Amended EA and include information on how NextBridge will construct the Project. Each plan was submitted to the Ministry of Natural Resources and Forestry and to Indigenous communities for a minimum of 30 days prior to carrying out construction activities in each of those WFs.

The overarching DPP was submitted on June 22, 2019, and a revised version was re-submitted on July 30, 2019. The content of the overarching DDP was discussed at length with the government agencies to establish content. Each one of the subsequent WF DPPs was prepared and reviewed by the regulators; however, the relationship of these DPPs to the content in the permits was unclear, and therefore, the review period was extended. By mid-November 2019 all the DPPs had formally been submitted for review to allow for the expected availability of all permits to be issued by mid-December 2019.

Determination of adequacy of consultation with Biinjitiwabik Zaaging Anishnabek (BZA)

On March 8, 2019, BZA filed a Judicial Review against the Government of Ontario and the Ontario Energy Board for issuing the Order in Council and ETC, respectively, which designated NextBridge as the Transmitter of the Project.

BZA asserted that it was not adequately consulted or accommodated on the Project. In addition to engagement with BZA, which began shortly after the initial award of the development to the Project in 2013, NextBridge engaged with BZA to provide additional consultation on the Project, and more specifically regarding the permits managed under the MNRF, for WFs 1, 2, 3, 4, 5, and 6 for which they claim the Project is impacting parts of their Traditional Territory.

In order to determine if BZA had been adequately consulted the MNRF halted the issuance of permits while NextBridge engaged with the community to address their concerns. The MNRF released the permits for WFs 2 and 6 in December 2019 (impeding the start of the winter construction season in northern Ontario which had begun in September) as consultation progressed and Traditional Territory boundaries were refined.

After MNRF had determined that consultation had been adequate, the approvals for permits for WFs 3, 4, and 5 were released on January 31, 2020 (well into the construction season and after the 4Q 2019 Reporting Period). The delay in the issuance of permits resulted in a delay in access to clear the trees across a number of areas. Although NextBridge managed the delay in permits to prevent work stoppages to the extent possible, interruptions were still encountered while reorganizing crews and mobilizing them to other parts of the Project.

Aggregate Act Restrictions

The Aggregate Act did not allow the proposed road building and crossing methods that were outlined in the Amended EA and common construction practice. Road building approach was secured through an exemption from the government after months of discussions and negotiations which delayed the start of constructing access roads to reach the right of way.

ANALYSIS OF IMPACTS ON THE CURRENT EAST-WEST TIE PROJECT'S COST AND SCHEDULE

It is not possible at this time to analyze the potential impacts to the East-West Tie's cost and schedule resulting from the delay of permit approvals due to the seasonal nature of construction in northern Ontario and the limitations of constructing in environmentally sensitive timing windows for birds, bats, and caribou. NextBridge's construction schedule is based on the need for the ground to be frozen to clear trees and build roads; however, the timing as to when the ground freezes and thaws cannot be reliably predicted or controlled.

NextBridge's approved Amended EA includes a commitment to optimize the construction schedule to conduct as much clearing as possible under frozen ground conditions for several reasons, including:

- Reduction of impacts to wetlands and hydrologically sensitive areas;
- Decreases in sedimentation and erosion; and

- Reduction of ground disturbance and the need to install and remove road building materials that can cause additional impacts to the environment.

Installing roads under frozen ground conditions also allows the avoidance of timing windows for:

- Migratory nesting birds (April 15th to August 31st);
- Nursery and calving for Woodland Caribou (May 1st to September 15th);
- Moose aquatic feeding area (May 1st to June 30th);
- Avoids bat maternity roosting (May 15th to August 31st); and
- Eastern Whip-Poor-Will nesting (May 15th to August 31st).

Additionally, the development of East-West Tie Project construction schedule was designed to allow construction to take place in the Caribou Zone (restricted by the Overall Benefits Permit) as well as in areas limited by Species at Risk timing restriction windows noted above. The Overall Benefit Permit requires all construction activities in the Caribou Zone (WFs 5, 6, and 7) be performed between a period of September 15th to April 30th. The Species at Risk permitting restrictions also limit clearing activities beyond the winter season across all other WFs on the Project.

It is likely that NextBridge will no longer be able to complete all activities in the Caribou Zone as planned during the 2019/2020 winter season, although this still depends on the timing of frozen ground conditions. This may require construction crews to re-mobilize to these areas during the 2020/2021 winter season, which was not part of the original construction schedule.

In anticipation that NextBridge will no longer be able to complete all activities in the Caribou Zone as planned during the winter 2019/2020 season, NextBridge has adjusted its construction sequence which has impacted the flow of work in other WFs. NextBridge must be able to assess the amount of clearing and road building that is completed in the winter of 2019/2020 to be able to then assess how much more clearing needs to be completed in the winter of 2020/2021.

ADDITIONAL ANALYSIS TO BE COMPLETED FOLLOWING THE 2020 WINTER CONSTRUCTION SEASON

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.

3. Please identify the impacts for the East-West Tie Project's costs and schedule under each of the following two scenarios: (a) all necessary approvals are received in February and (b) no necessary approvals are received prior to the end of the 2020 winter construction season.

For many of the same reasons explained in response to Question #2, NextBridge cannot identify the impacts for the Project's costs and schedule for the scenarios presented in Question #3. That said, NextBridge provides the following additional information to facilitate an understanding of how the scenarios could affect the Project.

a) Having all of the permits by the end of February would no longer provide immediate benefits to the Project for the 2019/2020 winter season as outlined below. However, obtaining all permits by the end of February would provide more certainty for the scheduling of the 2020/2021 winter season activities.

   At this time, existing crews have been mobilized to other locations where construction activities are permitted. If all permits were received by the end of February 2020, the addition of clearing crews at that time is not advisable given the uncertainty of the timing of the upcoming spring thaw. If spring thaw arrives early, mobilization could take place with little to no work taking place, resulting in increased costs to the Project.

b) No matter whether all permits are obtained by the end of February, construction crews will continue working for as long as possible, weather permitting. Once the spring thaw begins, crews will have to stop work until the terrain can be accessed to continue construction activities.

4. According to the January Progress Report, there may be delays associated with finalizing acquisition with mining claim holders. Please outline the potential implications for the East-West Tie Project's cost and schedule of the Mining and Lands Tribunal hearings for the two outstanding mining claim holders.

NextBridge requires certain surface rights in order to construct the Project, including in locations where there are existing unpatented mining claims. NextBridge has reached agreement with all but two mining claim holders and has made constant efforts to resolve these remaining claims over the past 18 months.

One mining claim is located in WF 6, which is in an environmentally sensitive area for Woodland Caribou, and has a winter construction restriction (as described earlier) where NextBridge cannot clear vegetation and trees within the timing window of nursery and calving season.

If NextBridge cannot reach a settlement with the mining claim holder in WF 6 before the end of the 2019/2020 winter construction season, clearing will have to be completed in the winter of 2020/2021.

The second remaining outstanding mining claim is located in WF 10. Currently, NextBridge does not have the necessary environmental permits for this WF that would allow for construction activities to commence in the 2019/2020 winter construction period. The clearing of this parcel of land will now have to be completed during the 2020/2021 winter construction season and the impact to schedule and cost will be reassessed after the end of the winter 2019/2020.

The cost impacts of resolving these two outstanding claim holders has not been estimated, and would not be estimated until the winter season has been completed and a new schedule created to factor in skipping these sections and having to return to them if we do not resolve them this winter.

GROSS ASSETS

Property, Plant, and Equipment and Accumulated Depreciation

1. 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.

DEVELOPMENT COSTS

1. A total of $31.2 million in development costs were approved in Decision and Order dated December 20, 2018 (EB-2017-0182). As these development costs were already reviewed for prudence and approved for recovery, they are included in the proposed opening rate base balance.

PHASE SHIFT COSTS

1. A total of $5.3 million in costs (as shown in Table 1 below) were also 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.

Table 1. Summary of Phase Shift Costs

Phase Shift Costs	$ Millions
EA Review Participation	$0.46
Land Optioning Negotiations	$1.44
Land Acquisition Negotiations	$0.02
Economic Participation	$3.41
Total	**$5.33**

Phase Shift: EA Review Participation

2. These costs were required for NextBridge to participate in the EA review process that was scheduled to begin in advance of the LTC filing. A draft EA Report was prepared and submitted in December 2016, with a comment period from December 2016 to March 2017. NextBridge received approximately 1,000 comments on the draft EA Report. The comments were reviewed and responded to by NextBridge, with a response to each comment set forth in Appendix 1-III in the final EA Report. The final EA Report was updated in response to many of the comments and these changes are noted in the responses provided in Appendix 1-III and in the final EA Report change log. Project

planning and consultation continued during this period and NextBridge also sourced additional data that resulted in updates to the project footprint, project description, and the final Amended EA Report, which was submitted in July 2017.

3. Also as part of the EA Review process revisions had to be made to adhere to the regulatory requirement to include comments and responses from regulators, Indigenous communities and other stakeholders. The draft EA Report needed to be revised to reflect this prior to submitting the final EA Report. NextBridge also participated in several meetings with regulators, Indigenous, and non-Indigenous communities to obtain clarification on the comments prior to drafting the responses. The filing of the Amended EA Report in July 2017, including the completed alternative route assessment, was required in order to start construction of the East-West Tie line in late 2018 and bring the line into service.

4. The work on the EA Review process was competitively bid. Three bidders were invited to competitively bid on the RFP proposal to complete the EA in Fall of 2015. One successful bidder (Golder Associates) was awarded the contract in November 2015. The major services for external environmental consultants were competitively sourced and the hourly rates of these services are consistent with NextBridge partner organization experience and expectations for these types of services, especially given the size, complexity, limited access and difficult terrain of the East-West Tie line. NextBridge worked with its environmental consultants to find efficiencies where possible.

Phase Shift: Land Option Negotiation

5. The initiation of certain land optioning and related activities to obtain consent from landowners and interest holders that initially were to be pursued in the construction phase were pulled forward into the development phase. These activities included: land ownership line list preparation; agreement preparation; and meetings with landowners regarding the project, land acquisition principles, presentation of compensation offers, and follow-up

engagement regarding the status of the project. Such activities allowed NextBridge to build respectful relationships with interest holders and to uphold transparent, meaningful dialogue regarding compensation and land rights, which, in turn, was critical in avoiding adversarial, prolonged, costly, and less certain outcomes associated with regulatory takings processes such as expropriation.

6. The land optioning negotiations and engagement resulted in a higher percentage of optioned landowners and interest holders, and a corresponding reduction in the number of parcels required to be subject to a regulatory takings process. In fact, at the time of the LTC application filing, NextBridge had reached agreements with a majority of private landowners. At the time of filing this Application, NextBridge has 191 landowner agreements and all five expropriations have been completed.

7. Further, NextBridge had an extensive route and access request management process that identified modifications prior to contacting landowners which eliminated the incurrence of unnecessary access and optioning activities which would have required more agreement and potentially more expropriations. Early and ongoing landowner engagement regarding the route and access alternatives provided essential input to finalizing the route and securing the land rights that were required to keep the project on track and on schedule.

Phase Shift: First Nation & Métis Land Acquisition Negotiation

8. These costs were incurred related to activities in relation to Federal First Nations reserve crossing permits that were identified by NextBridge and required by the Federal government as a necessary component of constructing the project. However, it was also recognized that it was not possible to estimate the costs for these activities. Specifically, at the time of designation, NextBridge was not in a position to estimate costs associated with First Nation and Métis participation and land acquisition until further engagement had been initiated with communities and the Federal government. These costs also included ongoing consultation with communities to enter into federal permits to allow the line to

cross reserve land, which 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 able to construct the project through these reserve lands.

Phase Shift: Economic Participation

9. During the LTC proceeding, NextBridge conveyed that it was not in a position to estimate the costs associated with First Nation and Métis economic participation until further engagement had been initiated with communities. NextBridge believed to do so would be presumptuous to the needs of communities as each community is unique in its interaction with project proponents. Over the development phase, NextBridge has worked with all communities identified by the Crown and has a better understanding of the scope of potential economic participation in the East-West Tie line.

10. During the LTC proceeding, NextBridge also indicated it had signed economic participation agreements with Bamkushwada, LP (representing 6 First Nations) and the Métis Nation of Ontario (representing 3 Métis communities). The agreements contain various forms of economic participation beyond equity positions which substantially forms the costs during the development phase. Not only did NextBridge incur costs for its own legal counsel, it provided funding in a series of capacity funding agreements to these communities to facilitate their participation in negotiations and retain their own independent legal counsel. Funding of this type is a customary practice in project development to provide First Nation and Métis communities the opportunity to secure participation arrangements to ensure projects on their traditional territories and provides an economic benefit to those communities for future generations.

11. To manage costs, each of the First Nation and Métis capacity funding agreements were tied to a specific milestone in the negotiations. The milestone approach ensured that costs were associated with progress toward reaching a participation agreement. NextBridge's own external legal counsel fees were also tied to these same milestones.

12. NextBridge and the First Nation and Métis communities considered these costs essential to the development phase as participation agreements needed to be finalized as much as possible before the filing of the LTC application and well before the commencement of construction in order to (A) ensure costs in the LTC budget reflected these activities; (B) provide communities the time to train and employ community members for jobs before the commencement of the construction period; and (C) prepare Indigenous businesses to participate in procurements for construction contracts to maximize economic opportunities. For example, the results of these development period engagement efforts have enabled over 300 individuals from all the 18 communities identified in the duty to consult to be trained for employment. NextBridge's workforce at the beginning of construction was 60% from Indigenous communities and made up of trainees from this training initiative.

FORECAST CONSTRUCTION COSTS

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. The cost categories in table below follow the format and order used in NextBridge's quarterly reports to the OEB. As evidenced in Exhibit B and in the CRA report attached at Exhibit B, Tab 1, Schedule 7, Attachment 1, NextBridge's construction costs are in line when benchmarked with other constructed transmission lines. The table below shows the total construction costs per category, for the estimated completion of the line assuming an in-service date of March 31, 2022.

	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
12	**Regulatory**	**5.4**
13	**East-West Tie Project Management**	**4.9**
	Total Project Spend	**706.1**
14	**Interest During Construction (IDC)**	**31.0**
	Total Construction Cost	**737.1**

2. After a general overview of NextBridge's cost management policies, each of these cost categories are discussed in turn below.

Overview of Cost Management Practices

3. On a monthly basis the following activities are performed by the Project Management Office and cost category discipline leads to monitor, record and control costs and mitigate risks:

- Financial accounting is maintained by NextBridge's Project Management Office
- Costs are compared on a budget versus actual basis to identify any variances
- Variances are used by the Project Management Office to maintain cost tracking

4. The Project Management Office meets with the cost category discipline lead 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.

5. Each month this review assesses:

- Cost performance;
- Schedule performance;
- Identification of new risk factors;
- Any major changes to forecast; and
- Vendor performance.

6. The Project Management Office and the cost category discipline lead also monitor vendor costs against the contractual amounts including purchase orders ("**PO**") where a comparison of work progress and payments is performed to ensure appropriate billing.

7. The Project Management Office identifies variations and any overall cost impacts and reports these findings to the Project Director. The Project Director then uses the information to ensure all key project milestones are being completed as planned and costs are being controlled. If there are outstanding questions that need to be discussed further, the Project Director and Project Management Office schedule meetings with the affected discipline team leads to review the risks, the potential for cost changes and mitigation plans. In addition to cost monitoring, and to ensure progress and risk mitigation, the Project Director is also actively tracking and reviewing each discipline's practices including:

   - Reviewing performance measures (*e.g.,* land procured, permits obtained, work fronts progression, construction milestones, etc.);
   - Schedule performance;
   - Risk management plans; and
   - Cost management practices (detailed in OEB Quarterly Report – Q4 2019, which is Attached as Exhibit C, Tab 1, Schedule 1, Attachment 2).

8. The Project Director holds weekly meetings with discipline team leads to monitor overall progress and actively identify any cross functional discipline issues that need addressing or could introduce new risks to the East-West Tie line. During these weekly meetings the Project Director manages the team's focus to any issues that have arisen and provides direction and decisions on any outstanding matters.

9. Based on the above, any newly identified cost variances or risks will be reported in the OEB quarterly reports. This monitoring and reporting allows NextBridge to manage the expected budget as most costs are now essentially fixed for the majority of activities.

10. NextBridge's commitment to prudently manage costs is also demonstrated by its request to move the in-service date of the East-West Tie line to March 31, 2022. For example, as described in NextBridge's letter to the IESO dated July 20, 2020, NextBridge assessed

changes to the overall benefit permit ("**OBP**") that would allow for a longer construction window that could make up a potential schedule delay resulting from the COVID-19 pandemic. These changes included the building of all season roads instead of constructing only when the ground was frozen. This analysis identified $15-$20 million in additional costs that were ultimately avoided by communicating with the IESO and obtaining confirmation that an in-service date of March 31, 2022 would not create an unacceptable risk to reliability.

Overview of Procurement Practices

11. As of the date of this filing, nearly 90% of forecasted construction costs have been contracted, which reduces future volatility in pricing and ensures resource availability due to the contracts having an agreed upon price and negotiated scope of work. The scope of work has been developed by an experienced supply chain team and the NextBridge cost category discipline team lead's specific project knowledge, both of which have been applied to reduce risks and costs. A copy of NextBridge's procurement policy can be found at Exhibit C, Tab 2, Schedule 4, Exhibit 1. Examples of effective procurement processes to contain costs and mitigate risks include:

- Engineering & Construction
    - 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. NextBridge completed a competitive process for a general contractor to incorporate actual construction market data specific to the climate and terrain characteristics of the East-West Tie line. An Expression of Interest ("**EOI**") process was held in 2014 in order to pre-qualify potential EPC companies or general contractors. Twelve companies participated in the EOI process, and five were short-listed to participate in the final project RFP process. The short-listed companies were selected based on twenty

specific criteria, including, among others, a) experience with transmission projects, b) evidence of projects completed with similar complexities in terms of size, climate conditions and environmental restrictions, c) safety records; and d) contracting and employment strategies for inclusion of First Nation and Métis communities. The final RFP process was initiated in 2016. The bidders were provided with detailed project technical and constructability information, including tower design and assembly details, foundation preliminary design, construction access plans, routing based on fieldwork, environmental constraints analysis, safety requirements, and direction on NextBridge's expectation that First Nation and Métis communities would be offered economic participation opportunities.

- Indigenous Engagement
    - The majority of the expected capacity funding agreements with Indigenous groups have been executed, making previously unknown costs more certain.
- Environmental
    - The majority of environmental activities that will occur during the construction phase of the project have been contracted with the general contractor, which includes a revised work scope as a result of the approved Amended EA.
- In order to improve cost certainty, NextBridge has competitively bid the following fixed price contracts:
    - Steel pole structures;
    - Towers;
    - Conductor;
    - Overhead ground wire;
    - Optical ground wire;

- EPC; and
- Environmental activities, such as preparing detailed project plans, obtaining work permits, and obtaining a variety of environmental permits such as waterbody crossing permits and species at risk permits

12. NextBridge entered into these fixed contracts as a cost containment measure to reduce the likelihood of significant budget increase risk to the project.

13. The EPC general contractor was required to accepted certain pricing risk responsibilities, such as costs associated with the subsurface of constructing foundations, which was based on their knowledge of the region, vast experience on similar projects and ability to use their means and methods to mitigate risks as they manifest during the construction period.

14. The appropriateness and reasonableness of these cost management policies, including competitive bidding practices, as they have been applied to the cost categories that follow has been confirmed by the cost effectiveness of the East-West Tie line when compared to other similar transmission projects in the Benchmarking study conducted by CRA.

15. The following cost categories align with the quarterly OEB report order and format, and provide detail on the forecasted construction costs of $737.1 million.

Engineering & Construction Activities ($614.3 million)

16. **(1) Engineering, Design, and Procurement ($8.5 million)**

17. The engineering, design, and procurement costs entail detailed engineering, design of the line, and procurement to support these activities. As detailed in the quarterly reports to the OEB, this category has decreased since the LTC to reflect work scope shifting to the general contractor contract, for efficiencies. The scope of this activity includes,: route

surveying (LiDAR, ground surveys, topographical, as built), engineering and design (routing, alignment, structure spotting, plan & profiles, details, etc.), detailed lattice tower design/prototype fabrication and physical load testing of 10 prototypes of lattice structures, conductor selection and arrangement design, geotechnical investigation (desktop and fieldwork), foundation designs, weather studies, crossing designs (railroad, highways/roads, transmission lines, pipeline, pipeline mitigations, etc.), alternative/re-routing analysis, all contractor supervision and management staff services throughout the duration of the East-West Tie line, labour, equipment and material for contractor mobilization/demobilization, testing and commissioning of the facilities, contractor performance bonds, quality assurance/quality control of material fabrications and engineering support during construction. Generally, these activities can vary in the level of effort needed due to the characteristics and needs of a specific transmission project and in the experience of NextBridge partner organizations these costs can range from 2% to 5% of the total project costs. The resources and materials required to complete the above-mentioned tasks were procured through competitive bid processes as explained above in Exhibit B and the hourly rates of these professional services are consistent with NextBridge partner organization experience from other projects given the complexity, limited access, and difficult terrain of this project.

18. **(2) Materials and Equipment ($66.9 million)**

19. The costs for material and equipment include the major materials sourced directly from vendors, outside of the general contractor contract. This category has decreased since the LTC budget due to transferring scope to the general contractor contract, and also favorable negotiated pricing on materials. This cost category does not include the cost of spare equipment, which is in the spare strategy costs section below.

20. **Structures:** This cost includes 1,227 structures (*i.e.,* towers and poles), which were competitively sourced. The structures have been procured from two suppliers through a competitive bidding process, as per NextBridge procurement policies, to ensure the best

value to Ontario ratepayers. Both structure suppliers signed fixed price contracts that included raw material procurement, manufacturing and shipping. Using a risk analysis, NextBridge procured structures well before they were required for construction to mitigate cost fluctuations. The chosen tower supplier is located in Turkey, which allowed savings on the majority of the structures from US steel tariffs. Additionally, NextBridge chose to procure the towers at a time where commodity pricing was favourable and subsequently the cost for steel has risen substantially. The pole supplier is located in Oklahoma, USA and the number of poles was de minimis and any steel tariffs were minimal. NextBridge holds weekly conference calls with fabricators to ensure design and delivery compliance.

21. **Conductor:** This includes the cost of approximately 2,700 km of 1192 kcmil "Grackle" ACSR conductor, which was competitively sourced from the vendor General Cable and manufactured in Quebec, Canada.

22. **Overhead Ground Wire ("OHGW"):** This includes the cost of 450 km of 19#10 Alumoweld OHGW, which was competitively sourced from Conex Cable. Conex Cable has been manufacturing aluminum-clad overhead shield wire since 1988. NextEra procures a considerable amount of these types of cables every year for projects across all its affiliates through competitive solicitations. Given the high volume of procurement of these products, affiliates of NEET receive some of the most favoured pricing, terms and conditions for this supply in the industry which it has passed on to the NextBridge project.

23. **Optical Ground Wire (OPGW):** This includes the cost of approximately 450 km of 48 fiber OPGW, which was competitively sourced from Suzhou Furukawa Power Optic Cable Company. Similar to OHGW, affiliates of NEET receive some of the most favoured pricing for these materials due to its high volume of procurement.

24. **Staff / Other:** All contractor supervision and management staff services throughout the duration of the project construction. Labour, equipment and material for contractor mobilization/demobilization, testing and commissioning of the facilities, and contractor performance bonds are all contained in the fixed price EPC contract to minimize risk of cost increases.

25. **(8) Site clearing, Access ($140.6 million)**

26. The work scope below was competitively sourced through the fixed price EPC. The LTC budget was created prior to the general contractor contract execution. In the EPC contract, NextBridge was able to bundle many activities into overall EPC pricing. Therefore, the cost categories in the LTC were more granular than the contract. However, to remain consistent in reporting to the OEB against the LTC categories, NextBridge has worked to estimate the costs that would fall into each LTC category from the overall EPC contract. This cost category has increased since the LTC budget for two main reasons. First, an increase to allow a risk transfer from NextBridge to the contractor for access risk based on negotiations to protect ratepayers from any increases during construction for access. Second, an increased requirement that bridges would be needed to cross over many streams as opposed to the originally planned culverts which were less expensive. This cost includes the following activities:

27. **Civil Work**, **Access**: Upgrading, improving, or building new roads including matting installation, and waterbody crossings to facilitate the movement of construction equipment, construction material and personnel to and from the transmission line corridor in order to access each proposed tower location where towers are to be installed. It also includes the construction of temporary access roads in order to access worker camps, and storage yards and crane pads to facilitate the operation of cranes for the installation of towers. In the fall of 2019, NextBridge worked with the Ministry of Natural Resources and Forestry ("**MNRF**") to seek an amendment to the *Aggregates Act* that would allow materials to be used from the surrounding area to construct access roads. Originally,

gravel would have to be purchased and trucked in to use on hundreds of kilometers of access roads along the East-West Tie line ROW; however, with this amendment there was a substantial savings to ratepayers in avoiding this cost.

28. **Civil Work, Clearing:** Timber cutting, grubbing and stump removal, preparation, flagging and cutting or mowing of vegetation within the transmission line corridor from ground to sky as required. This work scope can only be completed in the winter months when the ground is frozen. The majority of this work was procured by the general contractor in agreements with local Indigenous-owned businesses. In adherence to NextBridge's cost management process, the general contractor used values from previous projects as a benchmark for these contract negotiations to obtain competitive pricing.

29. **Civil Work, Traffic Control:** Signage and personnel used to coordinate and control the regular traffic of vehicles and the higher volume of construction vehicles traffic during project construction to avoid accidents on the construction roads and on the existing roads and highways that will be used by construction vehicles. Utilization of local labour was used to reduce the cost of travel to the site and maximize productivity.

30. **Construction Survey:** Surveying involves identifying items, objects, or matters such as structure location, guy anchors location, and any buried or overhead utilities.

31. **Construction Environmental Compliance:** Satisfy additional environmental requirements by the MNRF to bridge over stream crossings which were initially anticipated to use culverts as a result of permit requirements. NextBridge has had extensive coordination with the MNRF regarding the use of culverts, which are less expensive, versus using bridges to span over streams and waterbodies. Each of the waterbody crossing permits has been individually investigated in order to seek the use of lower cost culverts and as part of the cost management process the Project Director approves each application.

32. **Staff / Other:** All contractor supervision and management staff services costs throughout the duration of the project construction are included in this category. Labour, equipment, and material for contractor mobilization/demobilization, testing and commissioning of the facilities, and contractor performance bonds.

33. **(9) Construction ($398.2 million)**

34. This cost relates to the assembly and construction of foundations, towers, and the line. This work is contracted to the general contractor and was procured competitively. Since the LTC budget, this category has increased to accommodate transferring risk from NextBridge to the contractor for subsurface/foundations, along with the new March 31, 2022 in-service date of the project. Additionally, there was a transfer of costs to this category from the engineering and materials category (which had lower costs than the LTC) to reflect work being covered by the general contractor. The categories below are included in the fixed price contract to reduce construction related risks to cost and schedule.

35. **Cassions / Foundations:** Construction equipment, material and labour costs required to install the tower foundations and guy anchors. This foundation work involves excavation, backfill, compaction, formwork, rebar, concrete pouring, embedment, and dewatering among others.

36. **Structure Framing and Setting:** Construction equipment (crane, flatbed trucks, fork lift, helicopters), material, and labour cost required to assemble and install the structures at every location. This also includes installation of all insulators, line arresters and hardware, attachment of guy wires from the structures to the guy anchors, and installation of signage on the structures.

37. **Insulators:** Material and labour cost for all types of insulators, arresters, and jumpers to be installed on the structures to hang the transmission line cables and avoid contact with the towers. Externally gapped lightning arresters ("**EGLAs**") are included as part of the insulator assemblies and are installed on one circuit as required. During a cost review and after an engineering analysis EGLAs were selected in place of non-gapped line arresters ("**NGLAs**") which resulted in a cost savings. This cost savings was then offset with other costs in the general contractors fixed price contract, therefore negating potential cost increases for out of scope items.

38. **Assemblies:** Materials cost for assembly of all the hardware required to attach the insulators to the towers and install. This line item also includes all equipment, material and labour to install the grounding system at the base of structures.

39. **Conductor Installation:** Construction equipment, material, labor required for conductor installation includes the use of construction equipment such as tensioners and pullers, the labour and material for the stringing of all conductors, fiber optics, overhead ground wire, and installation of hardware such as deadends, bird flight diverters, galloping mitigation. splices, and dampers.

40. **Staff / Other:** all contractor supervision and management staff services throughout the duration of the project. Labour, equipment and material for contractor mobilization/demobilization, testing and commissioning of the facilities, and contractor performance bonds.

Environmental & Remediation Activities

41. This section explains the project costs related to receiving all of the necessary environmental approvals for the project and complying with the conditions of those approvals through construction and remediation. The major services for external environmental consultants have been competitively sourced and the hourly rates of these

services are consistent with NextBridge partner organization experience and expectations for these types of services, especially given the size, complexity, limited access and difficult terrain of this project.

42. **(3) Environmental and Regulatory Approvals ($19.1 million)**

43. This cost category includes the activities to support the EA and the Amended EA. This cost category has increased since the LTC budget primarily due to additional requirements imposed by regulatory entities. Additional field studies, documentation development, site investigations, and the creation of a new permitting approach called Detailed Project Plans ("**DPP**"s) were required by the government agencies that reviewed the Amended EA and resulted in the final expanded conditions in the Amended EA. The direction of government reviewers requested additional aquatic, bat, acoustic, and avian studies and surveys, as well as multiple rounds of review during the Amended EA process.

44. Additionally, there was a compression of NextBridge's permitting timeline as a result of the revised timing for the receipt of the Amended EA, which also included new conditions. The Amended EA was originally contemplated for an approval date in 2018 as per the schedule submitted with the LTC, but was ultimately approved in 2019. The compression of the schedule, paired with the new DPP process, resulted in NextBridge amending the EPC to allow for additional resources to expeditiously complete the new DPP process and permitting requirements to meet the scheduled construction start date. After the Amended EA was approved, NextBridge continued to adjust access to the ROW to ensure optimal and efficient access and minimize potential environmental impacts.

45. Environmental construction compliance support for the duration of construction was also a condition of the Amended EA. While the LTC budget included expenditures for environmental construction compliance, the Amended EA had significantly more conditions than contemplated in the original EA (815 commitments in the original EA vs.

1061 in the Amended EA) that required additional independent environmental monitoring expenditures beyond those budgeted for NextBridge to meet those additional conditions.

46. In summary this cost category includes:

- Final EA comment and response period;
- Field surveys associated with the EA;
- Drafting and submitting an Amended EA;
- Meetings with regulators and stakeholders regarding the final and Amended EA comments;
- Execution of Detailed Project Plans;
- Execution of environmental monitoring; and
- Environmental construction compliance

47. This category is also inclusive of internal payroll to support and manage these activities, including a dedicated internal resource based in Thunder Bay during the construction of the project only. Their role is to actively manage permit applications and approvals and to ensure schedule efficiencies are found by directly communicating with local permit offices. NextBridge utilized competitive procurements, cost management processes and cost efficiencies for the benefit the ratepayers for the activities.

48. The costs in this forecast are comprised of:

49. **Environmental Assessment and Amended EA:** The EA and the Amended EA acted as overall permits and covered the entire project area. However, the long linear nature of the project crossed multiple regulatory jurisdictions. In order to make the project easier for regulators to process the numerous site specific applications, the project was segmented into eleven sections (each commonly referred to as a "**Workfront**"). Each Workfront has

different terrain and habitat requiring site specific information/data in the form reports and applications.

50. The Ministry of Environment Conservation and Parks ("**MECP**") approved the Amended EA, with Cabinet concurrence (Order-in-Council 403/2019), on March 21, 2019. Attached as Exhibit C, Tab 2, Schedule 4, Attachment 2 is the Notice of Approval to Proceed with the Undertaking issued by the MECP for the project (the "**EA Approval**"). Included in the EA Approval are the conditions NextBridge must adhere to during the construction and operations of the project. The costs associated with the EA related to years of effort conducting field surveys, preparing reports, meetings with regulators and stakeholders, and responding to multiple rounds of questions.

51. While the Amended EA was received in March 2019, the additional requirements outlined in the Amended EA required more analysis. Under the direction of government reviewers, it was requested that additional aquatic, bat, acoustic, and avian studies and surveys, as well as multiple rounds of review were required during the Amended EA process.

52. NextBridge worked through multiple rounds of questions to address government concerns and allowed the agencies to place the Amended EA conditions into practice in parallel with issuing permits. These collaborative discussions extended the review duration and increased the support activities required for achieving permit approvals.

53. **Detailed Project Plans:** Following the issuance of the Amended EA, the project was required to conduct additional studies, site investigation and generate extensive reports to support the creation of a new regulatory review approach called DPPs. NextBridge ran a competitive bid process for the DPP work scope, along with the thousands of individual permits. The environmental services division of the EPC general contractor was selected to perform the work. The integrated relationship between the construction and environmental divisions allows for efficiencies in the field and administratively, benefitting ratepayers. These DPPs took time and effort to develop and required a 30-day review

from the MECP and the MNRF prior to submitting permit applications. This effort extended the time to permit as the process was new and was an additional step prior to submitting the permit applications, which contained the detail necessary for the final approvals.

54. **Individual Permits:** Numerous federal, provincial and local approvals were required for the project from, but not limited to the following regulators: Department of Fisheries and Oceans; Transport Canada; Environment and Climate Change Canada; Indigenous and Northern Affairs Canada; Ministry of Natural Resources and Forestry; Ministry of Environment Conservation and Parks; Ministry of Tourism, Culture and Sport; Infrastructure Ontario; Ministry of Environment and Climate Change; and Lakehead Region Conservation Authority (preliminary consultation, field surveys and assessments, drafting and submitting applications, further consultation).

55. The project has received over 1,000 permits and approvals. On average, each Workfront requires more than 95 approvals. The permitting process required additional surveys and site specific information, primarily related to access roads and crossing of waterbodies and wetlands. Permits include:

- MNRF:
    - Land Use Permits - ROW and laydown yards;
    - Work Permits – Access;
    - Roads and Watercourse Crossings;
    - Memorandum of Understanding - for Access Roads and Bridges;
    - Forest Resource License;
    - Authority to Haul;
    - Approval to Commence Harvesting Operations;
    - Burn Permits;
    - Fish Scientific Collectors Permit;

- Wildlife Scientific Collection Permit; and,
- Private Land Clearances.

- MECP:
  - Approval of the Amended EA;
  - Provincial Parks and Conservation Reserve Act Permits; Land Use Permit ("**LUP**") for ROW and Bridges, Clearing and Access Work Permits;
  - Permit to Take Water;
  - Environmental Site Assessment permit, Section 17 for Species at Risk Permits and Authorizations including Overall Benefit Permit and Letter of Advice; and,
  - Environmental Compliance Approval for waste disposal from camps, etc.
- Federal Permits:
  - Species at Risk, Department of Fisheries and Oceans Letter of Advice;
  - Transport Canada Navigation Protection Act Canada permits.
- Municipal:
  - Building Permits for Work Camps;
  - Noise By-Law exemptions;
  - Open Air Burning Permits/Fire Permits;
  - Fire and Protection and Prevent Act-notice of camp opening;
  - Permit to Injure or Remove Trees; and,
  - Site Plan Control Approval in accordance with Planning Act.
- Others:
  - Lakehead Region Conservation Authority for water crossing permits;
  - Sustainable Forest License Overlapping Permits/Licenses;

- Technical Standards and Safety Authority licenses for transport, storage and handling of fuels;
- Infrastructure Ontario Class Environmental Assessment; and,
- Ministry of Heritage, Sport, Tourism, and Cultural Industries approvals for archeology reports.

56. MNRF offices in Thunder Bay, Nipigon and Wawa were key to the many of the permits/approvals. As well as using the environmental services of the general contractor, NextBridge determined a cost efficiency during one of its weekly team meetings in hiring local staff that formed relationships with the local MNRF offices. Thus gaining efficiencies in coordination of information requests and ensuring timely issuance of permits. If a construction crew in the field does not have the required permits it will have to demobilize from that area and move to another. This can be detrimental to the project schedule and could cause increased costs.

57. MECP offices throughout the Province participated in the development and issuance of the Overall Benefits Permit.

58. **The Overall Benefits Permit:** The OBP represents the approval for the project to construct in areas where species protected under the ESA could be present – namely caribou (boreal population - Lake Superior Coastal Range) and species at risk bat species (Little Brown Myotis, Northern Myotis, and Eastern Small-footed Myotis). (See Exhibit C, Tab 2, Schedule 4, Attachment 3 for OBP Permit and Conditions)

59. **Plans and Procedures:** The project had to develop numerous plans and procedures that outline how construction and remediation would be conducted in the unique area of northwest Ontario. For example, a Construction Environmental Protection Plan, Standard Operating Procedures for construction of access roads through wetlands and water crossing selection and installation, as well as detailed alignment sheets were required to be developed as part of the Amended EA conditions.

60. **Construction Compliance:** The Amended EA mandated that third party, independent, compliance oversight was necessary on the project to ensure permit conditions were met during construction. Additionally, the Amended EA had significantly more conditions than contemplated in the original EA (815 commitments in the original EA as compared to 1061 commitments in the Amended EA), along with over 1,000 permits and associated condition to also comply with. NextBridge competitively procured an environmental monitoring firm that could assure that the conditions and requirements were being observed during construction. (See Exhibit C, Tab 2, Schedule 4, Attachment 2 for the EA Notice of Approval to Proceed and Conditions). This firm has a purchase order with a defined scope and budget and invoices are reviewed against this purchase order to ensure that work was performed in accordance with the scope as invoiced.

61. This budget item also includes environmental training for field personnel for construction, breeding bird nest sweeps and amphibian salvage prior to vegetation clearing, fish salvage prior to in-water works for water course crossings, and environmental inspection during construction.

62. These environmental monitors work though the 450 km project everyday ensuring compliance with permits during construction. Until March 2020 they also worked as liaisons with Indigenous inspectors by performing joint inspections of the ROW to observe construction.

63. **(10) Site Remediation ($12.5 million)**

64. The cost for site remediation includes the following activities below, along with the necessary internal labour to develop and manage these programs. This cost category has decreased since the LTC budget. The species at risk permit was not approved at the time of the LTC budget so the costs were estimated as closely as possible. In addition, once permits and requirements were received for laydown yards, NextBridge was able to

find cost efficiencies associated with the existing EPC to include these activities within the construction scope at a fixed price basis.

65. The site remediation costs include:

66. **Laydown Yards:** Consists of contracted cost of constructing, securing, and then remediating laydown yards. This scope of work is part of the overall EPC that was competitively bid. Yards include all areas that are to be used as laydown or storage facilities and worker camps. The terrain of these areas requires preparation (earth work, leveling and grading) before it can support the worker camp containers and towers and materials to be used in the project. In order to choose the most cost and schedule effective site for these yards, the general contractor surveys the land to ensure proper drainage, road access and proximity to water sources. At the weekly meetings with other disciplines, such as Land and Environment, the site selection of yards, access roads and worker camps is reviewed to ensure no additional costs would be incurred. This minimizes, or in some cases eliminates, the incremental cost of obtaining environmental permits and landowner agreements to construct laydown yards.

67. **Construction Compliance:** As described in the previous section (3. Environmental & Regulatory Approvals, section “Construction Compliance”), third party compliance oversight (monitors) is mandated by the Amended EA. These competitively procured monitors will oversee the remediation work covered in this section.

68. **Remediation and Mitigation**: NextBridge has made commitments for post-construction remediation and mitigation activities to satisfy the OBP, the Amended EA and other permits/licenses necessary for construction. This work is expected to begin during construction and extend up to 10 years past the March 31, 2022 in-service date as required in the permit conditions.

69. As required in the Amended EA, Post Construction Monitoring Plans ("**PCMP**") will also have components and requirements that extend years past the in-service date. A detailed PCMP are developed for each Workfront based on permit approval conditions. The PCMP will include detailed monitoring methods and a plan to address outstanding environmental issues or areas that require further reclamation or monitoring of reclamation efforts, as identified during and following construction (See Exhibit C, Tab 2, Schedule 4, Attachment 4 for PCMP Conditions in the Amended EA).

Construction Phase Remediation and Mitigation

70. Remediation and mitigation costs expected to be incurred prior to the in service date of March 31, 2022 and up to one year after that date have been included in this cost category. NextBridge has only included costs for these activities that are fixed or contractual in nature. These activities are primarily related to meeting the conditions of the OBP and the PCMP.

71. The OBP activities during the construction of the project include, but are not limited to:

- Developing a caribou transfer strategy along with pre-transfer monitoring of caribou and predators;
- Developing and implementing bat habitat creation;
- Developing and implementing bat gate installation plan;
- Designing, building and monitoring bat rock piles;
- Purchasing and monitoring permanent survey stations (trail cameras);
- Undertaking revegetation surveys;
- Monitoring hibernacula (visual and acoustic);
- Ice condition imagery monitoring; and

- Purchasing global positioning system collars and trail cameras to monitor caribou post-transfer.

72. The PCMP activities during the construction of the project include, but are not limited to:

- Developing PCMP plans;
- Annual monitoring of terrain & soil, weeds, revegetation, wetlands, Indigenous current land and resource use;
- Biannual monitoring of fish habitats, flow rates, wildlife mortality (year one of two); and
- Overall monitoring and reporting of field expenses.

Post-Construction Phase Remediation and Mitigation

73. The remediation and mitigation costs that are not identifiable, measurable, and/or expected to take place up to ten years after the in-service date, are not part of the construction costs in this cost category. These costs are not presented for consideration in this proceeding for prudence due to their uncertainty of occurrence and timing and will be recorded in the CCVA for future disposition, if and when they occur, as described in Exhibit H.

74. The OBP activities that may occur after the in-service date include, but are not limited to:

- Implementation of caribou transfer strategy and associated monitoring;
- Winter aerial surveys along the Lake Superior coast (year five and year ten);
- Trail camera monitoring;
- Revegetation surveys;
- Monitoring of bat hibernacula, ice conditions, rock pile and bat habitat; and
- General reporting and project management.

75. The PCMP activities that may occur after the in-service date include, but are not limited to:

- Overall planning of monitoring activities,
- Biannual monitoring of fish habitats, flow rates, wildlife mortality (year one of two); and
- Overall monitoring and reporting of field expenses.

76. To further elaborate on the remediation and mitigation costs that will occur during construction, and up to ten years after, some examples are below:

77. In regards to the OBP caribou transfer requirement, there are significant conditions that are both weather and nature dependent that drive volatility. Additionally, Ministry and stakeholder review and Indigenous consultation requirements can impact the timing and potential cost of implementation. (See Exhibit C, Tab 2, Schedule 4, Attachment 3 for OBP Permit and Conditions). In order to mitigate the cost of prolonged review and consultation, NextBridge has been engaging early and often with stakeholder groups and Indigenous communities on the caribou transfer requirement.

78. Pre and post-transfer ice monitoring is required for a minimum of two years before and three years after caribou transfer to monitor the formation of ice bridges to the islands on Lake Superior. If ice bridges form, aerial surveys must be conducted monthly thereafter to detect presence of associated predator movement. The transfer area must be free of natural predators of caribou at the time of transfer. The transfer of the required minimum of eight adult females and four adult males cannot occur until the caribou population and demographics at the capture area are adequate as to not jeopardize the persistence of the remaining population.

79. Post-transfer monitoring is required for three years to monitor the population size, reproductive success, and survival of caribou by trail cameras and radio-collars on adult females. If a mortality is detected through radio-collar data, and ice bridges were present, ground studies must be conducted to determine the cause of mortality.

80. Extensive monitoring of caribou, ungulates, and predator populations is required throughout the mainland by using permanent survey stations (trail cameras) for seven years at 19 locations.

81. NextBridge engaged with Michipicoten First Nation in the development of the OBP and included in the conditions of the permit, MECP requires NextBridge to consult with Michipicoten First Nation on the development and implementation of the caribou transfer plan.

Indigenous Activities

82. **(5) Indigenous Economic Participation ($9.7 million)**

83. As previously mentioned in the TSP at Exhibit B of this Application, NextBridge is required to meet the government of Ontario's policy objectives for Indigenous economic participation as laid out in the 2013 LTEP. The First Nation and Métis economic participation costs in this Application include legal, project management, skills training, construction access fees, and labour costs to communities to ensure that the commitments made during the negotiation of various agreements are carried out. For example, included are costs for community members to liaise with NextBridge and provide general assistance and support in connection with the construction of the East-West Tie line. Community liaisons provide valuable local knowledge and have been vital in identifying Indigenous procurement opportunities and recruiting Indigenous labour to seek positions on the project. To date, approximately 60% of NextBridge's workforce are from

local Indigenous communities with training initiatives ongoing throughout the construction period.

84. Additionally, costs related to acquiring land access to traverse reserve lands for two First Nations (Pays Plat, and Michipicoten) are included. These are federal permits issued under subsection 28(2) of the Indian Act 1985 ("**Section 28(2) Permits**") that will allow NextBridge the use of reserve lands, as well as lands that are in the process of being transferred to the community, to construct the East-West Tie line. There has not been a transmission line Section 28(2) Permit in Ontario in recent years. NextBridge used the expertise of partnership organization Enbridge having experience from a gas utility perspective and factored this into the budget creation for these costs. Costs account for legal fees and capacity funding to these communities to draft and conclude the federal permit. After a monthly budget review, NextBridge identified that using external legal firms sparingly would minimize cost and has negotiated these agreements with internal counsel from the partner organizations The fees for these permits 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.

85. In order for the Bamkushwada, LP to obtain equity in the project at the in-service date, legal and project management costs to support the First Nation's financing are also included in the forecasted cost of Indigenous Economic Participation.

86. **(6) Indigenous Consultation ($13.9 million)**

87. NextBridge has engaged and consulted with First Nation and Métis communities since it was first delegated procedural aspects of the duty to consult by the Crown in 2013 and remains committed to ensuring these aspects will continue to be met. NextBridge carried out a full program of interest-based consultation as required for an individual environmental assessment under Part II of the *Environmental Assessment Act*. This program included discussions regarding the transmission development and construction

process with the eighteen identified Indigenous communities from the Memorandum of Understanding between the Crown (represented by the Ministry of Energy) and NextBridge.

88. The MECP approved the Amended EA on March 21, 2019. In *Section 7: Consultation with Indigenous Communities* of the EA Approval, the Amended EA approval imposes ongoing requirements to ensure that NextBridge continues to consult with the 18 Indigenous communities throughout the construction of the East-West Tie line. Further to those requirements, NextBridge submitted, for approval by the Crown, an Indigenous Consultation Plan to the MECP in July 2019 to address NextBridge's plan for Indigenous consultation going forward (see Exhibit C, Tab 2, Schedule 4, Attachment 5). Additionally, in *Section 4: Compliance Monitoring Program* of the EA Approval an extensive monitoring program was mandated and in the Indigenous consultation section described above NextBridge must also detail opportunities for communities to be involved in environmental monitoring activities.

89. Therefore, the costs in the Indigenous consultation category include continued support to communities to facilitate meeting NextBridge's Crown duty to consult obligations and participating in the conditions for consultation in the EA Approval. For example, activities related to the development, maintenance and participation in environmental construction monitoring are included, as well as consultation activities relating to, or in connection with, project permitting during the construction period such as capacity funding for third party reviews of permits.

90. As part of the MECP's review of the Amended EA, the agency asked for a copy of NextBridge's Aboriginal Community Advisory Board ("**ACAB**") terms of reference (see Exhibit C, Tab 2, Schedule 4, Attachment 6) and requested modifications thereto. These modifications included an increase to the frequency of meetings to include the construction period, where the original terms of reference only contemplated meeting during the operations phase of the East-West Tie line. Therefore, costs are included to enable

NextBridge to meet with community members from the region to provide project updates and discuss potential issues that may arise during the construction period as part of the ACAB.

Community investment funds are provided to support First Nation and Métis events and groups in the region.

91. **(4) Land Rights ($23.8 million)**

Costs in this category include:

- acquisition of land rights by easements from property owners, government agencies along with consents, permits from all applicable interest holders in their land tenure
- title examining, clearing, and registering in connection with the acquisition of the rights
- preparation and maintenance of property owner and stakeholder line lists
- global information system mapping and data support for recording and documenting negotiations and engagements
- appraisals
- legal survey for reference plan registration
- land payments for said land rights (easement and temporary workspace, and Crown land permits)
- permitting activities including third party crossing notification, negotiation and execution of agreements, submission of Public Lands Act applications, and obtaining other provincial and federal approvals
- expropriation support

- in-field landowner and Crown interest holder related construction and post-construction site remediation activity coordination, including securing damage settlements and administering damage payments
- participation in the LTC application and Amended EA review processes.

92. An external land consultant was competitively sourced to support the acquisition of land rights and activities listed above. The hourly rates of these services are consistent with NextBridge partner organization experience and expectations for these types of services. Due to the activities in the development phase of the project (See Exhibit C "Phase Shift – Land Option Negotiation"), NextBridge had minimal expropriations and avoided long and costly processes.

93. This cost category includes the cost of rights, interests, and privileges held by NextBridge to access, construct and maintain easements and ROW for the East-West Tie line and related infrastructure. The NextBridge Project Director receives daily status updates on land acquisition activities, allowing for early issue identification and resolution to ensure the project stays on schedule. Several cost containment measures have been implemented in order to reduce the likelihood of budget increases to this cost category. These include the mitigation of risks such as delays in land acquisition, increased market value of land, and material changes to the project footprint by identifying and monitoring them on an ongoing basis, and proactively addressing them. For example, a land acquisition process and compensation policy were developed to ensure engagement was undertaken early, in an open and respectful manner, and with timely, meaningful and transparent dialogue. Fair and equitable compensation was provided to property owners based on the consistent application of the land acquisition compensation principles and supporting market-based land value appraisals. The focus was on reaching mutually acceptable agreements and avoiding costlier regulatory options such as expropriation proceedings. During the weekly project meetings, the Land team regularly coordinates with the rest of the team to review the project footprint and ensure that no more land is being acquired than needed for the project.

94. **(7) Other Consultation ($2.5 million)**

95. This cost category includes activities to engage with and keep municipal and public stakeholders informed for the project. Such costs include:

- newspaper and radio notices of project work and milestones;
- management of the project website and Facebook group;
- hosting of public open houses and project-related events;
- managing relationships with municipal leaders in ROW communities and supporting resolution of municipal issues and concerns;
- support of local needs through community investment, support for and participation in local municipal and industry conferences; and
- monitoring of the project email and phone line for inquiries and comments and documenting/tracking any formal complaints submitted under the East-West Tie line's complaint protocol which was a requirement of the Amended EA.

96. After analyzing the costs of previous engagement activities, NextBridge decided to target larger engagement activities to coincide with major project milestones, including open houses for the construction phase, thus gaining efficiencies in travel costs for project staff. Given that open houses provide the most transparent and open opportunity for stakeholders to personally engage with project staff, NextBridge considered they were important for the success of the project and an appropriate forum to satisfy community and stakeholder expectations.

97. The commencement of construction open houses took place during the week of May 6, 2019 and provided information on what people could expect in their community as workers mobilized and construction activity began. A key message at this round of open houses was how to be safe during construction. While effective, not all stakeholders could attend an open house event, so NextBridge also provided construction and safety awareness

information via notices published in local newspapers and radio, as well as through the project website and Facebook group. Construction awareness signage was also placed at key trail and road access points along the ROW.

98. **(11) Contingency (n/a)**

99. NextBridge has no 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 so as 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.

100. **(12) Regulatory ($5.4 million)**

101. This cost category includes activities to support regulatory and legal activities during the construction period already undertaken or anticipated to be required in advance of the East-West Tie line being able to enter into service. Ongoing regulatory support activities are limited to expenses related to project development, environmental assessment processes, and construction during the construction period. External counsel and consultant services have and will continue to be engaged to provide legal advice and support in relation to these matters, as required. Hearing costs and costs related to intervener participation in each of the LTC application and rate application, as well as any mediation and/or expropriation proceedings, are also included in this cost category.

102. Such costs include:

- LTC proceedings to determine the competing applications submitted by NextBridge and HONI, which ultimately resulted in authorization for NextBridge to construct and operate the East-West Tie line
- Application for rates and recovery of prudently incurred costs, in anticipation of a March 31, 2022 in-service date;
- Application pursuant to section 99 of the Act for authority to expropriate land rights required in order to construct the project on privately-owned lands where NextBridge was unable to reach negotiated agreements
- Application pursuant to section 101 of the Act for authority to construct the East-West Tie line over utility lines, in the event that NextBridge was unable to reach agreement with existing utility operators (including HONI)
- Legal support for any litigation that may arise, including the appeal and judicial review proceedings commenced by Biinjitiwaabik Zaaging Anishinaabek ("**BZA**") in March 2019
- General regulatory and legal support for the land team for land acquisition activities other than expropriations and crossing proceedings under the Act, including potential processes under the *Mining Act* and negotiation of land-related agreements
- General regulatory support for the project, as required

103. One of the primary risks for the potential for increased costs in the Regulatory category was the need to commence regulatory proceedings in order to obtain the land rights required to construct and operate the project. As a result of timely, ongoing, and sustained efforts to resolve issues and concerns with private landowners and other interest-holders, NextBridge was successful in reaching negotiated agreements, reducing the complexity or altogether removing the need for some of the regulatory activities anticipated to be required. In turn, this significantly reduced costs that would otherwise have been incurred.

104. As one example, building and maintaining relationships with landowners allowed NextBridge to secure option agreements with the majority of private landowners which reduced the extent of costs required to support expropriation proceedings. By the time NextBridge filed its expropriation application with the OEB on April 17, 2019 to account for those circumstances in which negotiated agreements were not obtained, it had secured access to all except 23 privately-owned parcels of land. As a result of continued engagement, by January 2020, the number of parcels that were required to be expropriated had been reduced from 23 to 5. Furthermore, none of the landowners whose land remained subject to expropriation sought intervenor status in, or opposed the expropriation proceeding. This lack of opposition allowed the OEB to set a schedule for a written expropriation proceeding, rather than an oral proceeding which would have been significantly costlier. Finally, in respect of the 5 parcels which have been expropriated, none of the landowners opposed NextBridge's proposed compensation amounts for the parcels and, as a result, NextBridge did not incur significant costs to proceed through post-expropriation compensation proceedings.

105. Additionally, NextBridge was able to reach an agreement with HONI regarding the relocation the T1M line and the costs of a Section 101 application and process with the Board has been avoided.

106. Where possible, external legal counsel expenditures were minimized by utilizing of in-house legal counsel from NextBridge partner organizations. External legal counsel services used for the majority of regulatory activities for the construction period, including the LTC, expropriation and *Mining Act* proceedings were competitively sourced through an RFP process. External counsel invoices are reviewed for accuracy and reasonableness before being submitted for payment and ultimate approval by the Project Director.

107. **(13) East-West Tie Project Management ($4.9 million)**

108. This cost category includes the overall project management activities including:

- Task/schedule management
- Internal/external reporting, including OEB reports and requests
- Management communication and directives
- Overall cost management including team lead variance discussions (as outlined in Exhibit C, Tab 2, Schedule 4 “Overview of Cost Management Practices”)
- Back office functions including accounting, financial reporting, accounts payable, vendor management/supply chain, cash management, tax, audit management, regulatory support, and financial modeling

109. 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.

110. **(14) Interest During Construction (IDC) ($31.0 million)**

111. This cost category represents the Interest During Construction (“**IDC**”) for the East-West Tie line. 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. The estimate remains approximately the same as was in the LTC budget, even with the additional months of construction due to lower rates. NextBridge will utilize the CCVA to capture any differences in revenue requirement

resulting from the actual IDC calculated at the end of the project compared to the amount of IDC included in this Application.

NEXTBRIDGE'S PROCUREMENT POLICY

Bidding Requirements

Competitive bidding should be used as the standard methodology to be used for procurements with an estimated total value in excess of $100,000, including the use of a Request for Proposal (RFP).

Competitive bidding is not required but is encouraged for transactions valued under $100,000 where market conditions warrant and/or there is additional value-add opportunities.

Bidders

Bids are to be requested from at least three (3) bidders whenever practical.

In situations where multiple potential suppliers are requested but decline to bid, or the NextBridge is unable to identify more than one (1) bidder, such that only one supplier bid is received, NextBridge can proceed to procure with the one bidder.

Bid Evaluation and Award

Upon the receipt of the proposals, NextBridge shall:

- Perform a commercial evaluation of proposals
- Coordinate written requests for clarifications or requests for additional technical or commercial information between the bidders and subject matter experts

Upon completion of the commercial and technical evaluation, NextBridge shall make a make a determination and the results of the competitive bid (commercial and technical) evaluation should be substantiated.

Exceptions to Bidding

There are certain limited exceptions and circumstances where a non-competitive single or sole source procurement may be justified, and in those cases NextBridge should document and justify the exceptions.

EA NOTICE OF APPROVAL TO PROCEED AND CONDITIONS

ENVIRONMENTAL ASSESSMENT ACT

SECTION 9

NOTICE OF APPROVAL TO PROCEED WITH THE UNDERTAKING

RE: An Environmental Assessment for the East-West Tie Transmission Line

Proponent: NextBridge Infrastructure LP

EA File No.: 03-03-03
EA Reference No.: 13136

Take notice that the period for requesting that the application or matters related to the application be referred to the Environmental Review Tribunal for a hearing and decision expired on November 16, 2018. I received no submissions requesting a hearing by the Environmental Review Tribunal before the expiration date.

I consider a hearing to be unnecessary in this case. Having considered the purpose of the Environmental Assessment Act, the approved terms of reference, the environmental assessment, the ministry review of the environmental assessment and that there were no submissions received, I hereby give approval to proceed with the undertaking, subject to the conditions set out below.

REASONS

My reasons for giving approval are:

(1) The proponent has complied with the requirements of the Environmental Assessment Act.

(2) The environmental assessment has been prepared in accordance with the approved Terms of Reference

(3) On the basis of the proponent's environmental assessment and the ministry review, proponent's conclusion that, on balance, the advantages of this undertaking outweigh its disadvantages appears to be valid.

(4) On the basis of the proponent's environmental assessment, the ministry review and the conditions of approval, the construction, operation and maintenance of the undertaking will be consistent with the purpose of the Environmental Assessment Act (section 2).

(5) The ministry's review of: the government, public and Indigenous community submissions on the environmental assessment and the ministry review has indicated no outstanding concerns that have not been addressed or that cannot be addressed through commitments made during the environmental assessment process, through the conditions set out below or through future approvals that will be required. I am not aware of any outstanding issues with respect to this Undertaking which suggest that a hearing should be required.

CONDITIONS

The approval is subject to the following conditions:

1. Definitions

For the purposes of these conditions:

"**environmental assessment**" means the document titled 'Amended Environmental Assessment Report for the East-West Tie Transmission Project, February 2018.

"**construction**" means physical construction activities, including site preparation works, but does not include the tendering of contracts.

"**Date of Approval**" means the date on which the Order in Council pertaining to the approval of the environmental assessment was signed by the Lieutenant Governor-in-Council.

"**Detailed Project Plan**" means an agreed upon approach to provide information to verify and supplement the environmental assessment by developing over-arching and individual workfront plans.

"**Director**" means the Director of the Environmental Assessment and Permissions Branch of the Ministry of the Environment, Conservation and Parks.

"**Indigenous Communities**" means, Animbiigoo Zaagi'igan Anishinaabek First Nation (Lake Nipigon Ojibway); Bingwi Neyaashi Anishinaabek (Sand Point First Nation); Biinjitiwaabik Zaaging Anishinaabek First Nation (Rocky Bay); Fort William First Nation; Ginoogaming First Nation; Long Lake No. 58 First Nation; Michipicoten First Nation; Missanabie Cree First Nation; Ojibways of Batchewana; Ojibways of Garden River; Ojibways of Pic River (Heron Bay First Nation); Pays Plat First Nation; Pic Mobert First Nation; Red Rock Indian Band; Greenstone Métis Council; Red Sky Independent Métis Nation; Superior North Shore Métis Council; Thunder Bay Métis Council.

"**Limits of Work**" means the portion of land approximately 450 km in length and 64 metres (m) in width that connects the Lakehead transformer station in the Municipality of Shuniah near the city of Thunder Bay to the Wawa transformer station located east of the Municipality of Wawa.

"**ministry**" means the Ontario Ministry of the Environment, Conservation and Parks.

"**proponent**" means NextBridge Infrastructure LP, its agents, successors, and assigns.

"**Protected Areas**" means Conservation Reserves and Provincial Parks.

"**Regional Director**" means the Director of the ministry's Thunder Bay Regional Office.

"**Species at Risk**" means the species that are on the Species at Risk in Ontario List provided by Ontario Regulation 230/08 of the Endangered Species Act, S.O. 2007, c. 6 as amended.

"**undertaking**" means the design, construction, operation, maintenance and retirement of a double-circuit 230 kilovolt (kV) transmission line connecting the Lakehead Transformer Station to the Wawa Transformer Station. Project components include a new, approximately 450 km long double-circuit 230 kV transmission line (with a connection at the Marathon transformer station), a right-of-way (ROW) corridor with a typical width of 64 metres and Temporary and permanent access roads, storage yards, laydown yards, construction camps and construction easements.

"**workfront**" means geographic groupings along the transmission line corridor representing the approach to execute construction phase in spans or groupings.

2. General Requirements

2.1 The proponent shall comply with the provisions in the environmental assessment which are hereby incorporated in this approval by reference except as provided in these conditions and as provided in any other approval or permit that may be issued for the site.

2.2 The proponent shall fulfill all commitments made in the environmental assessment.

2.3 The conditions of the Notice of Approval do not prevent more restrictive conditions being imposed under other statutes.

3. Public Record

3.1 Where a document is required for the public record, the proponent shall post the document on the proponent website and shall provide one hardcopy and one electronic copy of the document to the Director.

3.2 The environmental assessment Reference Number 13136 and File Number 03-03-03 shall be quoted on all documents submitted to the ministry pursuant to this Notice of Approval.

3.3 For every document submitted to the ministry, the proponent shall clearly identify which condition of approval the document is meant to fulfill.

4. Compliance Monitoring Program

4.1 The proponent shall prepare and submit to the Director for approval and for the public record an environmental assessment compliance monitoring program.

4.2 The compliance monitoring program shall be submitted to the Director for approval within one year from the Date of Approval, or 60 days before the commencement of construction, whichever is earlier; or by another date agreed upon by the Director.

4.3 The compliance monitoring program shall include a description of how the proponent will:

a. monitor implementation of the undertaking in accordance with the environmental assessment with respect to mitigation measures, public consultation, indigenous consultation and additional studies and work to be carried out;

b. monitor compliance with the conditions in this Notice of Approval; and

c. monitor compliance with all commitments made in the environmental assessment with respect to mitigation measures, public consultation, and additional studies and work to be carried out.

4.4 The compliance monitoring program must contain an implementation schedule for monitoring activities to be completed.

4.5 The Director may require the proponent to amend the compliance monitoring program at any time. Should an amendment be required, the Director will notify the proponent in writing of the required amendment and the date by which the proponent must complete and submit the amendment to the Director.

4.6 The proponent shall submit the amended compliance monitoring program to the Director within the time period specified by the Director in the written notice.

4.7 The proponent shall implement the compliance monitoring program and any amendments to it.

5. Compliance Reporting

5.1 The proponent shall prepare an annual compliance report outlining the results of the compliance monitoring program (Condition 4).

5.2 The first compliance report shall be submitted to the Director for review and for the public record no later than one year following the Date of Approval. Each subsequent annual compliance report shall be submitted on the date that is the anniversary of the Date of Approval thereafter. Each report shall cover the previous year.

5.3 The proponent shall submit annual compliance reports until all conditions in this Notice of Approval are satisfied or the proponent is instructed otherwise in writing by the Director.

5.4 The proponent shall notify the Director in writing when the final annual compliance report is being submitted. The ministry will confirm whether the annual compliance reporting requirements in Conditions 5.1 to 5.3 have been fulfilled and the Director will confirm this in writing to the proponent.

5.5 The proponent shall retain, either in the proponent's office or in another location approved by the Director, copies of the annual compliance reports for each reporting year and any associated documentation of compliance monitoring activities. The proponent shall post the annual compliance reports for each reporting year on its website.

5.6 The proponent shall make the compliance reports and associated documentation available to the Director or a designate in a timely manner when requested to do so by the ministry.

6. Complaint Protocol

6.1 The proponent shall prepare and implement a complaint protocol for dealing with and responding to inquiries and complaints during all stages of the undertaking. The complaint protocol shall include a procedure for notifying the Regional Director of any complaints received by the proponent.

6.2 The proponent shall submit the complaint protocol to the Director for approval and for the public record within one year from the Date of Approval, or 30 days before the start of construction, whichever is earlier; or by another date agreed upon by the Director.

6.3 The Director may require the proponent to amend the complaint protocol at any time. Should an amendment be required, the Director shall notify the proponent in writing of the amendment required and when the amendment must be completed.

6.4 The proponent shall submit the amended complaint protocol to the Director within the time period specified by the Director.

6.5 The proponent shall implement the complaint protocol and any amendments to it.

6.6 The proponent shall provide a summary on the complaints received and how they were addressed in each of the annual compliance reports required by Condition 5.

7. Consultation with Indigenous Communities

7.1 The proponent shall prepare, in consultation with Indigenous Communities, an Indigenous consultation plan that sets forth:

a) how, during implementation of the undertaking, the proponent will consult with Indigenous Communities and provide them with opportunities to be involved in environmental monitoring activities;

b) how the proponent will notify Indigenous Communities, using a notification protocol, if archaeological resources or Indigenous remains are encountered during implementation of the undertaking;

c) how the proponent will consider any additional traditional ecological knowledge and traditional land and resource use information that Indigenous Communities may provide during implementation of the undertaking; and

d) how the proponent will issue notices and updates to Indigenous communities on key steps during the implementation of the undertaking.

7.2 At least 30 days prior to the start of construction or by such other date as may be agreed to in writing by the Director, the proponent shall submit the Indigenous consultation plan to the Director for approval, including details of the consultation that was undertaken with Indigenous Communities on the plan, as required by Condition 7.1.

7.3 The Director may require the proponent to amend the Indigenous consultation plan at any time. Should an amendment be required, the Director shall notify the proponent in writing of the amendment required and when the amendment must be completed.

7.4 Once the Director is satisfied with the Indigenous consultation plan, the proponent shall implement the Indigenous consultation plan and any amendments to it.

8. Detailed Project Plans

8.1 The proponent shall prepare Detailed Project Plan(s) to verify and supplement the information in the environmental assessment. This information will be submitted as an over-arching plan for the undertaking as well as multiple individual workfront plans according to how the proponent phases the construction of the undertaking, such as by geographic groupings, timing windows and/or types of project activities. Detailed Project Plan(s) will be used to fulfill the requirements of this Condition and to assist in fulfilling the permitting requirements of the Ministry of Natural Resources and Forestry and the Ministry of Environment Conservation and Parks.

8.2 Over-arching Detailed Project Plan(s) shall describe and include:

a) plans and/or protocols, including, but not limited to, Timber Salvage Plan, Unmapped Stream Assessment Protocol, Best Management Practices,

Sediment Control Plan, Road Use Management Strategy, Vegetation Management Plans; and

b) details for all phases of the project (i.e. pre-construction, construction, maintenance, decommissioning) as it relates to significant environmental features, as well as plans and/or protocols described in 8.2 (a).

8.3 Workfront Detailed Project Plan(s) shall describe and include project specific impacts and information outlining:

a) the final locations and footprint of project components, inclusive of any amendments that are approved under Condition 10; and project activities planned to occur within a specific individual workfront of the undertaking and the timing window for these activities, including the construction, operation, maintenance and decommissioning phases, as applicable;

b) significant environmental features (including, but not limited to, Species at Risk, wetlands, watercourses, significant wildlife habitat, Protected Areas); environmental constraints; and unexpected environmental conditions in the area(s) where specific project activities are planned;

c) site-specific mitigation for significant environmental features (including, but not limited to, wetlands, Species at Risk, significant wildlife habitat, Protected Areas); and maintaining vegetation setbacks on all waterbodies and watercourses;

d) monitoring plans for the project activities;

e) consultation plan with Indigenous communities, and stakeholders; and,

f) detailed mapping at a sufficient scale to display the information listed above.

8.4 The proponent shall submit the Detailed Project Plan(s) to:

a) the Director,

b) the Ministry of Natural Resources and Forestry's Director of Northwest Region, and

c) Indigenous Communities

8.5 The proponent shall provide over-arching Detailed Project Plan(s) prior to workfront Detailed Project Plan(s). The proponent shall provide a minimum of 30 days for review of each Detailed Project Plan by the parties listed in Condition 8.4 prior to carrying out any construction activities for the portion of the undertaking covered by those plans.

8.6 The proponent shall post the Detailed Project Plan(s) on the proponent's website and provide notification to all interested stakeholders that were notified of the undertaking during the environmental assessment.

8.7 If adverse impacts on Aboriginal or treaty rights are identified through consultation with Indigenous communities on the Detailed Project Plan(s), the proponent must notify the Director in writing. The Director may require the proponent to amend the Detailed Project Plan(s) or carry-out additional consultation at any time to address

potential adverse impacts on Aboriginal or treaty rights. The proponent shall consult with the ministry about any consultation requirements that may apply.

8.8 If changes are required to be made to Detailed Project Plan(s) after it has been submitted, the proponent shall determine if the proposed change:

a) would result in a change to the undertaking that is outside of the Limits of Work; or

b) could result in greater adverse environmental effects than were identified in the environmental assessment

If the proposed change to the Detailed Project Plan(s) would result in either (a) or (b) above, the proponent shall notify ministry in accordance with Condition 10. Otherwise, the proponent may proceed with the proposed change, subject to any permitting requirements.

8.9 At the end of the construction phase of the undertaking, the proponent shall provide the ministry with a summary of how Condition 8 has been satisfied in the following compliance report required by Condition 5.

9. Vegetation Removal

9.1 Use mechanical methods to remove unwanted vegetation whenever possible and only using chemical means when deemed necessary, in consultation with Indigenous communities and the Ministry of Natural Resources and Forestry.

10. Changes to the Undertaking

10.1 The proponent shall notify the Director in writing of any proposed change to the undertaking that is outside of the Limits of Work or that could result in greater adverse environmental effects than were identified in the environmental assessment. The proponent shall consult with the ministry about any consultation requirements that may apply, and whether any changes can be permitted without an amendment to the environmental assessment.

11. Duration of Approval

11.1 If construction of the undertaking has not commenced within 10 years of the Date of Approval, this Notice of Approval shall expire unless otherwise extended by the Minister.

Dated the 8 day of March. 2019 at TORONTO.

Minister of the Environment, Conservation and Parks
77 Wellesley Street West
11th Floor, Ferguson Block
Toronto, Ontario
M7A 2T5

Approved by O.C. No. 403/2019

Date O.C. Approved March 21, 2019.

OBP PERMIT AND CONDITIONS

Ontario

PERMIT UNDER s. 17(1) in accordance with clause 17(2)(c) of the ENDANGERED SPECIES ACT, 2007

Permit #: NR-C-001-19

Issued to: Upper Canada Transmission, Inc. on behalf of NextBridge Infrastructure LP (the "Proponent")

Term: This permit comes into force on the date it is issued (the "Effective Date") and is valid until the date upon which all permit conditions have been satisfied.

Location: The construction of a new 450 km transmission line within an approximately 60m-wide right of way between Thunder Bay, Ontario and Wawa, Ontario, in Northwestern Ontario (the "Project") in the areas identified in Workfront 3, 5, 6 and 7 in Appendix B (the "Site").

1. **Authority.** This permit is issued to the Proponent under subsection 17(1) [in accordance with clause 17(2)(c)] of the *Endangered Species Act, 2007* (the "ESA").

2. **Application to Species.** This permit applies to the following species that are listed on the Species at Risk in Ontario List in Ontario Regulation 230/08 and their respective habitats:

    - Caribou (Boreal population) (*Rangifer tarandus*), listed as threatened.
    - Northern Myotis (*Myotis septentrionalis*), listed as endangered. and
    - Little Brown Myotis (*Myotis lucifugus*), listed as endangered. and
    - Eastern Small-footed Myotis (*Myotis leibii)*, listed as endangered

3. **Authorization.** This permit authorizes the Proponent to engage in the activities specified in section 4 that would otherwise be prohibited by sections 9 and 10 of the ESA, for the purpose of vegetation clearing, grubbing, site grading, blasting, temporary camps, turn-around areas, and laydown areas, access roads, trails and building transmission line structures necessary to carry out the Project.

4. **Application of Authorization.** The authorization provided in section 3 applies to the Proponent as is necessary to:

    (a) Kill, harm, and harass Caribou (Boreal population), Little Brown Myotis, Northern Myotis and Eastern Small-footed Myotis in order to carry out the Project and fulfill the conditions of the permit. and

    (b) Damage or destroy:

    - Habitat for Caribou (Boreal population) in the Lake Superior Coast Range including Nursery and Winter Habitat
    - 9.58 hectares of habitat supporting 6 hibernacula used by Northern Myotis, Little Brown Myotis and Eastern Small-footed Myotis

    in order to carry out the Project at the Site and fulfill the conditions of this permit.

5. **Conditions:** The activities authorized by this permit are subject to the conditions specified herein.

6. **Appendices:** The following appendices form part of this permit:

- Appendix A: Conditions
- Appendix B: Project Site
- Appendix C: Notification/Contact Schedule
- Appendix D: Lake Superior Coast Range
- Appendix E: Caribou Category 1 Habitat
- Appendix F: SAR Bat Hibernaculum
- Appendix G: Species Encounter Reporting Form

Failure to comply with conditions in this permit may result in a contravention of the ESA.

Pursuant to subsection 17(1) [in accordance with clause 17(2)(c)] of the ESA, I hereby issue this permit authorizing the activities described above, subject to the conditions set out herein.

Jeff Yurek
Minister of the Environment, Conservation and Parks

Date of Issuance: 14/2/19
(dd/mm/yy)

1. DEFINITIONS

1.1 In the permit, the following words shall have the following meanings:

"Artificial Roost Structure" bat boxes, rocket box, or bark poles intended to provide an artificial roost for a **SAR** Bat and referred to in conditions 6.6 (e) and (f);

"Bat Gate" means a flat grid of bars across the entrance of a cave or mine passage used by bat species as a hibernaculum;

"BMPs for Caribou" means the *Best Management Practices for Renewable Energy, Energy Infrastructure and Energy Transmission Activities and Woodland Caribou in Ontario* (MNR 2013)";

"Clear" or "**Clearing"** means the clearing or removal of vegetation;

"Detailed Project Plans" or "DPPs" means, a series of documents developed and provided to MECP to verify and supplement the information for each Workfront, as defined in the Notice of Approval;

"Hibernacula" means a cave or suitable site used by members of the SAR Bats to hibernate, as depicted in Appendix F;

"Hibernation Period" means September 1st through May 30th, when SAR Bats are likely to be hibernating in suitable Hibernacula;

"High Use Areas" means in respect to Caribou (Boreal population), its Nursery Habitat and Winter Use Habitat, and in respect SAR Bats, their Hibernacula and Maternity Habitat;

"Lake Superior Coast Range" means the broad geographic area historically used by Caribou (Boreal population) in proximity to Lake Superior, as depicted in Appendix D;

"Maternity Habitat" means in respect SAR Bats, forested areas containing cavity trees likely to be used by individual females for maternity roosting;

"Maternity Period" means May 15th through August 31st, when female SAR Bats, are likely to be giving birth and raising their pups;

"MECP" means the Ministry of the Environment, Conservation and Parks;

"Mitigation Measure" means a measure to avoid or minimize the adverse effects of the Project on the Species;

"**NHIC**" means the Natural Heritage Information Centre of the Ministry of Natural Resources and Forestry;

"Notification/Contact Schedule" means the document in Appendix C that outlines the protocol to be followed to communicate with MECP and/or NHIC, as the case may be;

"Notice of Approval" means the Notice of Approval provided by Minister of MECP related to the Project under section 9 of the *Environmental Assessment Act*, dated March 8, 2019;

"Nursery Habitat" means in respect to Caribou (Boreal population), areas used by individual or multiple adult females during late parturition, to give birth, and raise their calves during the spring, summer and early fall, as depicted in Appendix E;

"Nursery Period" means in respect to Caribou (Boreal population), May 1st to September 15th, when female individuals are likely to be giving birth and raising their calves;

"Project Site" or "Site" means the areas within Workfronts 3, 5, 6 and 7 as identified in Appendix B – Project Site, in which activities necessary for the construction, operation or maintenance of the Project will be carried out;

"Qualified Professional" means a person who has the training, qualifications and expertise in the ecology, biology, handling and monitoring of the Species to undertake the requirements of this permit that are to be undertaken or overseen by that person;

"Restore" or "Restoration" means the practice of renewing and restoring degraded, damaged or destroyed habitats for the Species in the environment to natural conditions suitable for the Species, by active human intervention and action;

"ROW" means a right of way of the transmission line, access roads or other permanent or temporary infrastructure constructed, improved, repaired or used for the purposes of the Project;

"SAR Bats" means Northern Myotis, Little Brown Myotis and Eastern Small-footed Myotis;

"Snag" means a tree that is dead, but is standing or partially fallen, and has the potential to provide habitat functionality for SAR Bats;

"Species" means Caribou (Boreal population) and SAR Bats;

"Species Encounter Reporting Form" means the form found in Appendix G;

"Swarming Period" means August 15th through October 31st, when individual SAR Bats are likely to be swarming near the entrance to a Hibernacula;

"Temporary Construction Easements Area" means an area adjacent to the transmission ROW temporarily utilized during conductor installation, where hardline followed by conductor is pulled and tensioned for stringing of the transmission line;

"Winter Road" means a temporary road that is built to the standard of an "Access New Winter" as identified in the document supplied by NextBridge to MECP on September 13, 2019, entitled "Detailed Project Plan for Workfront 6 for the Ontario East West Tie Transmission Line Project", and which are incorporated by reference into this permit;

"Winter Use Habitat" means in respect to Caribou (Boreal population) areas associated with soil and forest cover conditions that provide abundant ground lichen for winter forage, and tend to have lower average snow depths that may facilitate easier movement than in surrounding areas, as depicted in Appendix E;

"Winter Use Period" means in respect to Caribou (Boreal population), December 1st through March 31st, when individuals are likely to be using Winter Use Habitat;

"Workfront" means one of the eleven (11) geographic groupings along the Project corridor as referred to in the Notice of Approval, and identified on the map in Schedule B – Project Site;

2. GENERAL

2.1 The Proponent shall ensure that a copy of this permit is maintained on the Site at all times when activities are being conducted under the authority of the permit.

2.2 Where this permit requires the Proponent to communicate with or submit something to the MECP, the Proponent shall do so in accordance with the Notification/Contact Schedule.

2.3 The Proponent shall provide written notice to MECP when construction activities for the Project have been completed.

3 MITIGATION MEASURES

Mitigation Measures for All Species

3.1 The Proponent shall act with due diligence to minimize killing, harming, or harassing the Species while carrying out the Project.

3.2 The Proponent shall ensure that Site access during construction will be primarily along the 60-m-wide transmission line ROW or narrow (approximately 6-metre-wide) access roads adjacent to the ROW to limit damaging or destroying Species' habitat or cause sensory disturbance to the Species.

3.3 In order to minimize impacts to the Species' habitats from Clearing activities or increases in anthropomorphic linear features, the Proponent shall ensure that, the Site is accessed only by existing access points or infrastructure where reasonably possible.

3.4 The Proponent shall employ the use of a Qualified Professional, to monitor the Project footprint within the Site during construction, identify sensitive features (i.e., Caribou Nursery Area, Caribou Winter Use Area, Hibernacula) in advance of construction, conduct monitoring in accordance with conditions 7.1 through 8.12, and report to MECP on the effectiveness of the construction procedures and Mitigation Measures for minimizing potential impacts in accordance with conditions 9.1 through 9.10

3.5 The Proponent shall ensure that employees and contractors are prohibited from feeding wildlife in the course of their performance of Project activities to avoid and minimize Species habituation to humans.

3.6 The Proponent shall ensure that speed limits are applied to employees and contractors using automobiles, trucks, ATVs or other vehicles in the course of performing Project activities at the Site and along access roads to limit potential impacts to the Species (e.g., dust and sensory disturbance, vehicle collision with the Species).

3.7 The Proponent shall ensure that recreational use of all off-road vehicles, including, but not limited to ATVs, UTVs, snowmobiles, dirt-bikes, by employees and contractors, is prohibited at the Site.

3.8 The Proponent shall post signs warning drivers of potential Species' presence in High Use Area(s), excluding Maternity Roosting Habitat, along all access points in to the High Use Area(s), every 2 kilometres within the High Use Area(s), and in both directions along the access roads excluding the Trans-Canada Highway;

3.9 The Proponent shall ensure all noise abatement, emission and pollution control equipment on machinery is in place, properly maintained and in good working order;

3.10 The Proponent shall restrict access to active work-sites to authorized personnel in order to avoid unnecessary activity and disturbance;

3.11 The proponent shall commence Restoration of all temporary access roads, construction camps, laydown yards and construction easements located off of the transmission line ROW sequentially after stringing operations are completed, to the extent practicable, within Workfronts 3, 5, 6 and 7, as identified in the documents supplied by the Proponent to MECP between July 25, 2019 to November 8, 2019, entitled "Detailed Project Plan for Workfront 3 for the Ontario East West Tie Transmission Line Project", "Detailed Project Plan for Workfront 5 for the Ontario East-West Tie Transmission Line Project", "Detailed Project Plan for Workfront 6 for the Ontario East-West Tie Transmission Line Project", and "Detailed Project Plan for Workfront 7 for the Ontario East-West Tie Transmission Line Project" respectively, and which are incorporated by reference into this permit;

3.12 Within the Lake Superior Coast Range, Workfronts 6 and 7, the Proponent shall carry out Restoration following guidance in the "Best Management Practices for Renewable Energy, Energy Infrastructure and Energy Transmission Activities and Woodland Caribou in Ontario", which shall include

(a) planting and or seeding of jack pine trees or spruce trees as follows:

i. site preparation and planting seedlings in temporary access roads, construction camps, laydown yards and Construction Easements located outside of the transmission ROW, at a minimum density of 1,000 stems per hectare, and

ii. site preparation and seeding at 20,000 viable seeds per hectare;

(b) avoiding seeding of non-native or invasive grass and legume-based mixes in temporary access roads, construction camps, laydown yards located outside of the transmission ROW and in Temporary Construction Easement Areas, which will create competition for native target species and alternate food sources for predators and alternate prey.

3.13 Despite condition 3.12, where practicable the Proponent may use alternate site renewal treatments to Restore temporary access roads, construction camps, laydown yards located outside the transmission ROW, and Temporary Construction Easement Areas to a forested condition that reflects the conditions of those areas prior to the commencement of the Project;

Mitigation Measures for Caribou

3.14 The Proponent shall, where appropriate, apply the Best Management Practice Principles, General Best Management Practices and Activity Specific Best Management Practices set out in the BMPs for Caribou to all Project activities.

3.15 The Proponent shall not undertake Project activities within 10 km of the Nursery Habitat, as identified in Appendix E, during the Nursery Period (May 1 to September 15) to minimize sensory disturbance to Caribou.

3.16 The Proponent shall retain compatible (low, slow growing) vegetation under 2 m on the ROW, where reasonably possible, to reduce line-of-sight for predators and limit predator efficiencies.

3.17 The Proponent shall confine soil stripping to the extent practicable, to minimize ground surface disturbance.

3.18 The Proponent shall stockpile soil during construction for use when carrying out Restoration activities.

3.19 During reclamation the Proponent shall cut and pile any maintained slash and non-salvageable timber on appropriate locations along the ROW to reduce predator use of the ROW .

3.20 The Proponent shall ensure Clearing operations occur only during the daytime period from 07:00 to 19:00. In the event that construction will occur beyond the daytime period, a Qualified Professional shall assess the potential effects of the Clearing. If additional potential adverse effects to any of the Species are identified, the Proponent shall take reasonable steps to avoid or minimize those adverse effects.

3.21 The Proponent shall turn off vehicles and equipment when not in use to minimize idling and associated sensory disturbance(s), unless weather or safety conditions require otherwise.

3.22 The Proponent shall ensure that all employees and contractors performing Project activities on new temporary access roads within 500 metres of Nursery Habitat and Winter Use Habitat limit their speeds to 35km/hr, to limit dust and sensory disturbance and to reduce the potential for vehicle collision with the Species.

3.23 The Proponent shall only remove snow along access roads where access is required for construction activities to minimize predator efficiencies.

3.24 The Proponent shall ensure Project Sites are kept clean and limit the potential wildlife attractants that would adversely increase predator encounters with Caribou.

3.25 The Proponent shall ensure that any Winter Roads constructed within Caribou High Use Areas are constructed to minimize the damage and/or destruction of habitat;

3.26 The Proponent shall design and construct all access roads within the Lake Superior Coast Range to contain bends, on average once every kilometer, where consistent with safety standards, in order to reduce the line of sight for predators of Caribou.

3.27 The Proponent shall, where reasonably possible, use ripping techniques where rock is encountered, instead of blasting, to minimize sensory disturbance to Caribou.

3.28 The Proponent shall, where reasonably possible, limit the use of blasting for the construction of access roads where environmental conditions do not allow for typical or standard drilling methods to minimize sensory disturbance to Caribou.

3.29 The Proponent shall implement the dust control measures within 500 metres of the Nursery Habitat during the Nursery Period and Winter Use Habitat during the Winter Use Period, as identified in the document supplied by the Proponent to MECP on September 13th, 2019, entitled "Detailed Project Plan for Workfront 6 for the Ontario East-West Tie Transmission Line Project", and which is incorporated by reference into this permit, to minimize sensory disturbance to Caribou;

3.30 For transit flights between yards and active Workfronts, the Proponent shall ensure that the helicopter does not fly lower than an altitude of 400 metres, where safety or operational requirements do not constrain altitude, to minimize sensory disturbance to Caribou.

3.31 When Clearing the transmission ROW, the Proponent shall undertake selective mechanical Clearing and retention of shrubby vegetation, trees, wildlife trees, and coarse woody debris, as identified in the document supplied by the Proponent to MECP on July 25th, 2019, entitled "Detailed Project Plan for Workfront 6 for the Ontario East-West Tie Transmission Line Project, and which is incorporated by reference into this permit, where safe operation practices can still be achieved to provide line-of-sight breaks to discourage predator-Caribou interactions and limit sensory disturbance to the Species;

Mitigation Measures for SAR bats

3.32 The Proponent shall not undertake Clearing activities in Maternity Habitat during the Maternity Period.

3.33 During the Hibernation Period, within Workfront 3, the Proponent shall not undertake activities that could disturb members of the SAR Bats (e.g., vegetation removal, use of heavy machinery or motorized vehicles) within 200 metres of a Hibernacula.

3.34 The Proponent shall carry out tree Clearing by hand within 200 metres of a hibernaculum.

3.35 The Proponent shall retain Snags to provide wildlife habitat, where practicable.

3.36 The Proponent shall minimize the use of explosives, to the extent practicable. If blasting is required, the Proponent shall adhere to the Blast Management Plan, in section 8.3 and Appendix L Amended Environmental Assessment Report for the East-West Tie Transmission Project;

3.37 Where blasting is required within 500m of a known hibernaculum, and ripping is not feasible, the hibernaculum shall be visually inspected prior to blasting and after blasting for presence of bats;

3.38 If a new hibernaculum is encountered during construction, the Proponent shall carry out the following Mitigation Measures:

(a) immediately cease all activities within 200 metres of the Hibernaculum and contact MECP within one business day of the encounter to receive further direction, and then follow that direction;

(b) document and photograph the location of the hibernaculum and report the encounter to MECP and NHIC.

3.39 The Proponent shall place signage on access routes and work areas to identify the location of each hibernaculum within 200 metres of the Project footprint;

3.40 The Proponent shall use existing roads and trails to minimize disturbance, where practicable;

3.41 The Proponent shall ensure that all new roads constructed in Workfront 6 are Winter Roads;

3.42 The Proponent shall ensure that roads and trails constructed around hibernacula in Workfronts 3 and 6, as identified in Appendix F, are decommissioned using barriers to restrict public assess from an existing road ROW to the constructed road or trail.

4. EDUCATION AND AWARENESS TRAINING

4.1 The Proponent shall ensure that before an employee or contractor enters the Site to perform Project activities, each employee or contractor is provided with information and given education and awareness training by Qualified Professionals and or developed by Qualified Professionals about the Species that addresses:

(a) The existence of the Species on the Site, the permit and its obligations;

(b) The identification of the Species and their habitat;

(c) The care that should be taken to avoid unnecessary harm to the Species and/or the Species' habitat;

(d) Appropriate actions to take if a member of the Species is encountered. and

(e) How to record impacts to the Species in accordance with condition 5;

4.2 The Proponent shall keep a record of training conducted under condition 4.1, and retain it for the purposes of the reporting under condition 9.2. The record shall include:

(a) The name(s) of the person(s) trained, which shall only be provided to MECP in the event MECP requires those names to verify compliance with this permit;

(b) The training completed including the subject matter and/or a list of the training materials reviewed;

(c) The date of the training event(s); and

(d) The manner in which the training was provided.

5. SPECIES ENCOUNTERS

5.1 Using a Species Encounter Reporting Form (Appendix G), the Proponent shall record any encounter with, or observation of a member of the Species, or any other species listed as endangered or threatened on the Species at Risk in Ontario List at the Site.

5.2 The Proponent shall submit all Species Encounter Reporting Forms filled out in accordance with condition 5.1 to the MECP and NHIC within 30 days of the encounter or observation.

5.3 If an individual living and uninjured member of any Species is encountered in the Site, the Proponent shall:

(a) Immediately communicate the presence of Species on and near roads to other employees working in the area;

(b) Cease activity in the relevant area and provide the member of the Species sufficient time to leave the area before continuing with Project activities;

(c) Provide the member of the Species with a right-of-way to traffic, so long as doing so does not pose a risk to driver safety; and

(d) Report Species observations to the NHIC, in accordance with condition 5.1, within 30 days.

5.4 If an individual of a Species is found on Site and is injured, the Proponent shall, where possible and if safe to do so:

(a) Ensure that the individual is protected from further harm;

(b) Obtain veterinary advice/care for the individual;

(c) Contact the MECP by the next business day;

(d) Report the Species Encounter to MECP within one business day or as soon as possible thereafter, including the location where the individual member of the Species was found and the circumstances under which it was found injured; and

(e) Report Species observations to the NHIC, in accordance with condition 5.1, within 30 days.

5.5 If a Caribou is killed or found dead within the Site, the Proponent will:

(a) Contact the MECP within one business day. and

(b) Comply with any instructions or protocols provided by MECP regarding the use of equipment and handling of the dead individual.

5.6 If a SAR Bat is found dead within the Site, the Proponent shall:

(a) Test the bat for presence of *Pseudogymnoascus destructans* (Pd) and White-nose Syndrome (WNS) following the methods identified by the Canadian Wildlife Health Cooperative (CWHC) available here:

- http://www.cwhc-rcsf.ca/docs/How_to_survey_for_WNS.pdf. or
- Anther comparable method approved by MECP;

(b) Contact the MECP within one business day;

(c) Comply with any instructions or protocols provided by MECP regarding the use of equipment and handling of the dead individual; and

(d) Report Species observations to the NHIC, in accordance with condition 5.1, within 30 days;

6. OVERALL BENEFIT

Beneficial Actions for Woodland Caribou

6.1 The Proponent shall undertake the following activities for the purpose of providing an overall benefit to Caribou (Boreal Population):

(a) Prepare and submit to MECP for approval a Caribou Transfer Strategy, under the direction of a Qualified Professional that satisfies the requirements of condition 6.2, no later than December 15th, 2020;

(b) Consult with Michipicoten First Nation in the course of developing and implementing the Caribou Transfer Strategy; and

(c) Once MECP has approved the Caribou Transfer Strategy, initiate implementation of the approved Strategy immediately or as otherwise acceptable to MECP.

6.2 The Caribou Transfer Strategy shall, at a minimum, include the following:

Pre-transfer

(a) A detailed description of the area from which Caribou will be captured ("Capture Area"), where the Capture Area meets the following criteria:

i. the Capture Area is Caribou Island and/or Slate Islands Provincial Park, as identified in Appendix D, or another area, that contains a population of Caribou that is large enough that removing a minimum of eight (8) adult female and four (4) adult male Caribou from the Capture Area will not jeopardize the persistence of the remaining population at the Capture Area;

(b) A detailed description of the area to which Caribou will be transferred (the "Transfer Area"), where the Transfer Area meets all of the following criteria:

i. The Transfer Area is not the same area as the Capture Area specified in the Caribou Transfer Strategy, and is:

A. Michipicoten Island Provincial Park as identified in Appendix B;

B. Slate Islands Provincial Park as identified in Appendix B; or

C. another area where there is potential for the transferred Caribou to contribute to the overall Caribou population and recovery within the Lake Superior Coast Range;

ii. The Transfer Area will provide sufficient habitat with the potential support a viable population of Caribou over a 20-30 year timeframe, and includes Nursery and Winter Use Habitat; and

iii. The Transfer Area is free of natural predators for Caribou at the time of the transfer.

(c) For the purpose of assessing the suitability of the Transfer Area against the criteria in this sub-condition (b), the Proponent may assume that the Transfer Area will not experience any significant natural disaster, such as a significant blow down, forest fire, disease, or the arrival of natural predators, that could threaten the population;

(d) A detailed description of the suitability of a specific location or locations within the Transfer Area to land an aircraft for the purposes of transporting caribou by air, or a watercraft for the purposes of transporting caribou by water, and provide immediate support to transferred Caribou upon transfer if any is required;

(e) A detailed description of the pre-transfer monitoring strategy for Caribou at the Capture Area, that satisfies the requirements of condition 8.1;

(f) A detailed description of the pre-transfer monitoring of Lake Superior ice conditions and associated predator movement that satisfies the requirements of condition 8.2;

Transfer

(g) Timing for which the Caribou Transfer Strategy will be implemented;

(h) A description of the methodology the Proponent shall employ to capture Caribou at the Capture Area, transfer, and release Caribou at the Transfer Area, including but not limited to:

i. timing and appropriate conditions (e.g., weather) under which the transfer will be conducted;

ii. the number of personnel and necessary roles required to capture, transfer and release Caribou;

iii. the required training for personnel involved in the capture, transfer and release of Caribou;

iv. type and number of vehicles (i.e., aircraft, watercraft) that will be required to capture and transfer Caribou;

v. the methods that will be used to capture Caribou (i.e., air or ground capture);

vi. the methods that will be used to transfer Caribou from the Capture Area to the Transfer Area; and

vii. the methods that will be used to release Caribou at the Transfer Area;

(i) A thorough Animal Capture, Handling and Transport Protocol, approved by an Animal Care and Use Committee recognized by the Canadian Council on Animal Care and the Ontario Ministry of Agriculture, Food and Rural Affairs, which shall include at a minimum:

i. presence of a wildlife veterinarian on site during the capture, transfer and release of Caribou;

ii. sedation of Caribou being transferred, administered by a wildlife veterinarian, where the transportation will be in excess of 30 minutes; and

iii. physical restraint of Caribou being transferred to ensure the safety of both the animal and personnel;

(j) A detailed description of the health and safety standards and procedures that transfer personnel will adhere to during the implementation of the Caribou Transfer Strategy;

(k) Details of other approvals that may be required under Provincial Parks and Conservation Reserve Act, Class EA for Resource Stewardship and Facility Development, Wildlife Animal Care Committee in order to carry out the transfer;

Post-Transfer

(l) A detailed description of a post-transfer monitoring program that satisfies the requirements of condition 8.3;

6.3 If the Capture Area described in the Caribou Transfer Strategy satisfies the criteria in condition 6.2(a)(i), the Proponent shall capture a minimum of eight (8) adult female and four (4) adult male Caribou from the Capture Area and transfer them to the Caribou Transfer Area;

Beneficial Actions for SAR bats

6.4 The Proponent shall prepare a Woodland Bat Habitat Creation Plan, under the direction of a Qualified Professional, that satisfies the requirements of condition 6.6 and 6.7 and shall submit it to MECP for approval by December 15th, 2020.

6.5 The Proponent shall begin implementation of the MECP approved Woodland Bat Habitat Creation Plan no later then one year after construction activities have been completed.;

6.6 The Woodland Bat Habitat Creation Plan, shall include:

a) The creation of a minimum of 13.38ha of woodland habitat for the SAR Bats, located in southern Ontario where land is disturbed and in close proximity to wetlands/watercourses;

b) The location of the habitat to be created, and a description of its pre-creation condition;

c) The activities that will be carried out to Restore the habitat for SAR Bats, which shall include, but not be limited to the planting of trees at a ratio of 1,440 stems/ha (600 stems/acre) including both softwood and hardwood trees;

d) Factors that will be considered in determining which tree species will be planted, which will include the location of the creation area and the composition of the soils in that area;

e) The installation of the following Artificial Roost Structures within the creation area:

i. Four bat boxes;

ii. Five rocket boxes. and

iii. Four Bark poles;

f) The installation and positioning of the bat and rocket boxes and bark poles, according to the manufacturer recommendations;

g) Details of the activities the Proponent will carry out to maintain the created habitat over at least 10 years.

6.7 The Proponent shall place six rock piles within the northern or eastern side of the construction ROW within Workfronts 10 and 11, in accordance with the following:

a) The rock piles shall be installed prior to or during the decommissioning and Restoration phase of the Project which is anticipated for October to December 2021;

b) Rock piles shall have a minimum of: a basal diameter of 6-9 m, height of 2-3 m, and side slopes of 2:1. and

c) Rock piles shall be placed in proximity to suitable forage habitat for SAR Bats and in areas close to a water source, but outside of wetlands;

6.8 By December 15th, 2020, the Proponent shall prepare and submit a Bat Gate Installation Plan, under the direction of a Qualified Professional, to MECP, which shall:

a) Identify two suitable hibernaculum locations for the installation of Bat Gates;

b) Include detailed Bat Gate design specifications; and

c) Specify the timing of Bat Gate installation, which shall not be during SAR Bat Hibernation and Swarming Periods;

6.9 The Proponent shall complete implementation of the Bat Gate Installation Plan under condition 6.8 by July 31st, 2021 or as otherwise acceptable to MECP;

7. MONITORING

Effectiveness Monitoring and Correction:
Boreal Caribou

7.1 The Proponent shall conduct effectiveness monitoring, under the direction of a Qualified Professional, to determine the impacts of the Project and effectiveness of mitigation measures on Caribou in accordance with the following requirements:

(a) Winter aerial surveys shall be conducted between the western boundary of the Lake Superior Coast Range to the mouth of the Pic River, perpendicular to the shoreline of Lake Superior, following the methodology identified in the document supplied by NextBridge to MECP on November 21st, 2019, entitled "EWT_Amend_EA_Appendix_12-I_06_App_B4-D_February2018-CaribouSurvey", during the period between February 1st and March 15th of the first year of construction, and during the same period in years 5 and 10 post-construction, the information from which is to be used to determine:

i. The presence of Caribou, alternate prey (i.e., moose, deer), and predators (i.e., wolves), as determined through direct observations or signs (i.e., tracks, cratering, slushing, beds), within the northwest portion of the Lake Superior Coast Range during the Winter Use Period;

ii. Where Caribou are observed, and where reasonably possible, a group structure which will record the age (i.e., adult or calf) and sex of each individual;

iii. The location of Caribou, alternate prey (i.e., moose, deer), and predators (i.e., wolves), as determined through direct observations or signs (e.g., tracks), on existing and new linear features, including the approximate length of travel along linear features. and

iv. Whether Caribou continue to use the Winter Use Habitat after the Project has been constructed;

(b) Permanent Survey Stations consisting of remote camera traps shall be established throughout the Lake Superior Coast Range between the communities of Terrace Bay and Marathon, with specific focus on the Nursery Habitat and Winter Use Habitat, the information from which is to be used to determine:

i. The year-round use of the broader Nursery Habitat and Winter Use Habitat and Project infrastructure (e.g., access roads, transmission right-of-way,

etc.) by Caribou, alternate prey (i.e., moose) and predators (i.e., wolves, black bears) during construction and operation phases of the Project;

ii. If, when and for how long Caribou, alternate prey (i.e., moose) and/or predators (i.e., wolves, black bears) use or avoid these types of Project infrastructure. and

iii. The effectiveness of mitigation methods (e.g., Restoration of temporary disturbed areas) undertaken;

(c) The location of the Permanent Survey Stations as required by condition 7.1(b), shall be determined by a Qualified Professional, and informed based on past observation records, in accordance with the following requirements:

i. five (5) are to be located along new temporary access roads no more than five (5) days after Clearing activities for the roads are completed;

ii. three (3) are to be located along the transmission ROW, no more than five (5) days after Clearing activities for the ROW are completed, where compatible vegetation is retained, as per condition 3.16;

iii. three (3) are to be located along areas of the transmission ROW, no more than five (5) days after slash and non-salvageable timber are placed in appropriate places in accordance withcondition 3.19;

iv. three (3) are to be located along existing access roads at least one (1) week prior to the start of construction within respective Workfronts. and

v. five (5) are to be located at suitable locations within the Lake Superior Coast Range, between the communities of Terrace Bay and Marathon, likely to be used by Caribou (e.g., beaches, bays, peninsulas likely to be used by Caribou based on past signs or observations of Caribou use) and at least 1 km away from existing and new infrastructure, at least one (1) week prior to the start of construction within respective Workfronts;

(d) The equipment at all Permanent Survey Stations is appropriately maintained and in good working condition from the time the Permanent Survey Stations are established through to five (5) years post-construction. and

(e) The information captured at the Permanent Survey Stations shall be collected and/or downloaded once every 3 months;

7.2 During the first and second years after completion of the Restoration activities, the Proponent shall ensure that inspections are conducted by a Qualified Professional of all temporary disturbed areas (e.g., access roads, works camps, laydown areas, Construction Easements, etc.) on the Site where Restoration activities were carried out to determine the effectiveness of Restoration activities, as required by condition 3.12 and 3.13, for achieving a forested condition that reflects the conditions of those areas prior to the commencement of the Project.

7.3 Where inspections required by condition 7.2 demonstrate forested conditions do not reflect the conditions of those areas prior to the commencement of the Project, the Proponent shall carry out additional plantings to achieve this state.

SAR Bat Monitoring and Additional Mitigation Measures

7.4 During the Hibernation Period, and under the direction of a Qualified Professional, where it is safe to do so, the Proponent shall visually monitor the existing four (4) Hibernacula in Workfront 6, as identified in Appendix F to determine the effectiveness of Mitigation Measures carried out in accordance with conditions 3.32 through 3.42.

7.5 Under the direction of a Qualified Professional, the Proponent shall monitor the area within 200 metres of the entrance to the two (2) confirmed Hibernacula identified as BH007 and BH012 in Appendix F, during the construction phase and each year between August 15 and October 31, during the 1st and 2nd years post-completion, to determine:

(a) The presence of Little Brown Myotis and Northern Myotis at or near the entrance to the Hibernaculum during the Swarming Period;

(b) Whether Little Brown Myotis and Northern Myotis continue to use the Hibernaculum after Project completion. and

(c) Whether Little Brown Myotis and Northern Myotis exit the hibernacula after the Project has been completed;

8. Overall Benefit Effectiveness Monitoring

Monitoring of Transferred Caribou, Predators and Ice Conditions

8.1 Under the direction of a Qualified Professional, the Proponent shall carry out Pre-transfer monitoring, using one or more of the following methods: aerial surveys, trail camera surveys, or faecal DNA surveys, in accordance with the Caribou Transfer Strategy required by condition 6.2 (e), to determine population size, sex, age class (i.e., adult, calf) and general health of the Caribou at the Capture Area. The chosen method or methods must satisfy the relevant requirements set out below:

(a) If aerial surveys are used, aerial surveys of the Capture Area shall occur during the first winter following MECP approval of the Caribou Transfer Strategy, between December 1st and January 1st, and continue once each year until the requirements of condition 6.2 (a) are met;

(b) If trail camera surveys are used:

i. sufficient numbers of trail cameras shall be installed at suitable locations throughout the Capture Area during the first winter following MECP approval of the Caribou Transfer Strategy through to three (3) years after Caribou transfers have been completed to determine whether the remaining population at the Capture Area continues to persist if the Capture Area described in the Caribou Transfer Strategy satisfies the criteria in condition 6.2 (a), and

ii. the trail cameras shall be appropriately maintained and in good working condition for the duration of the monitoring; or

(c) If faecal DNA surveys are used:

i. Faecal DNA surveys of the Capture Area shall occur two (2) times during the first winter following MECP approval of the Caribou Transfer Strategy between January 1st and March 15th , and continue twice each year until the requirements of condition 6.2 (a) are met; and

ii. Caribou pellets collected during faecal DNA surveys shall be analyzed at a lab specializing in the analysis of faecal DNA;

8.2 Under the direction of a Qualified Professional, the Proponent shall carry out Pre and Post-transfer monitoring of Lake Superior Ice conditions for the purpose of determining if, and when, wolves cross from the mainland to the Transfer Area, in accordance with the Caribou Transfer Strategy required by condition 6.2 (f), and shall satisfy the following requirements:

(a) Review of satellite imagery or other data sources sufficient to identify current ice conditions on Lake Superior shall occur each week between January 1st and March 31st beginning two (2) years prior to transfers and continuing for three (3) years post-transfer, the information from which is to be used to determine:

i. the date(s) and duration(s) that an ice bridge forms between the mainland and the Transfer Area; and

(b) Aerial surveys beginning the week following the formation of an ice bridge between the mainland and the Transfer Area (if the Transfer Area is located on an island), when weather conditions are safe and suitable to conduct aerial surveys, and continuing once per month for the duration of each ice bridge event, the information from which is to be used to determine:

i. the condition of the ice bridge; and

ii. approximate dates where there is evidence of wolves (e.g., tracks, sightings) crossing the ice bridge from the mainland to the Transfer Area;

8.3 Under the direction of a Qualified Professional, the Proponent shall carry out Post-transfer monitoring, in accordance with the monitoring program required by condition 6.2 (l), using GPS collars, and trail cameras at the Transfer Area, and the monitoring shall satisfy the following requirements:

(a) Monitoring shall begin immediately following the transfer of Caribou;

(b) GPS collars shall be deployed on all transferred adult female Caribou and set to transmit the location, date, time, and fix (i.e., location accuracy) a minimum of once per day for three (3) years, the information from which will be monitored weekly and be used to determine:

iii. the status of transferred adult female Caribou;

iv. mortalities, should they occur;

v. survival rates of transferred Caribou; and

the status of the GPS collars;

(c) If GPS collar information collected under condition 8.3 (b) suggests mortality of a transferred Caribou and there is evidence collected under condition 6.2 (f) that suggest wolves may have crossed an ice bridge to the Transfer Area, aerial and/or ground surveys shall be conducted to determine the cause of death of the Caribou;

(d) Sufficient numbers of trail cameras shall be installed at suitable locations throughout the Transfer Area to determine:

i. the success of post-transfer calving;

ii. the approximate number of Caribou calves within the Transfer Area;

iii. the presence of adult male Caribou within the Transfer Area; and

iv. the presence of wolves within the Transfer Area;

(e) The trail cameras shall be appropriately maintained and in good working condition from the time they are deployed through to three (3) years after Caribou transfers have been completed;

Monitoring and Correction of Bat Gates

8.4 Under the direction of a Qualified Professional and using acoustic and a minimum of 2 visual surveys to collect data to support an analysis of the Species' use of the two (2) hibernacula in which Bat Gates were installed under condition 6.9, the Proponent shall monitor the Bat Gate locations as follows:

(a) In year 1 following the installation of the Bat Gates, between August 15th and October 31st, the Proponent shall visually monitor the Bat Gates to determine:

i. the condition of the Bat Gates;
ii. which members of the Species are using the Hibernacula in which Bat Gates were installed;
iii. whether the Bat Gates are impeding the use of the hibernacula by the Bat Species;
iv. whether the Bat Gates are effectively restricting human access to the hibernacula in which Bat Gates were installed; and
v. whether the Bat Gates are effectively allowing the free movement of bats to exit the hibernacula without being predated.

8.5 Where monitoring conducted under condition 8.4 indicates any of the following issues, the Proponent shall repair or alter the Bat Gate installation to address the issue:

i. A Bat Gate is not correctly and securely mounted,
ii. There is gap between a Bat Gate and the Hibernaculum opening large enough to allow human entry,
iii. A Bat Gate is impeding the use of the Hibernaculum by members of the Bat Species; or
iv. A Bat Gate does not effectively allow the free movement of bats to exist the Hibernaculum without being predated.

Woodland Bat Habitat Creation Monitoring

8.6 Under the direction of a Qualified Professional, the Proponent shall conduct effectiveness monitoring in all areas where tree planting has taken place in accordance with the Woodland Bat Habitat Creation Plan approved by the MECP under condition 6.4. The monitoring shall occur between May 15th and September 15th, in the 2nd, 5th, and 10th years following the planting to determine:

(a) the effectiveness of the Woodland Bat Habitat Creation activities (e.g. establishment of suitable habitat species). and

(b) if additional Woodland Bat Habitat Creation activities are required;

8.7 The Proponent shall ensure that monitoring of the Woodland Bat Habitat required under condition 8.6 meets the following requirements:

(a) Planting assessments shall be conducted in years 2, 5 and 10 to determine whether Woodland Bat Habitat Creation efforts were successful;

(b) An assessment of the Habitat Restoration efforts shall be carried out to determine whether tree densities meet a desired 70% of the 1,440 stems/ha (600 stems/acre) as set out in the Woodland Bat Habitat Creation Plan.

8.8 If the monitoring required by conditions 8.6 and 8.7 shows that Habitat Restoration efforts resulted in tree densities below the 70% desired density, the Proponent shall carry out supplementary planting following the planting assessments, sufficient to increase densities to 70%.

Monitoring of Rock Piles

8.9 The Proponent shall ensure that monitoring at each of the six (6) rock piles created in accordance with condition 6.7 is carried out by a Qualified Professional using trail cameras, to determine if SAR Bats are emerging or returning from foraging activities.

8.10 Rock piles shall be monitored during the Maternity Period in the 2nd and 5th, years following installation.

Monitoring of Artificial Roost Structures

8.11 The Proponent shall ensure effectiveness monitoring is conducted by a Qualified Professional in the 2nd, 5th years following installation of the Artificial Roost Structures installed in accordance with conditions 6.6 (e) and (f).The Proponent shall ensure that monitoring of Artificial Roost Structures includes inspections for guano, twice annually, conducted between May 1st to September 30th, at each of the installed structures in accordance with conditions 6.6 (e) and (f).

8.12 If guano is present in any of the Artificial Roost Structures, the Proponent shall ensure that a borescope is used to check the structures for bats and determine the number of bats and pups, if any, are present. The Proponent shall also collect guano samples and send them for environmental DNA (eDNA) sampling to determine species;

9. Data and Reporting

Data

9.1 The Proponent shall provide to MECP and NHIC all Caribou observation data and associated survey data, and corresponding shapefiles containing point of observations and flight tracklogs collected under the requirements of conditions 7.1, 8.1 and 8.2. This information shall be provided no later than December 15th in the year it was collected, and shall include:

(a) Project title;

(b) Names of surveyors;

(c) Survey conditions (e.g., weather, time since last snowfall, etc.);

(d) Dates for each transect;

(e) Dates for each observation;

(f) Evidence type for each observation (e.g., sighting, tracks, pellets, slushing, etc.);

(g) Where applicable, count of Individuals (i.e., number of adult males, adult females, calves, adult unknowns and unknown age/sex). and

(h) Location accuracy;

Reporting General

9.2 Each year during which construction activity takes place, and years 1 and 2 post-construction, the Proponent shall submit an annual report to MECP no later than December 15th summarizing details of:

(a) Education and awareness training of employees and contractors about the Species in accordance with conditions 4.1 and 4.2;

(b) Species encounters in accordance with conditions 5.1 through 5.6; and

(c) A detailed list of all Mitigation Measures undertaken in accordance with conditions 3.1 through 3.13.

Reporting Caribou

9.3 The Proponent shall submit a report to MECP no later than December 15th of each year in which monitoring is required by conditions 7.1 and 7.2, outlining the results of Mitigation Measures and effectiveness monitoring, that includes:

(a) a detailed summary of the survey methodology used for effectiveness monitoring for Caribou;

(b) a map showing:

i. the areas surveyed for Caribou;

ii. winter aerial surveys identified using GPS tracklog information;

iii. the location of all Permanent Survey Stations; and

iv. the locations of all temporarily disturbed areas where Restoration activities were carried out;

(c) a list of UTM or latitude/longitude coordinates with associated accuracy and a map showing the location of where all Caribou, alternate prey (i.e., moose, deer), and/or predators (i.e., wolves, bears) were observed during monitoring, including:

i. date for each observation;

ii. evidence type (e.g., animal, tracks, pellets, slushing, etc.);

iii. where applicable, count of Individuals (i.e., number of adult males, adult females, calves, adult unknowns and unknown age/sex); and

iv. location accuracy.

(d) a summary of Restoration activities at temporary disturbed areas;

(e) pictures of the Restoration areas;

(f) a detailed summary of all Mitigation Measures undertaken;

(g) where applicable, the effectiveness of Mitigation Measures undertaken in accordance with conditions 3.14 through 3.31; and

(h) where monitoring has demonstrated a Mitigation Measure has been ineffective to achieve the desired outcome, recommendations for how to improve future Mitigation Measures;

9.4 The Proponent shall submit a report to MECP no later than December 15th, of each year in which Overall Benefit actions, including monitoring, are required by conditions 8.1, 8.2 and 8.3, outlining the results of Overall Benefit actions and effectiveness monitoring for Caribou, that specifies:

(a) Where applicable, a detailed summary of the pre-transfer aerial survey methodology and results, including:

i. the date and weather conditions during each aerial survey; and

ii. the approximate population size, sex, age class (i.e., adult, calf) and general health of Caribou at the Capture Area prior to implementation of the Caribou Transfer Strategy;

(b) Where applicable, a detailed summary of the pre-transfer trail camera results, including:

i. the number and locations of all trail cameras installed within the Capture Area; and

ii. the approximate population size, sex, age class (i.e., adult, calf) and general health of Caribou at the Capture Area prior to implementation of the Caribou Transfer Strategy;

(c) Where applicable, a detailed summary of the pre-transfer faecal DNA methodology, analysis and results, including:

i. the date of each survey;

ii. the location and number of all faecal DNA samples collected within the Capture Area during each survey;

iii. the analytical methods used to analyze the faecal DNA samples; and

iv. the approximate population size, sex, and age class (i.e., adult, calf) of Caribou at the Capture Area prior to implementation of the Caribou Transfer Strategy;

(d) A detailed summary of the pre and post-transfer survey methodology and results, including:

i. the date(s) and duration(s) that an ice bridge forms (if at all) between the mainland and the Transfer Area during each year in which monitoring was carried out; and

ii. the date(s) when wolves travel across an ice bridge from the mainland to the Transfer Area;

(e) A detailed summary of the Caribou Transfer methodology and results, including:

i. the dates and locations, identified on a map, where each transferred Caribou was captured;

ii. the weather conditions at the time each transfer of Caribou occurred;

iii. the dates and locations, identified on a map, where each transferred Caribou was released;

iv. the sex, age class (i.e., adult, calf) and general health of each Caribou at the time of capture;

v. the length of time taken to transfer each Caribou from the Capture Area to the Transfer Area; and

vi. the health of each Caribou at the time of release in the Transfer Area;

(f) A detailed summary of the post-transfer survey methodology and results, including:

i. the GPS collar locations, identified on a map, of all transferred Caribou fitted with a GPS collar with the most recent location highlighted;

ii. a summary of GPS collar status [i.e., operational, malfunction (e.g., battery, pre-mature drop, etc.), dropped]. and

iii. a summary of all mortalities of transferred Caribou including location and, if known, the cause of mortality;

(g) The effectiveness of Caribou transfers; and

(h) Recommendations for how to improve future Caribou transfers.

9.5 The Proponent shall submit a report to MECP within 24 hours of a wolf observation on or in proximity to the Transfer Area in accordance with condition 8.2 (b);

Reporting SAR Bats

9.6 The Proponent shall submit a report to MECP no later than December 15th of each year in which bat monitoring is required by conditions 7.4 and 7.5 outlining the results of Mitigation Measures and Effectiveness Monitoring that includes:

(a) the location and photos of each Hibernaculum;

(b) dates and times in which monitoring took place; and

(c) summary of the monitoring results.

9.7 The Proponent shall submit a report to MECP no later than December 15th following the installation of the Bat Gates, in which Overall Benefit Action monitoring is required by condition 8.4 following the installation of Bat Gates, which shall include:

(a) Location and photos of each Bat Gates;

(b) A description of the condition of the Bat Gates;

(c) Summaries of post construction acoustic and visual surveys (e.g. identification of species using the hibernaculum, number of passes, etc);

(d) an assessment of the effectiveness of the Bat Gates based on the analysis and conclusions from the post construction acoustic and visual surveys;

(e) if repairs or alterations were made to the Bat Gate(s) under condition 8.5, a summary of the repairs or alterations made; and

(f) recommendations for how to improve Bat Gating (e.g., selection of hibernacula for Bat Gating, method of installing Bat Gates).

9.8 The Proponent shall submit a report to MECP no later than December 15th, of each year in which Overall Benefit Action monitoring is required by conditions 8.6 through 8.8, outlining the results of activities carried out to implement the Bat Woodland Habitat Creation Plan during that year, which shall include:

(a) a summary of Bat Woodland Habitat Creation activities;

(b) pictures of the Bat Woodland Habitat Creation areas;

(c) an assessment of the effectiveness of Bat Woodland Habitat Creation; and

(d) recommendations for how to improve future Bat Woodland Habitat Creation activities.

9.9 The Proponent shall submit a report to MECP no later than December 15th, of each year in which Overall Benefit Action monitoring is required by conditions 8.9 and 8.10 of the permit, outlining the results of the effectiveness monitoring of Rock Piles conducted during that year, which shall include:

(a) A summary of the installation of the six (6) Rock Piles (e.g. date, location, photos)

(b) a summary of the camera monitoring surveys including:

i. the dates, times, species, and number of SAR Bat individuals observed; and

ii. details of the methodology used to analyze the monitoring results;

(c) the effectiveness of Rock Piles for providing habitat for SAR Bats; and

(d) recommendations for how to improve future Rock Piles;

9.10 The Proponent shall submit a report to MECP no later than December 15th, of each year in which Overall Benefit Action monitoring has been conducted under conditions 8.11 and 8.12 outlining the results of effectiveness monitoring of Artificial Roost Structures conducted during that year, which shall include:

(a) A summary of the installation of artificial roost structures (e.g. date. location, photos);

(b) a summary of inspections for guano and borescope inspections, including:

i. the locations, dates, time, species and number of SAR Bat individuals observed; and

ii. results of any environmental DNA (eDNA) sampling carried out in accordance with condition 8.12;

(c) an assessment of the effectiveness of the Artificial Roost Structures for providing habitat for SAR Bats; and

(d) recommendations for how to improve future Artificial Roost Structures.

10. Notification

10.1. The Proponent shall notify MECP where the Proponent,

(a) Is adjudged bankrupt, makes a general assignment of the benefit of its creditors, or a receiver is appointed on account of the Proponent's insolvency;

(b) Takes a step toward dissolution, or is amalgamated;

(c) Undergoes a change in control which adversely affects the corporation's ability to satisfy some or all the conditions of this permit; or

(d) Changes its ownership.

11. Observation

11.1. On reasonable notice and in addition to any authority exercisable under the ESA, MECP may seek consent to access the Site and other areas for the purpose of observing the Site, and any actions the Proponent is required to take under the permit. For greater certainty, this condition does not affect the powers of an enforcement officer under the ESA.

11.2. The Proponent shall undertake reasonable steps to allow MECP staff and others accompanying them to access the Site for the purposes of observation. For areas that are not provincial Crown land or owned by the Proponent, the Proponent shall undertake reasonable steps to obtain permission for MECP staff and others accompanying them to enter the Site for the purpose of observation.

PCMP CONDITIONS IN THE AMENDED EA

6.10. Post-Construction Monitoring

This section describes a preliminary Post-Construction Monitoring Plan based on the Environmental Assessment. A detailed Post-Construction Monitoring Plan will be developed prior to the start of construction of each segment based on permit approval conditions. The detailed Post-Construction Monitoring Plan will include detailed monitoring methods and a plan to address outstanding environmental issues or areas that require further reclamation or monitoring of reclamation efforts, as identified during and following construction.

Post-construction environmental monitoring will be conducted after the completion of the construction activities and continue into the operation phase of the Project and will include such activities as examining and documenting the success of reclamation measures.

The goal of post-construction monitoring is to:

- Continue monitoring the effectiveness of implementation of mitigation after the construction phase is complete for all Project components.
- Monitor and manage reclamation concerns, including but not limited to soil erosion, re-vegetation, slope stability and weeds.
- Implement remedial measures to achieve the goal of the reclamation that is to stabilize and revegetate disturbed areas, while maintaining access and appropriate drainage to support operation and maintenance standards.

6.10.1. Monitoring Summary

A summary of the key post-construction monitoring activities that will be conducted for post-construction monitoring is presented in Table 4-II-2. Specific monitoring programs can be developed as a result of the post-construction monitoring. For example, NextBridge may establish a bi-annual weed monitoring program, seed germination monitoring program or seedling growth monitoring program if issues are identified during the post-construction monitoring.

Table 4-II-2: Key Post-Construction Monitoring Activities

Key Monitoring Activity	Parameter	Duration after Construction	Frequency	Timing	Measurements or Observations
Terrain and Soils					
Post-construction monitoring to identify reclamation concerns	Terrain conditions and soil quality	Two year	Annual	Spring	• Signs of changes to surface and ground water flows • Signs of changes in slope stability • Signs of erosion and sedimentation • Signs of revegetation issues
Vegetation					
Post-construction monitoring the success of protection or relocation measures during long term monitoring, as required	Species occurrence	One year	As required	Summer	Species mortality or abundance
Post-construction weed survey to identify and map occurrence of weed on ROW	Species occurrence	One year	Annual	Summer	Species composition and abundance
Wetlands					
Post-construction wetland surveys to identify wetland changes not discernable from desktop mapping	Area of wetland affected by the Project	Two years	Annual	Spring/Summer	• Area affected (ha) • Vegetation species composition and abundance • Amphibian presence
Fish and Fish Habitat					
Post-construction monitoring/inspections of new permanent water body crossing structures and new roadside drainage features	Physical function and condition of crossing structures and drainage features	Two years	Bi-annual for the first two years following post construction and then annual thereafter	Spring/Summer and Fall/Winter	• Integrity of permanent water body crossing structures • Signs of changes to the morphology of the water body channel at new permanent water body crossing structures • Signs of blockages or debris at new drainage features • Assess effectiveness of erosion and sediment control measures (e.g., bank restoration and re-vegetation).

Key Monitoring Activity	Parameter	Duration after Construction	Frequency	Timing	Measurements or Observations
Post-construction monitoring of total suspended solids and streamflow rates to verify the effectiveness of reclamation measures at selected water bodies those with greater sensitivity or implication to change from the standpoint of fish habitat, species at risk, channel stability, drainage pattern, or other environmental considerations. The specific monitoring locations will be determined during the permitting phases of the Project; however, it is expected that water bodies of varying size (small, medium, large) would be captured, recognizing that this would allow the performance/effectiveness of mitigation measures to be evaluated at a range of scales.	Total suspended solids and streamflow rates	Six months	Bi-annual during the early stages of the Project operation and maintenance	Spring/Summer and Fall/Winter	• Total suspended solids • Streamflow rates (The monitoring program may be discontinued thereafter if conditions are observed to have stabilized and applicable water quality standards are met)
Wildlife and Wildlife Habitat					
Post-construction avian mortality survey to evaluate effectiveness of bird flight diverters	Mortality	Two year	Bi-annual	Spring and Fall	Mortality presence / absence
Indigenous Current Land and Resource Use					
Post-construction traditional use plant species survey to confirm or identify traditional use plant species presence	Species occurrence	Two years	Annual	Summer	Species composition and abundance

6.10.2. Post-Construction Mitigation Measures

Owner Measures

Environmental Inspector	1)	The Owner will employ the services of qualified Environmental Inspector(s) to monitoring the effectiveness of implementation of mitigation and identify any reclamation concerns.
Resource Specialist	2)	Following construction, a Resource Specialist may evaluate the success of mitigative measures, particularly if habitat features (like nests) or individuals are relocated.
Post-Construction Monitoring	3)	Post-construction monitoring of the Project Site will begin following reclamation, within one growing season, and annually during operations to identify and address any reclamation concerns, including but not limited to soil erosion, revegetation, slope stability and weeds.
	4)	Post-construction monitoring at water body crossing location should be conducted after the first spring freshet and routinely until the site has become stable and re-vegetated.
Remedial Measures	5)	Implement remedial measures to achieve the goal of the reclamation that is to stabilize and revegetate disturbed areas, while maintaining access and appropriate drainage to support operation and maintenance standards.
Reporting	6)	Monitoring report including results of monitoring activities will be prepared and submitted to applicable regulatory agency as described in permit approval conditions.

INDIGENOUS CONSULTATION PLAN – JULY 2019

NextBridge East-West Tie Indigenous Consultation Plan

July 5, 2019

NEXTBRIDGE INFRASTRUCTURE

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Executive Summary

NextBridge Infrastructure LP ("NextBridge"), through its general partner Upper Canada Transmission, Inc., has been designated by the Ontario Energy Board ("OEB") as the transmitter that will develop, construct and operate a new high voltage transmission line known as the East-West Tie ("EWT" or the "Project"). The EWT will be an approximately 450 km long, double-circuit 230 kilovolt electric power transmission line from the Lakehead Transformer Station ("TS") near Thunder Bay to the Wawa TS near Wawa, Ontario.

On January 31, 2019 the Government of Ontario issued an Order-in-Council (OIC) and ministerial directive that provides the exclusive right of NextBridge to proceed to construct the Project. This was followed by the OEB Leave-to-Construct approval on February 11, 2019 that grants approval to construct to NextBridge for the Project. On March 25, 2019 NextBridge received a letter from the Minister of the Environment, Conservation and Parks (MECP) that confirmed they have completed its review of the Environmental Assessment (EA), and approves of the undertaking subject to conditions found in their Notice of Approval.

Since 2013, when the Crown delegated certain procedural aspects of consultation to NextBridge in a Memorandum of Understanding, NextBridge has drafted, implemented and continues to update an Indigenous Consultation Plan. The following is an update to that Plan given ongoing EA conditions and other project commitments to Indigenous communities.

The following plan is a summary of how NextBridge will continue to meet MECP conditions related to the EA approval as well as consultation requirements found in the 2013 Memorandum of Understanding between NextBridge and Crown.

Introduction and Project Background

Nextbridge recognizes that transmission development activities can assist in generating economic reconciliation with Indigenous communities through comprehensive consultation activities, partnerships, employment, skills development, and business opportunities. Beyond this, there is opportunity for participation in cultural and economic activities undertaken during project development (e.g., monitoring, mentorship, traditional land use study enhancement, cultural ceremonies etc.) and activities undertaken to protect the environment during construction and operation (e.g., Indigenous monitoring and tours).

In November 2010, the Long Term Energy Plan (LTEP) identified the upgrading of the EWT as a priority project. The Ontario Power Authority (OPA) subsequently confirmed the need to ensure long-term system reliability in northwestern Ontario by bringing the system into compliance with the Independent Electricity System Operator's (IESO) reliability criteria. In response to an August 22, 2011 invitation from the OEB, seven transmitters registered an interest in seeking the designation to construct and operate the Project. On July 12, 2012, the OEB issued its Phase 1 Decision and Order, which set out the specifics for the designation proceeding and the schedule for the filing of applications for designation. On August 7, 2013, the OEB issued EB-2011-0140, its Phase 2 Decision and Order, selecting Upper Canada Transmission Inc., NextBridge's General Partner, as the transmitter to complete development work for the Project.

The Crown has delegated certain procedural aspects of the consultation and accommodation through a Memorandum of Understanding (MOU) between the Crown (represented by the Ministry of Energy) and NextBridge dated November 4th, 2013. This includes discussions regarding the transmission development process with the communities from the MOU and any expected or potential impact on Indigenous or treaty rights. NextBridge and the Crown have, and continue to carry out their respective consultation obligations under the MOU. The Plan describes how NextBridge will approach meeting these delegated obligations but, does not limit or preclude certain types of accommodation or mitigation from being developed and implemented.

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Identified Indigenous Communities

In a May 31, 2011 letter to the Ontario Power Authority (OPA), then Ontario Ministry of Energy identified eighteen Indigenous communities to be consulted by the OPA in early consultation with respect to the Project. These communities are also referred to in the Consultation MOU. They are as follows:

TYPE	ORGANIZATION
First Nation	Michipicoten First Nation
First Nation	Pic Mobert First Nation
First Nation	Ojibways of Pic River (currently Biigtgong Nishnaabeg)
First Nation	Pays Plat First Nation
First Nation	Red Rock Indian Band
First Nation	Fort William First Nation
First Nation	Ojibways of Garden River
First Nation	Ojibways of Batchewana
First Nation	Missanabie Cree First Nation
First Nation	Animbiigoo Zaagi'igan Anishinaabek (Lake Nipigon First Nation)
First Nation	Biinjitiwaabik Zaaging Anishinaabek (Rocky Bay First Nation)
First Nation	Bingwi Neyaashi Anishinaabek (Sand Point First Nation)
First Nation	Ginoogaming First Nation
First Nation	Long Lake #58 First Nation
Métis	Red Sky Métis Independent Nation
Métis	Superior North Shore Métis Council (MNO)
Métis	Greenstone Métis Council (MNO)
Métis	Thunder Bay Métis Council (MNO)

Consultation Plan and Addressing of EA Conditions

With its purpose of addressing EA conditions, the Indigenous Consultation Plan is composed of the following sections:

1. Consultation with Indigenous Communities: An ongoing approach (Condition 7.1 a)
2. Environmental Monitoring Participation Activities (Condition 7.1 a)
3. Notification of Archeological or Indigenous remains (Condition 7.1 b)
4. Consideration of Additional Traditional Knowledge (Condition 7.1 c)
5. Issue Notices and Updates (Condition 7.1 d)
6. Capacity Funding to Support Engagement

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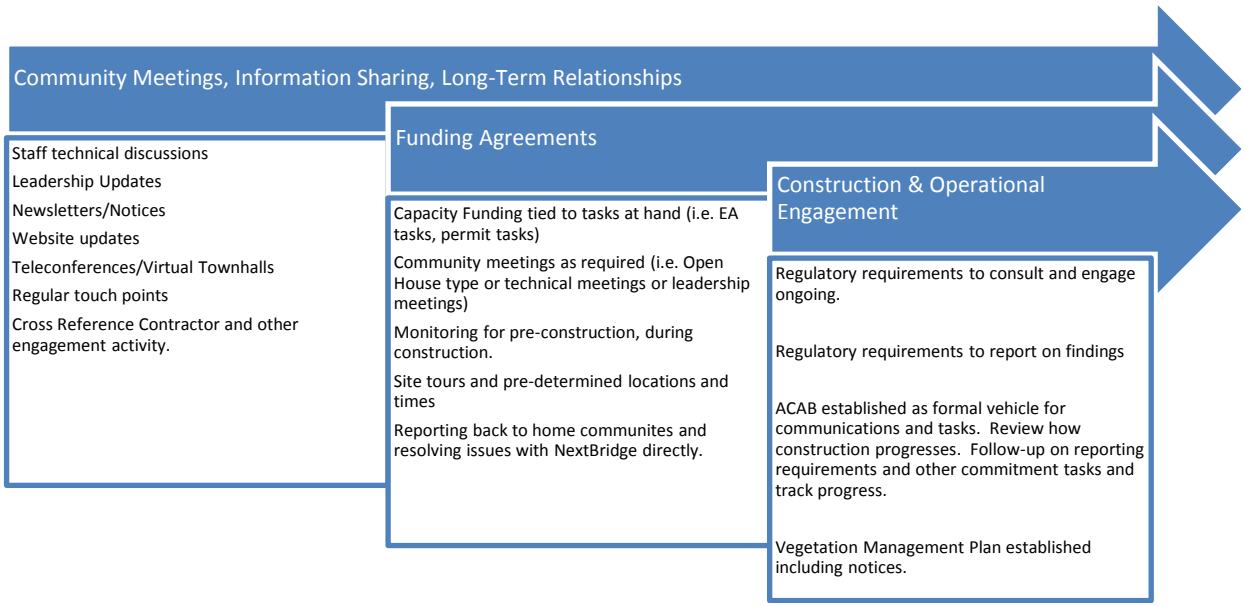
Consultation with Indigenous Communities: An Ongoing Approach (Condition 7.1 a)

A transmission line is a long-term asset that can continue to operate upwards of fifty years or more. NextBridge is approaching consultation on the same long-term basis, and wants to form long-term, mutually beneficial relationships with impacted Indigenous communities that are built on mutual trust and respect. NextBridge recognizes that trust takes time to build, and consultation and continuing dialogue with the communities will be ongoing throughout the Project development process and into the operations and maintenance phase.

The following diagram demonstrates the steps involved in the lifecycle approach to relationship building and consultation that Nextbridge, through engagement with Indigenous communities has agreed.



Nextbridge recognizes that many Indigenous communities have established internal consultation protocols or procedures that provided opportunities for elders, youth and other holders of traditional knowledge each have an opportunity to hear and consider potential impacts of new project development. NextBridge will continue to work with communities to follow their individual internal protocols and procedures to the extent reasonably possible, provide capacity funding if appropriate to support ongoing engagement and will respect the confidentiality aspects of any information provided to NextBridge in a manner consistent with the MOU.

Regarding NextBridge's EA commitments and the 2013 Memorandum of Understanding with the Crown, NextBridge remains committed to ensuring the Crown remains informed about

Indigenous engagement. NextBridge will continue to provide monthly engagement summaries to the Crown during the construction phase and during operations, NextBridge would like to recommend moving to an annual engagement summary. To supplement engagement summary submissions, prior and during construction, NextBridge remains committed to holding bi-weekly teleconferences with MECP and ENDM staff to provide verbal updates on the Project and respond to questions and information requests as they arise.

Below are some of the methods Nextbridge continues to offer as part of our ongoing consultations.

Information Exchange

In addition to what meets each community's needs, NextBridge continues to offer support, where appropriate, in the form of:

- disseminating project information to Chiefs and Councils, Métis leadership, and staff;
- arranging for project information sessions for Chiefs and Councils, Métis leadership, youth, elders and/or Indigenous communities at large;
- continuing with an Indigenous Engagement position on the project team who is the liaison that will be present throughout the project to ensure an easily identifiable and consistent point of contact with Nextbridge; and,
- facilitating Indigenous engagement in the entire lifecycle of the Project.

Staff and Community Meetings

Where required, meetings with Indigenous communities will continue to discuss issues of concern, provide project updates, and to facilitate discussion and understanding of whether, and if so, to what extent, new areas of concern around the Project may potentially cause impacts to rights and interests. The information shared by the communities will be collected and incorporated, where appropriate, in the planning, execution, or operation of the Project, and any required regulatory processes.

The mechanism for the establishment of meetings is for community representatives to contact NextBridge with a request to hold a meeting. Both parties will discuss the nature of the meeting such as purpose, resources required, staff to participate, time, location and logistics etc. Once discussions take place and both parties have a clear understanding of the request and how that meets our common goals and objectives, the parties will implement the meeting procedures. NextBridge will take meeting summaries and document the meetings as part of standard Record of Consultation logs.

NextBridge remains committed to offering permitting and associated detailed project plan meetings and workshops with interested Indigenous communities during the permitting review timeframe. NextBridge continues to work with communities to determine timing and format that meets all parties' interests.

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Community Ceremonies and Activities

In the past, NextBridge has supported community ceremonies prior to meeting or as part of community-driven engagement of their membership. Community ceremonies and activities represent an opportunity for community members to share information internally about the Project and is an opportunity to engage NextBridge in a culturally appropriate manner. For example, in 2018 a First Nation expressed an interest in conducting ceremonies on their reserve lands near the proposed route of the Project. NextBridge provided capacity funding for catering and safety equipment for land users, elders and leadership to re-connect with the land and their membership. NextBridge representatives were present and were able to share information about the Project. NextBridge remains committed to ensuring communities have those opportunities to conduct ceremonies, exercise their traditional practices and communicate those requests to NextBridge in order for the Project team to ensure a safe worksite and safety of workers and communities members is planned.

Aboriginal Community Advisory Board (ACAB)

NextBridge remains committed to establishing an Aboriginal Community Advisory Board (ACAB) as part of our lifecycle approach to engagement on the Project. Since 2016 there have been attempts to establish the ACAB but there has been limited interest / need up until this point. The ACAB Terms of Reference (ToR) have been circulated for comments by communities a number of times since 2016, and were updated again in April 2019 to reflect input provided as part of consultations on this plan.

Communities have expressed an interest in establishing the ACAB prior to start of construction and throughout this phase of the Project, the forum will operate as a venue where communities can share information, Nextbridge can provide construction updates and potential issues can collectively be resolved related to construction. Following the construction phase of the Project, the ACAB will be a venue for ongoing consultation during the operational phase. The intent is to circulate the updated ToR in Spring 2019 and establish the ACAB prior to construction kick-off.

NextBridge recognizes a community may request an opportunity to raise issues individually in order to ensure confidentiality of Traditional Knowledge and sensitive information. Through the Indigenous Facilitation Plan process, a communications protocol and dispute resolution process will be outlined and agreed to by all parties. The Facilitation Plan will ensure individual communities or small groups of communities, can raise issues of concern directly with NextBridge and, if all parties agree, may raise issues with the broader ACAB group but only after individual or small group efforts are made to resolve outstanding issues. The communications protocol and resolution process will also outline reasonable and mutually agreed upon timelines for resolution and response.

Please see Appendix “A” Draft Aboriginal Community Advisory Board Terms of Reference.

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Environmental Monitoring Participation Activities (Condition 7.1 a)

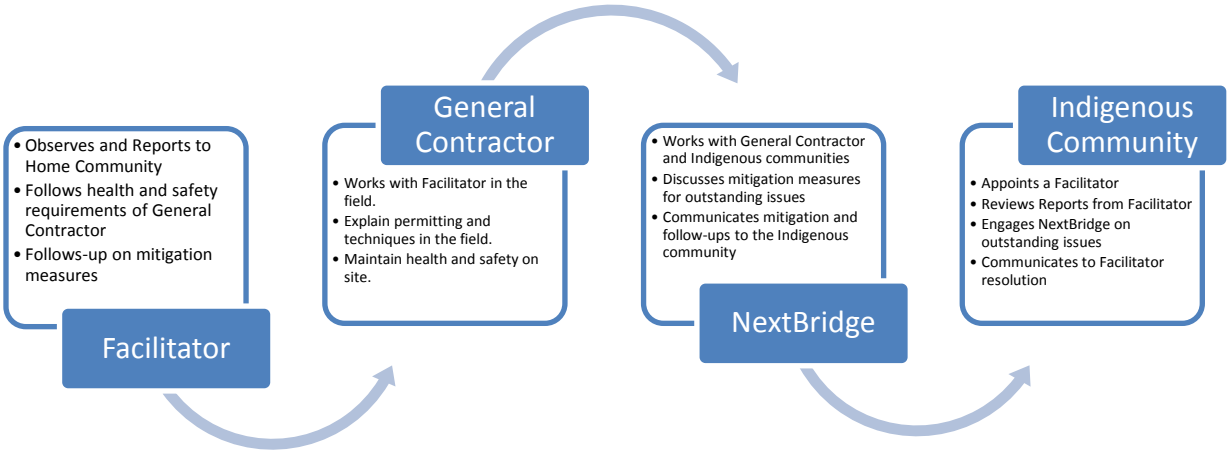
Nextbridge is committed to Indigenous involvement in environmental monitoring of the Project. See Appendix "B" – Environmental Monitoring Overview for more details on roles and responsibilities and communications procedures.

There are three broad roles of environmental participation available to Indigenous communities: Environmental Inspector; Environmental Monitor; and Indigenous Facilitator. Environmental Inspector and Monitor are contract positions and will be retained by NextBridge directly or by our General Contractor to conduct environmental compliance and implementation work. These first two roles report directly to their employers (i.e. NextBridge or General Contractor); and require technical knowledge and experience in construction and environmental compliance. Communities have consistently expressed an interest in filling these positions and efforts are being made to advertise the roles through Indigenous employment and procurement methods.

Communities have also consistently expressed a desire to have independent, community representatives in the field during construction. NextBridge is offering Indigenous Facilitator roles to all 18 Indigenous communities to meet this expectation. The anticipated method for a community to designate an individual(s) is through a letter from the Chief or elected community leader and copied to the Band Manager or financial officer for the community. The Facilitator's role during the construction phase is to represent the interests of the home community and ensure the environmental aspects of the Project are being conducted in a respectful manner consistent with the exercise of the Indigenous community's rights. The Indigenous Facilitator will develop and execute a facilitation plan in collaboration with NextBridge. In general, the plan will focus on two broad tasks: Monitoring or Tours and identification of specific areas of interest.

The diagram below outlines the roles and responsibilities of the Indigenous Facilitator and how they engage with the respective parties involved with the Project.

Communication Strategy



For environmental monitoring tasks, as outlined in the pre-determined facilitation plan, an Indigenous Facilitator may be meeting the Environmental Inspector (or their designate) in the field on a regular basis to observe tasks being undertaken by the General Contractor. The Facilitator asks questions to the Environmental Inspector and documents responses and any outstanding issues or concerns.

Another task available to Indigenous Facilitators is to establish Construction Tours. These tours will be offered if there is the need to include land users, elders, leadership or others. As part of the pre-determined facilitation plan, NextBridge and the Indigenous Facilitator will pre-identify sites or territories or work fronts they wish to tour; the date ranges for tours to take place, the frequency of the tours, the names and number of tour participants; and required end products to be produced such as tour summary and outstanding questions summary.

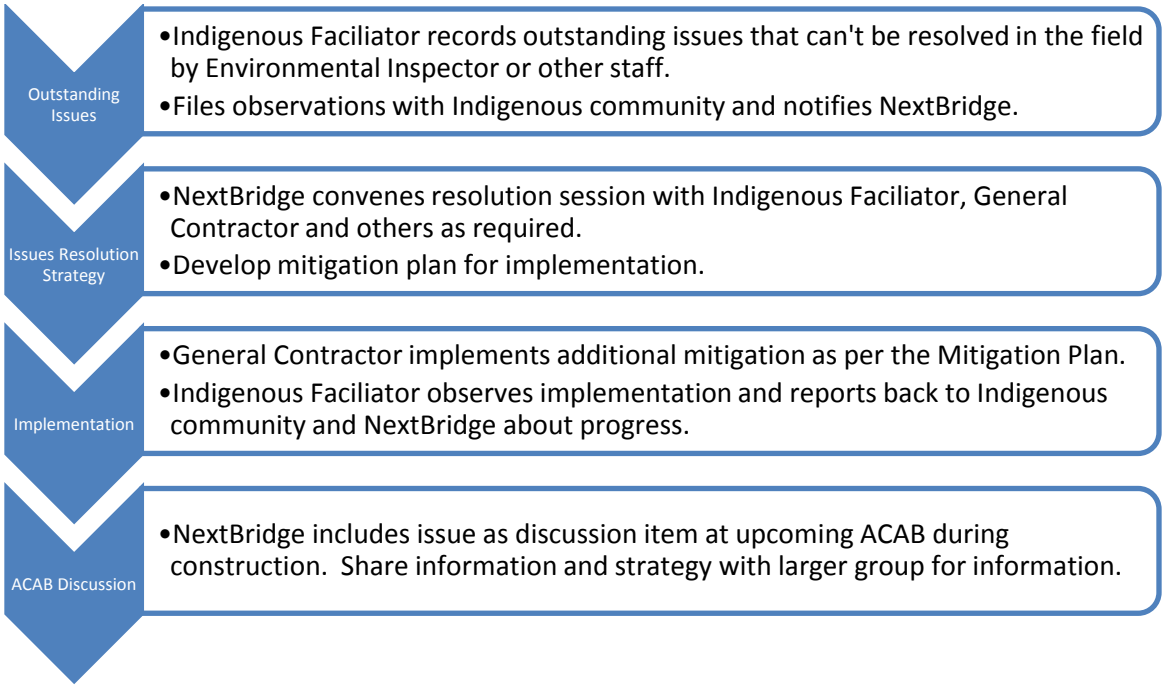
The third task for an Indigenous Facilitator is communications. Indigenous Facilitators will be generating summary reports on their activities. These summary reports will be shared directly with the home community and with NextBridge. If there are outstanding issues or concerns, these items will be brought to NextBridge's attention immediately for resolution.

NextBridge remains committed to collaborating with communities on a Facilitation Plan that will include post-construction phases of the Project. NextBridge will be contacting communities mid-way through construction to determine their level of interest in developing a post-construction Facilitation Plan.

As a first step in ensuring Indigenous communities' rights and interests are protected, the majority of issues an Indigenous Facilitator identifies will be addressed with Project field staff on site. In the event a resolution is not achieved in the field, the below diagram outlines the

method in which Indigenous Facilitators can raise questions / concerns to ensure rights and interests are bring protected during construction.

Issues Resolution



By establishing three opportunities to participate in Environmental Monitoring, including a separate direct participation role through Indigenous Facilitation, NextBridge is demonstrating our commitment to being responsive to community requests to participate during the construction phase of the Project and also balancing the need to maintain an organized and safe worksite.

Nextbridge is working to secure an Indigenous partner to support the scheduling, payroll and administration of the Indigenous Facilitator Program.

Notification of Archeological or Indigenous Remains (Condition 7.1 b)

Nextbridge is committed to respecting and protecting cultural resources throughout the life of the project. We take this commitment seriously.

The Project has Clearance Letters from the Ministry of Tourism, Culture and Sport regarding our approved archeological assessments for the Project. In the event undiscovered archeological or Indigenous finds are discovered, NextBridge remains committed to offering opportunities to Indigenous Facilitators to participate in future archeological assessments. These scenarios will be discussed when NextBridge and communities collaborate on Facilitation Plans.

In the event the Project team discovers archeological sites or human remains, the Project will comply with regulatory requirements as set out in the Engaging Aboriginal Communities in Archeology – a Draft Technical Bulletin for Consultant Archaeologists in Ontario, Ministry of Tourism and Culture, 2010 http://www.mtc.gov.on.ca/en/publications/AbEngageBulletin.pdf and the Standards and Guidelines for Consultant Archaeologists, Ministry of Tourism and Culture, 2011 http://www.mtc.gov.on.ca/en/publications/SG_2010.pdf.

As a brief summary, the Project team will:

- Immediately halt work to ensure the site is not disturbed further;
- Notify the Project leadership team of the discovery including notification to an Ontario licensed archeologist to review the site to determine next steps in compliance with Ontario's regulatory requirements;
- Notify local Indigenous communities;
- In coordination with an Ontario licensed archeologist, develop an archeological assessment plan, including local Indigenous participation, to determine appropriate avoidance or mitigation options;
- Implement the mitigation plan under the supervision of an Ontario licensed archeologist and invite Indigenous participation;
- Comply with Ontario regulatory documentation and filings.

Consideration of Additional Traditional Knowledge (Condition 7.1 c)

NextBridge understands the development of the Project, including an approved EA, would not have been as successful as it was had it not been for the active engagement of Indigenous communities that hold traditional ecological knowledge (TEK) and traditional land use information (TLU) about the Project area. This information was essential to completing the EA for the Project in a timely, appropriate, and cost effective manner.

NextBridge remains committed to working with communities to identify any new TEK/TLU information and to mitigate and/or avoid potential impacts that arise from routing, construction and operations. NextBridge plans to undertake this task by continuing to meet with communities and share information about the Project; offer Indigenous Facilitators the opportunity to be present, and providing tour opportunities during construction in order to identify new information quickly and where required, implement additional mitigation in a timely manner. To facilitate this commitment, NextBridge is amenable to the opportunity to renew Confidentiality and other Knowledge sharing agreements as requested by both parties.

Inclusion of additional Traditional Knowledge into relevant documentation will be determined by the timing on when it is received. If the information is provided in advance of permitting and DPP development, NextBridge will make all reasonable efforts to include the information in our applications. In the event information is not provided in time for permit and DPP

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applications, communities will work with NextBridge through the Facilitation Plan to ensure construction alignment sheets are updated.

To supplement regulatory filings, Indigenous Facilitators will be able to provide feedback to local construction crews to ensure information is included when discovered in the field. The Indigenous Facilitators will note potential changes in construction due to Traditional Knowledge inclusion in their summaries provided to their community and Nextbridge. Finally, through community-specific update meetings, small group meetings or through the broad ACAB, NextBridge will provide summaries on Traditional Knowledge feedback provided and Facilitator feedback on inclusion of information into the construction plans and approach.

TEK is based upon the experience of many generations of community members, is geographically specific, and is usually transmitted orally. It is defined by an Indigenous community's traditional land base, environment, region, culture and language. All members of a community hold TEK collectively, although some members may have been given the responsibility for its communication. TLU is based on who is using the land today, and for what purpose.

Issue Notices and Updates (Condition 7.1 d)

Nextbridge will continue to formally provide project announcements and notifications to communities directly. NextBridge will continue to ensure it is using the most appropriate methods to engage the community based on local needs including the use of email, written correspondence, community meetings, leadership meetings, technical workshops and use of websites to store and access information. Over the last 7 years, NextBridge has been able to effectively deliver Project information to all 18 identified communities and will continue to work with them to ensure timely delivery of information in an appropriate format.

In the winter of 2019, NextBridge provided communities with updates on the Project including our commitment to construction start time as early as June 1, 2019. NextBridge is committed to ongoing updates through teleconference, emails, newsletters and in-person meetings.

NextBridge remains committed to notifying communities at least 45 days prior to application of herbicides. It should be noted, no use of herbicides will take place during construction. The method of notice to communities will be through regular ACAB updates during operations and follow-up meeting summaries distributed to communities and stored on NextBridge website.

First Nations and Métis organizations will also receive notification via email of the opportunity to review and provide comment on Detailed Project Plans (DPPs). This notification will be supplemented by phone calls, technical workshops and meetings and written correspondence as required.

Throughout the EA process, NextBridge received extensive feedback from communities regarding the draft Vegetation Management Plan. That feedback resulted in direct and substantial changes to the overall approach. Changes and the overall approach have been shared with communities already and are available for review. Prior to construction, as part of permitting and DPP discussions, NextBridge is committed to sharing the Vegetation Management Plan with communities. During operations, as part of ongoing ACAB meetings, NextBridge will continue to solicit feedback.

The Project has a website (www.nextbridge.ca), and Project information will be routinely posted to the website for distribution. The Project website, email and hotline will be available to provide access to information and opportunity to provide comment throughout the lifecycle of the asset. Included on the NextBridge website, and available for distribution to communities, will be documentation that is provided to the Director at the Ministry of the Environment, Conservation and Parks.

NextBridge will also publish a series of newsletters about the Project, which will be distributed to the communities. Specific information materials and communication processes and activities will be designed to reach out to Indigenous communities over and above the Project announcements and notifications to all interested parties.

Capacity Funding to Support Engagement

To ensure communities have the resources to continue to engage, NextBridge continues to offer Capacity Funding Agreements (CFA's) to communities based on need that take steps to ensure that the communities are able to fully participate in ongoing consultation.

NextBridge has offered reasonable amounts of funding to provide for these needs during the construction phase of the Project. For the next stage in the Project, the agreements will be extended to cover the construction phase of the Project (i.e. 2019 to 2021) and includes identifiable objectives such as funding for community communication efforts, review and comment on DPPs and communications with leadership and with NextBridge.

For reviews of DPPs, NextBridge remains committed to ensuring communities have the resources to retain 3rd party reviews of our documentation, meet with NextBridge subject matter experts to discuss proposed plans, provide feedback on finalizing DPPs and follow through with feedback by offering Indigenous Facilitators in the field.

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APPENDIX "A"

2018 Draft Terms of Reference for Aboriginal Community Advisory Board (ACAB)

NextBridge East-West Tie Transmission Project
Aboriginal Community Advisory Board
TERMS OF REFERENCE

Revised September 17, 2018
Updated April 5, 2019, April 30, 2019, June 28, 2019, July 5, 2018

1. Introduction

NextBridge Infrastructure (NextBridge), through its general partner Upper Canada Transmission, Inc., has been designated by the Ontario Energy Board (OEB) to develop the East-West Tie (EWT Project). The EWT Project will be an approximately 446 km long, electricity transmission line extending from Thunder Bay to Wawa, Ontario.

NextBridge is engaging with 18 Indigenous communities about the EWT Project – to ensure that they are appropriately consulted, and that provision is made for meaningful aboriginal participation in the EWT Project. NextBridge's approach for engaging these communities is based upon the following guiding principles:

- Understanding the Communities
  - NextBridge will collaborate with Indigenous communities to better understand their established and asserted rights, as well as their concerns for the environment and community members affected by NextBridge's work in the EWT Project area.
  - NextBridge will show respect for traditional ways of life and land uses, cultural heritage resources, the natural environment, and traditional knowledge.
- Commitment to Effective Policies and Procedures
  - NextBridge's partners have strong, established and effective policies and procedures:
    - NextEra's First Nation and Métis Relationship Policy
    - Enbridge's Indigenous People's Policy
- Communication and Transparency
  - NextBridge forms good working relationships through:
    - Open dialogue
    - Communicating key project information and updates
    - Being attentive to the communities' concerns about project impacts or questions about project benefits
- Duty to Consult
  - The activities undertaken through the ACAB does not remove, hinder or replace the Crown's obligation to consult.
  - If triggers for consultation take place in the future (i.e. seeking permits, approval of plans, policies etc.), NextBridge remains committed to ensuring we discharge the aspects of consultation as delegated by the Crown.

- NextBridge will conduct consultation on those triggers as separate from ACAB proceedings. If ACAB members wish to amalgamate consultation discussions with regular ACAB proceedings, a mutually agreed upon process will be developed and executed prior to those undertakings.

NextBridge is committed to adhering to these guiding principles, and the Aboriginal Community Advisory Board (ACAB) is being established to help meet them.

2. ACAB Mandate

a. To advise NextBridge on the views, needs and interests of the 18 identified Indigenous Communities in the EWT Project area as they relate to issues that fall within the parameters of NextBridge's authority and responsibilities.
b. To report back to individuals, councils, communities, organizations and networks on the EWT Project based on discussions and information shared at the ACAB.
c. To provide a communication link between the 18 Indigenous communities and the EWT Project during all stages of the EWT Project.
d. To provide advice on how the EWT Project work might identify and protect Indigenous heritage, culture and values, and on how to increase involvement of Indigenous.
e. To advise on policies and procedures; report back to communities on how policies and procedures reflect ongoing advice; and develop mutually agreed upon tasks and activities that reflect the priorities of the communities.

3. Roles & Responsibilities

a. Role of the ACAB
    i. Communication
        - Ensuring that communication flow between NextBridge and affected Indigenous communities is two-way.
    ii. Information Exchange and Education
        - Learning about the EWT Project and informing others in their respective communities.
    iii. Participation
        - Making constructive recommendations to NextBridge regarding the views, needs and interests of Indigenous communities and peoples in the EWT Project area.
b. Member Responsibilities
    i. Regularly attend and participate in ACAB meetings.
    ii. Actively participate in meeting discussions.
    iii. Share information and impressions with their council and/or community or organization, as applicable.

4. Standing Items of Discussion

a. Project Construction Update (during construction phase only)
    i. Throughout construction, the ACAB will function as a forum for NextBridge to provide ongoing project updates and to offer a venue to discuss potential issues that may arise that are of interest to more than one single community.
    ii. Examples of Project Updates include Decommissioning of temporary bridges, culverts, ice bridges, snow fills, temporary access roads, laydown areas/yards, camps and timber salvage etc.
b. Vegetation Management Updates
    i. The feedback received by communities has indicated they would like the opportunity to review how Vegetation Management is being implemented including details regarding invasive species control protocols.
c. Operator feedback
    i. Provide an opportunity to discuss the approach of NextBridge employees, or contractors to their tasks and how they are interacting with Indigenous communities in the field. Discuss how respectful they have been to communities while conducting their tasks and raise any issues, concerns or observations of going above and beyond their normal duties.
d. Environmental Reporting
    i. Provide an opportunity for community members to review environmental reporting required by regulators.
e. Community-led Activities
    i. If communities have initiated environmental programs in the Project area or the Project has provided capacity funding to undertake programs such as wildlife monitoring or vegetation re-planting, the community representatives may share the results at the ACAB.

5. Geographic Scope

ACAB activities, recommendations and decisions will generally relate to the geographic area commonly referred to as the EWT Project area and other potentially impacted areas.

6. ACAB Philosophy

The ACAB members will strive to uphold the following principles and values while participating in the ACAB process:

- Being honest, accountable, responsible, respectful, transparent and open in all ACAB activities during and outside of ACAB meetings.
- Striving to operate by general agreement and consensus where possible, respecting everyone's point of view, listening and deciding with fairness and cooperation in mind.
- Respecting each other's participation and time, proposed EWT Project timelines, and being mindful of ACAB agendas and meeting timeframes.

- Demonstrating integrity, empathy and respect for diversity.

7. Membership and Board Composition

a. The ACAB will be comprised of 18 seats representing one of each of the eighteen Indigenous communities identified in the Ministry of Energy's Aboriginal engagement list for the EWT Project. Membership will be open to one member from each of the following communities:

i. Animbiigoo Zaagi'igan Anishinaabek First Nation (Lake Nipigon Ojibway)
ii. Biinjitiwaabik Zaaging Anishinaabek First Nation (Rocky Bay)
iii. Bingwi Neyaashi Anishinaabek (Sand Point First Nation)
iv. Fort William First Nation
v. Ginoogaming First Nation
vi. Long Lake No. 58 First Nation
vii. Michipicoten First Nation
viii. Missanabie Cree First Nation
ix. Ojibways of Batchewana
x. Ojibways of Garden River
xi. Biigtgong Nishnaabeg (formerly Ojibways of Pic River (Heron Bay First Nation))
xii. Pays Plat First Nation
xiii. Pic Mobert First Nation
xiv. Red Rock Indian Band
xv. Greenstone Métis Council
xvi. Superior North Shore Métis Council
xvii. Thunder Bay Métis Council
xviii. Red Sky Independent Métis Nation

b. Each Indigenous community noted above (or their respective governance/representative organization) may appoint one representative to serve as a member on the ACAB. No community shall be under an obligation to appoint a representative, but the community's allocated seat on the ACAB will remain vacant for this purpose, and a community may fill such vacancy at any time.

c. During the construction phase of the Project, the ACAB will function as a forum for community construction facilitators to serve as members of the ACAB board as a general rule. The reasoning for this is that the Facilitators will be the eyes and ears out on the project representing specific community interest and the ACAB will provide a forum to ensure the Facilitators are provided real-time updates and are able to report back to their local community on the status of the project. A community may choose to appoint a different representative to the board during construction if they so wish or if they do not have a facilitator.

d. An ACAB member must be:

i. An Indigenous person, who lives, works or studies in the geographic area of the EWT Project and is a member of the community that has appointed them.

ii. An Indigenous person that: (1) is not affiliated with any organization or business who may materially benefit from the construction or operation of the EWT Project; and (2) does not have a conflict of interest (real or perceived) with respect to the EWT Project.

e. The Board will vote annually to determine its Chairperson. The inaugural Chairperson will be a delegate from NextBridge until such time as the Board is established and a formal vote can be held. The inaugural Chairperson will hold a vote on determining the next Chairperson based on a motion being carried by the ACAB that will set a date for a vote or within the first year of the operational phase of the Project, whichever one comes first.
f. NextBridge representatives are entitled to attend and participate fully in all ACAB meetings.
g. If one or more ACAB members request a side-bar or in-camera session (i.e. side-bar to refer to meetings pre or post ACAB meeting with a select few community or ACAB members; in-camera to refer to components of the ACAB meeting will be confidential and not part of the public Meeting Minutes), the Chair will determine the need and will have the discretion to establish side-bar or in-camera components of meetings.
h. The Chair may invite technical experts to attend specific meetings to provide updates and reports depending on the requests made by ACAB members.

8. Frequency of Meetings

During construction, the ACAB will meet on a quarterly basis (and more regularly if required) to discuss project progress and for Nextbridge to provide updates. If issues arise that are of interest to the broader group (as opposed to a community specific issue) more frequent meetings will be considered.

Once in operations, the initial ACAB requirement will be to meet quarterly on an agreed upon date and time.

Quorum for each meeting will be based on the majority of the number of ACAB seats that are filled and the attendance at the meeting. ACAB members may be present in person or by phone, or by any other method that allows all members to speak to and hear each other.

9. Conflicts of Interest

Before the start of any ACAB meeting, the Chairperson will ask ACAB members to:

- Disclose any conflicts of interest. Those statements will be included in ACAB meeting minutes;
- Not participate in ACAB discussions with respect to any topics in which that ACAB members may have a conflict of interest;
- Refrain from voting on any issue or resolution which may represent a conflict of interest for that ACAB member.

Filed: 2020-11-04
EB-2020-0150
Exhibit C
Tab 2
Schedule 4
Attachment 5
Page 21 of 22

It is incumbent upon ACAB members to disclose to the group any Conflict of Interest (real or perceived). Failure to disclose can result in disciplinary actions from the Chairperson that may range from written warning to exclusion from future ACAB meetings at the Chairperson's discretion.

10. Expenses

If attending an ACAB meeting is not within a member's normal course of business (i.e., your time to attend was not paid by your Indigenous community or organization), reasonable and documented travel, accommodation and meal expenses will be reimbursed by NextBridge upon submission of an invoice with associated receipts and in accordance with the Federal Government of Canada's National Joint Council Travel Directive (where specified).

10. Honoraria

For in-person meetings honoraria will be paid by NextBridge to ACAB members in accordance with the following:

a. For meeting attendance, members will be paid $150 per meeting day;
b. For travel required to arrive at, and return from, a meeting venue, members will be paid $75 per travel day;
c. A travel and meeting day honorarium cannot be claimed for the same day, so the maximum honorarium claim per day is $150

*For standing update meetings during construction, meetings will be facilitated via teleconference as a general rule. Participants such as Indigenous Facilitators will be paid their regularly hourly rate for participation. If an in-person meeting is required, the above policy will be followed.

11. Dissemination of Information

Minutes of meetings will, unless decided otherwise by agreement of the majority of the ACAB members present at any given meeting, be taken by a NextBridge representative attending each meeting and sent to the Chairperson for review, following which said minutes will be disseminated to all members of the ACAB. ACAB members will strive for approval of said minutes by consensus within 30 days of the meeting. Member-approved meeting minutes will be disseminated to NextBridge as well as to each Indigenous community and its governance/representative organization. NextBridge will post meeting minutes on its website unless alternative direction is provided by the ACAB members.

APPENDIX "B"

Environmental Monitoring Overview: Roles and Responsibilities

Role	Report to	Description
Environmental Inspector	Contract Position directly to NextBridge Environmental Lead	Responsible for identifying and investigating the sources of non-compliance with environmental conditions and regulations. Recommends corrective actions. Examines environmental safeguards such as silt fencing, collection facilities, and buffer zones for accuracy. Works with other worksite staff and contractors including: Health and Safety Lead, Environmental Monitors, Indigenous Facilitators and Construction Lead to ensure compliance with environmental standards.
Environmental Monitor	Temporary employees of General Contractor. Report directly to General Contractor Construction Crew Lead and Project Manager.	Conducts necessary tasks to ensure compliance with environmental conditions for the Project. Collect samples, for example air, water, and soil samples. Record data and observations in an accurate and well-organized manner. Assist in the operation and maintenance of equipment, including laboratory, field, and monitoring equipment. Read maps and navigate variable terrain, including operating vehicles. Prepare technical reports detailing monitoring activities.
Indigenous Facilitator	Indigenous Community appointee (via letter from Chief and Council or Community Leader with a copy to Band Manager of Financial Officer). Report to Indigenous Community.	Representative of the Indigenous Community responsible to ensure Indigenous and Treaty Rights are being respected. Develop a Facilitation Plan in collaboration with NextBridge that outlines key tasks. Provide daily or weekly or tour summary notes to the Indigenous Community and store notes on a shared digital platform. Attend ACAB meetings as required to share experiences and mitigation strategies. Discuss mitigation measures and strategies with the Environmental Inspector in the field if required.

ACAB TERMS OF REFERENCE

NextBridge East-West Tie Transmission Project

Aboriginal Community Advisory Board

TERMS OF REFERENCE

November 1, 2016

1. Introduction

NextBridge Infrastructure (NextBridge), through its general partner Upper Canada Transmission, Inc., has been designated by the Ontario Energy Board (OEB) to develop the East-West Tie (EWT Project). The EWT Project will be an approximately 400 km long, electricity transmission line extending from Thunder Bay to Wawa, Ontario.

NextBridge is engaging with fourteen First Nations and four Métis communities about the EWT Project – to ensure that they are appropriately consulted, and that provision is made for meaningful aboriginal participation in the EWT Project. NextBridge's approach for engaging these communities is based upon the following guiding principles:

- Understanding the Communities
  - NextBridge will collaborate with First Nation and Métis communities to better understand their recognized and asserted rights, as well as their concerns for the environment and community members affected by NextBridge's work in the EWT Project area.
  - NextBridge will show respect for traditional ways of life and land uses, cultural heritage resources, the natural environment, and traditional knowledge.
- Commitment to Effective Policies and Procedures
  - NextBridge's partners have strong, established and effective policies and procedures:
    - NextEra's First Nation and Métis Relationship Policy
    - Enbridge's Indigenous and Native American Policy
- Communication and Transparency
  - NextBridge forms good working relationships through:
    - Open dialogue
    - Communicating key project information and updates
    - Being attentive to the communities' concerns about project impacts or questions about project benefits

NextBridge is committed to adhering to these guiding principles, and the Aboriginal Community Advisory Board (ACAB) is being established to help meet them.

2. ACAB Mandate

a. To advise NextBridge on the views, needs and interests of First Nation and Métis communities in the EWT Project area as they relate to issues that fall within the parameters of NextBridge's authority and responsibilities.

b. To report back to individuals, councils, communities, organizations and networks on the EWT Project based on discussions and information shared at the ACAB.
c. To provide a communication link between First Nation and Métis communities and the EWT Project during all stages of the EWT Project.
d. To provide advice on how the EWT Project work might identify and protect First Nation and Métis heritage, culture and values, and on how to increase involvement of First Nation and Métis communities at all stages of the EWT Project.

3. Roles & Responsibilities

a. Role of the ACAB
    i. Communication
        - Ensuring that communication flow between NextBridge and affected First Nation and Métis communities is two-way.
    ii. Information Exchange and Education
        - Learning about the EWT Project and informing others in their respective communities.
        - Sharing First Nation and Métis traditional knowledge and expertise with NextBridge and learning from others.
    iii. Participation
        - Making constructive recommendations to NextBridge regarding the views, needs and interests of First Nation and Métis communities and peoples in the EWT Project area.

b. Member Responsibilities
    i. Regularly attend and participate in ACAB meetings.
    ii. Actively participate in meeting discussions.
    iii. Share information and impressions with their council and/or community or organization, as applicable.

4. Geographic Scope

ACAB activities, recommendations and decisions will generally relate to the geographic area commonly referred to as the EWT Project area and other potentially impacted areas.

5. ACAB Philosophy

The ACAB members will strive to uphold the following principles and values while participating in the ACAB process:

- Being honest, accountable, responsible, respectful, transparent and open in all ACAB activities during and outside of ACAB meetings.
- Striving to operate by general agreement and consensus where possible, respecting everyone's point of view, listening and deciding with fairness and cooperation in mind.

- Respecting each other's participation and time, proposed EWT Project timelines, and being mindful of ACAB agendas and meeting timeframes.
- Demonstrating integrity, empathy and respect for diversity.

6. Membership and Board Composition

a. The ACAB will be comprised of 18 seats representing one of each of the eighteen Aboriginal communities identified in the Ministry of Energy's Aboriginal engagement list for the EWT Project. Membership will be open to one member from each of the following communities:

i. Animbiigoo Zaagi'igan Anishinaabek First Nation (Lake Nipigon Ojibway)
ii. Biinjitiwaabik Zaaging Anishinaabek First Nation (Rocky Bay)
iii. Bingwi Neyaashi Anishinaabek (Sand Point First Nation)
iv. Fort William First Nation
v. Ginoogaming First Nation
vi. Long Lake No. 58 First Nation
vii. Michipicoten First Nation
viii. Missanabie Cree First Nation
ix. Ojibways of Batchewana
x. Ojibways of Garden River
xi. Ojibways of Pic River (Heron Bay First Nation)
xii. Pays Plat First Nation
xiii. Pic Mobert First Nation
xiv. Red Rock Indian Band
xv. Greenstone Métis Council
xvi. Superior North Shore Métis Council
xvii. Thunder Bay Métis Council
xviii. Red Sky Independent Métis Nation

b. Each First Nation or Métis community noted above (or their respective governance/representative organization) may nominate one representative to serve as a member on the ACAB. No community shall be under an obligation to nominate a representative, but the community's allocated seat on the ACAB will remain vacant for this purpose, and a community may fill such vacancy at any time.

c. An ACAB member must be:

i. A First Nation or Métis person who lives, works or studies in the geographic area of the EWT Project and is a member of the community that has nominated them.
ii. A First Nation or Métis person that: (1) does not hold a political office within their community; (2) is not affiliated with any organization or business who may materially benefit from the construction or operation of the EWT Project; and (3) does not have a conflict of interest (real or perceived) with respect to the EWT Project.

d. The Board will vote annually to determine its Chairperson. The inaugural Chairperson will be a delegate from NextBridge until such time as the Board is established and a formal vote can be held. As inaugural Chairperson, NextBridge will not have a vote or seat on the Board.
e. NextBridge representatives are entitled to attend and participate fully in all ACAB meetings, but will not have voting rights.

7. Frequency of Meetings

The initial ACAB requirement will be to meet quarterly on an agreed upon date and time in the EWT Project area. Quorum for each meeting will be based on the majority of the number of ACAB seats that are filled and the attendance at the meeting. ACAB members may be present in person or by phone, or by any other method that allows all members to speak to and hear each other.

8. Expenses

If attending an ACAB meeting is not within a member's normal course of business (i.e., your time to attend was not paid by your First Nation or Métis community or organization), reasonable and documented travel, accommodation and meal expenses will be reimbursed by NextBridge upon submission of an invoice with associated receipts and in accordance with the Federal Government of Canada's National Joint Council Travel Directive (where specified).

10. Honoraria

Honoraria will be paid by NextBridge to ACAB members in accordance with the following:

a. For meeting attendance, members will be paid $150 per meeting day;
b. For travel required to arrive at, and return from, a meeting venue, members will be paid $75 per travel day;
c. A travel and meeting day honorarium cannot be claimed for the same day, so the maximum honorarium claim per day is $150 and
d. No part-time or full-time employee or paid representative of a First Nation or Métis community or its respective governance or representative organization shall be entitled to an honorarium while acting in their role of employee or paid representative.

9. Dissemination of Information

Minutes of meetings will, unless decided otherwise by agreement of the majority of the ACAB members present at any given meeting, be taken by a NextBridge representative attending each meeting and sent to the Chairperson for review, following which said minutes will be disseminated to all members of the ACAB. ACAB members will strive for approval of said minutes by consensus within 30 days of the meeting. Member-approved meeting minutes will be disseminated to NextBridge as well as to each First Nation and Métis community and its governance/representative organization.

SPARE STRATEGY

1. A total of $1.2 million in spare equipment are to be procured prior to the March 31, 2022 in-service date to ensure reliability and are included in the proposed revenue requirement. Due to the long procurement times of transmission towers, a good utility practice is to have a spare strategy to procure a minimum requirement of towers and associated components to address potential events. The determination of the amount of spare equipment was based on the extensive experience of affiliates of NEET, who presently develop and operates transmission assets across North America. The statistical probability of extreme ice and wind events and ESL of the assets (*i.e.*, “like new”) were also factored into the decision of the amount of materials needed. These spares will be purchased prior to the in-service date to allow for already negotiated favorable pricing. The vendor providing the towers used in construction will already be set up to manufacture these tower designs and completing the spare towers at the same time allows for savings to the project. In addition, savings were extracted by using the previously negotiated terms with the current vendor who was competitively procured. The spare strategy includes enough tower material to replace a total of seventeen towers. The most prevalent tower designs on the project determined the number of towers procured and NextBridge has seven of the most prevalent towers on the project, two of the second most, and one each of the eight other tower types. This allows for the most efficient use of the spare inventory. The spares were sourced 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.

Table 1. Summary of Spare Equipment

Spare Equipment	Estimated Quantity	Unit	($ Thousands)
Towers	17	Each	$ 930
Conductor	17k	Meters	147
OHGW	3k	Meters	11
OPGW	3k	Meters	13
Insulators	100	Each	74
Arresters	25	Each	56
			$ 1,231

IN SERVICE ADDITIONS IN TEST YEAR (APRIL 1, 2022 TO MARCH 31, 2023)

1. 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. Refer to Exhibit B for details on each capital program.

REQUIRED EXHIBITS AND TABLES

1. Since the East-West Tie line is a new asset, and in its first year of service, there is no historical or bridge year to present for continuity or variance analysis. Tables 1 and 2 below for gross property, plant and equipment and accumulated depreciation show the Test Year impact, as that is the first year of service.

Table 1. Gross Property, Plant and Equipment for Test Year

Continuity of Property, Plant and Equipment Total - Gross Balances ($ Millions)							
	Opening Balance	**Additions**	**Retirements**	**Sales**	**In/Out and Other**	**Closing Balance**	**Average**
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Test Year	774.9	0.2	-	-	-	775.2	775.1

Table 2. Accumulated Depreciation for Test Year

Continuity of Property, Plant and Equipment - Accumulated Depreciation Total - Gross Balances ($ Millions)							
	Opening Balance	**Additions**	**Retirements**	**Sales**	**In/Out and Other**	**Closing Balance**	**Average**
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Test Year	-	9.3	-	-	-	9.3	4.6

GROSS PROPERTY, PLANT AND EQUIPMENT

NextBridge
Continuity of Property, Plant and Equipment
Test Year 12 Months; Opening 4/1/22, Closing 3/31/23
Total - Gross Balances
($ Millions)

Line No.	Year	Opening Balance	Additions	Retirements	Sales	In/Out and Other	Closing Balance	Average
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
Test								
1	2022	774.9	0.2	-	-	-	775.2	775.1

ACCUMULATED DEPRECIATION

NextBridge
Continuity of Property, Plant and Equipment - Accumulated Depreciation
Test Year 12 Months; Opening 4/1/22, Closing 3/31/23
Total - Gross Balances
($ millions)

Line No.	Year	Opening Balance	Additions	Retirements	Sales	In/Out and Other	Closing Balance	Average
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
Test								
1	2022	-	9.3	-	-	-	9.3	4.6

FIXED ASSETS CONTINUITY SCHEDULES

Appendix 2-BA
Fixed Asset Continuity Schedule [1]

Accounting Standard USGAAP
Year 4/1/22 - 3/31/23

CCA Class [2]	OEB Account [3]	Description [3]	Cost				Accumulated Depreciation				Net Book Value
			Opening Balance	Additions [4]	Disposals [6]	Closing Balance	Opening Balance	Additions	Disposals [6]	Closing Balance	
N/A	1705	Land									
14.1	1706	Land rights	$ 35,093,798			$ 35,093,798	$ -	$ 350,938		$ 350,938	$ 34,742,860
1	1708	Buildings and fixtures									
47	1715	Station equipment									
47	1720	Towers and fixtures	$ 578,241,343			$ 578,241,343	$ -	$ 6,424,904		$ 6,424,904	$ 571,816,439
47	1730	Overhead conductors and devices	$ 161,608,342	$ 230,000		$ 161,838,342	$ -	$ 2,485,075		$ 2,485,075	$ 159,353,267
47	1735	Underground conduit									
47	1740	Underground conductors and devices									
17	1745	Roads and trails									
								$ -			
		Sub-Total	**$ 774,943,482**	**$ 230,000**	**$ -**	**$ 775,173,482**	**$ -**	**$ 9,260,916**	**$ -**	**$ 9,260,916**	$ 765,912,566
		Less Socialized Renewable Energy Generation Investments (input as negative)								$ -	$ -
		Less Other Non Rate-Regulated Utility Assets (input as negative)								$ -	$ -
		Total PP&E	**$ 774,943,482**	**$ 230,000**	**$ -**	**$ 775,173,482**	**$ -**	**$ 9,260,916**	**$ -**	**$ 9,260,916**	$ 765,912,566
		Depreciation Expense adj. from gain or loss on the retirement of assets (pool of like assets), if applicable6									
		Total						**$ 9,260,916**			

10		Transportation
8		Stores Equipment

Less: *Fully Allocated Depreciation*
Transportation
Stores Equipment
Net Depreciation $ 9,260,916

Notes:

1 Tables in the format outlined above covering all fixed asset accounts should be submitted for the Test Year, Bridge Year and all relevant historical years. At a minimum , the applicant must provide data for the earlier of: 1) all historical years back to its last rebasing; or 2) at least three years of historical actuals, in addition to Bridge Year and Test Year forecasts.

2 The "CCA Class" for fixed assets should agree with the CCA Class used for tax purposes in Tax Returns. Fixed Assets sub-components may be used where the underlying asset components are classified under multiple CCA Classes for tax purposes. If an applicant uses any different classes from those shown in the table, an explanation should be provided. (also see note 3).

3 The table may need to be customized for a utility's asset categories or for any new asset accounts announced or authorized by the Board.

4 The additions in column (E) must not include construction work in progress (CWIP).

5 Effective on the date of IFRS adoption, customer contributions will no longer be recorded in Account 1995 Contributions & Grants, but will be recorded in Account 2440, Deferred Revenues.

6 The applicant must ensure that all asset disposals have been clearly identified in the Chapter 2 Appendices for all historic, bridge and test years. Where a distributor for general financial reporting purposes under IFRS has accounted for the amount of gain or loss on the retirement of assets in a pool of like assets as a charge or credit to income, for reporting and rate application filings, the distributor shall reclassify such gains and losses as depreciation expense, and disclose the amount separately.

ALLOWANCE FOR WORKING CAPITAL

1. NextBridge is not requesting an allowance for working capital.

CUSTOMER CONNECTION AND COST RECOVERY AGREEMENT

1. NextBridge is in the process of entering into a Customer Connection and Cost Recovery Agreement ("**CCRA**") with HONI. This agreement allows HONI to perform the work required to connect the East-West Tie line to Hydro One's transmission system, namely:

   - four new 230 kV circuits W35M, W36M, M37L and M38L, to Hydro One's transmission system at Wawa TS, Marathon TS and Lakehead TS, and
   - the reconfiguration of the existing facilities and addition of new facilities at the three terminal stations of the East-West Tie, namely Wawa TS, Marathon TS and Lakehead TS, to provide 450 MW east-west power transfer capability

2. Hydro One will provide project management, engineering, equipment and material, construction, and commissioning of new and modified Hydro One facilities for the East-West Tie connection work. 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.

CAPITALIZATION POLICY

1. NextBridge capitalizes costs that are directly attributable to capital projects. NextBridge does not allocate indirect costs via overhead rate or other method to capital projects.

Capitalization of Overhead

2. NextBridge does not capitalize overheads on capital projects. All capital costs are directly attributed and directly charged to the project.

Burden Rates

3. Not applicable

CAPITAL MODULE

1. NextBridge is not requesting a capital increment for discrete projects being placed in service after the rebasing year.

SERVICE QUALITY AND RELIABILITY PERFORMANCE AND REPORTING PROPOSED

Proposed Scorecard

1. 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 of each of the circuits is at 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. On this basis, NextBridge is proposing the following measures to best demonstrate its performance and address the performance standards for transmitters as set out in Chapter 4 of the *Transmission System Code*:

Table 1. Performance Measures

RRFE Outcomes	Performance Measure
Safety	0.00 OHSA Recordable Injuries Per Year
Financial Performance	Return on Equity
Public Policy Responsiveness	Applicable NERC Reliability Standards, such as FAC-003-4, Vegetation Compliance for NextBridge owned assets

RRFE Outcomes	Performance Measure
Operational Excellence	OM&A Cost ($ K) per circuit km
Operational Excellence	Average System Availability (%)

2. The performance measures will be tracked annually, and the results of this tracking will be reported to the OEB at the next proceeding. A description of the performance measures is provided in turn below.

Safety

3. Safety is of the utmost importance in NextBridge's transmission work activities. NextBridge is committed to complying with safety standards and regulations following those established by HONI and the Electrical Safety Authority.

4. Ontario's *Occupational Health and Safety Act* requires NextBridge to comply with industrial design and construction safety regulations, and NextBridge must also comply with the health regulations of the Ministry of Health under the *Health Protection and Promotion Act*.

Financial Performance

5. Return on equity ("**ROE**") compares the profitability of NextBridge over a period compared to the amount of equity invested by the partners. The biggest impact on ROE for NextBridge is related to variances caused generally by potential system impacts resulting from extreme weather events such as rain storms, winter storms, and ice storms. In order to mitigate some of these potential system impacts, NextBridge designed the structural elements of the East-West Tie line to withstand a 1-in-100-year ice storm, exceeding minimum requirements outlined in the relevant codes. Weather cases were applied to the

project design based on design requirements set forth by the OEB's *Minimum Design Criteria for the Reference Option of the E-W Tie Line* (OEB 2011), the Canadian Standards Association documents C22.3 No. 1-15 *Overhead Systems* (CSA 2015a) and C22.3 No. 60826-10 (R2015) *Design Criteria of Overhead Transmission Lines* (CSA 2015b), and severe weather and reliability concerns raised by stakeholders.

6. Using the Audited Statements, the ROE is calculated by dividing the Net Income (less extraordinary non-operating items such as startup cost reimbursement) by the Partners' Equity.

Public Policy Responsiveness

7. NERC Vegetation Compliance is a measure of the extent to which NextBridge is compliant with NERC Standard FAC-003-04. NERC developed a Transmission Vegetation Management Standard with the objective to prevent vegetation-related outages which could contribute to a cascading grid failure, especially under heavy electrical loading conditions. Each transmission owner is required to have a transmission vegetation management program designed to control vegetation on the active transmission line ROW in accordance with the requirements in NERC Standard FAC-003-04. Compliance with this NERC Standard is mandatory and enforceable.

Operational Excellence - OM&A Cost per circuit kilometer

8. Charles River Associates was engaged by NextBridge to prepare a benchmarking study of transmission projects comparable to that of its East-West Tie line. A copy of this report can be found at Exhibit B, Tab 1, Schedule 7, Attachment 1. CRA was asked to review the OM&A benchmarking for Bruce to Milton and Niagara Reinforcement rate case filings.

9. 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. NextBridge's rates were found to be cost competitive to Bruce to Milton and Niagara Reinforcement.

Table 2. OM&A Benchmarking study results

$ K (CAD)	Niagara 2020	Bruce-Milton 2019	East-West Tie
O&MA Expenses	320	600	1,275
Admin. & Corporate[5]	510	200	1,665
Regulatory			65
Total OM&A	**830**	**1,600[6]**	**3,005[7]**
Total km	76	180	450
OM&A / km (CAD)	**10.92**	**8.89**	**6.68**
OM&A / km (USD)	8.40	6.84	5.14

As the East-West Tie line continues to operate, NextBridge will report on its costs per kilometer.

Operational Excellence – Average System Availability

10. NextBridge complies with other relevant national and international standards such as the Canadian Standards Association, the Institute of Electrical and Electronic Engineers, and the International Electrotechnical Commission for the design of its transmission system and equipment. Further information on operational excellence can be found in Section B.

[5] The figure for the Niagara project includes costs associated with the Managing Director's office.
[6] Includes "Incremental expenses of $800k (CAD).
[7] The East-West Tie line also includes expenses for Indigenous Participation and Compliance costs. As these are not directly comparable to the other projects, and unique to the East-West Tie line, they have been excluded from this total.

RELIABILITY PERFORMANCE AVERAGE SYSTEM AVAILABILITY[8]

1. Transmission SAIDI and SAIFI (respectively, **"T-SAIDI"** and **"T-SAIFI"**) measure interruptions at delivery points in the system. The number of delivery points is the denominator of the equation. NextBridge has no delivery points and therefore is unable to calculate T-SAIDI or T-SAIFI for its circuits independently.

2. To demonstrate performance, NextBridge will measure Average System Availability ("**ASA**") where measurement of ASA is not reliant on a delivery point (customer). Rather, this metric focuses on equipment performance, *i.e.*, the availability of NextBridge's circuits, and is therefore an appropriate indicator given circumstances of the East-West Tie.

3. 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 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. The formulas for the two proposed measures are:

$$T - SAIFI_{NextBridge\ Contribution} = \frac{\sum_{i=1}^{k}(SF_i + MF_i)}{n}$$

$$T - SAIDI_{NextBridge\ Contribution} = \frac{\sum_{i=1}^{k}(SD_i)}{n}$$

- *n* is the total number of HONI delivery points.
- *k* is the total number of HONI delivery points that may be impacted by NextBridge circuits.

[8] This metric only includes events and/or time resulting from unplanned (or forced) automatic outages initiated by events directly involving the assets managed by NextBridge.

- *SF* and *MF* are the number of sustained and momentary interruptions experienced at Delivery Point *i* in a given year caused by NextBridge circuits.
- *SD* is the duration of the sustained interruptions experienced at Delivery Point *i* in a given year caused by NextBridge circuits.

COMPLIANCE MATTERS

1. There are no outstanding areas of non-compliance which have had an effect on this application, and, therefore, NextBridge is not seeking any relief to resolve any non-compliances issues.

OPERATING REVENUE

Load and Revenue Forecasts

1. NextBridge follows standard regulatory practice and has calculated its revenue requirement as shown below. The revenue requirement shown in Table 1 below is for a full year's cost of service. The amount requested in the 2022 UTR will be prorated to accommodate for the project being in service for only 9 months of 2022 (April 1, 2022 to December 31, 2022), as shown in Table 2 below.

Table 1. NextBridge Summary of Revenue Requirement ($ Millions)

Components	2022	Reference
OM&A	4.9	Exhibit F Operating Costs
Depreciation	9.3	Exhibit F Operating Costs
Income Taxes	0.6	Exhibit F Operating Costs
Return on Capital	41.0	Exhibit G Cost of Capital
Base Revenue Requirement	**55.7**	

Table 2. 2022 Revenue Requirement converted to UTR Amount ($ Millions)

2022 Revenue Requirement		
2022	A = Cost of Service for 12 months	55.7
2022	B = Monthly Cost of Service or A/12	4.6
2022	C = 2022 UTR Amount or B * 9	41.8

2. The above revenue requirement is the amount required by NextBridge to achieve its business objectives, responsible stewardship of a safe and reliable system, and have a

minimal impact on rates. The proposed revenue requirement is a reflection of NextBridge's commitment to operating at the lowest practical cost. Refer to Exhibit F for cost drivers and assumptions for OM&A, depreciation and income taxes. The return on capital component is further described in Exhibit G.

3. NextBridge is proposing a 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 set out below

Table 3. NextBridge Base Revenue Requirement by Year ($ Millions)

Year	Formula	Base Revenue Requirement ($ Millions)
2022	Cost of Service for 12 months (Base Rev. Req.)	55.7
2023	2022 Base Revenue Requirement x 1.020	56.8
2024	2023 Base Revenue Requirement x 1.020	58.0
2025	2024 Base Revenue Requirement x 1.020	59.1
2026	2025 Base Revenue Requirement x 1.020	60.3
2027	2026 Base Revenue Requirement x 1.020	61.5
2028	2027 Base Revenue Requirement x 1.020	62.8
2029	2028 Base Revenue Requirement x 1.020	64.0
2030	2029 Base Revenue Requirement x 1.020	65.3
2031	2030 Base Revenue Requirement x 1.020	66.6

4. NextBridge's revenue requirement in the first year (2022) of the IR Term is determined by using a cost of service, forward test-year approach, consistent with the OEB's Renewed Regulatory Framework for Electricity as most recently set out in the *Handbook for Utility Rate Applications* released by the OEB in October 2016. The Test Year revenue

requirement is shown for a full year's impact, whereas only 9 months' proration of the amount will be requested in the 2022 UTR to accommodate the East-West Tie line's March 31, 2022 in-service date. The revenue requirement in the following years, 2023 to 2031, is determined by using an RCI that is calculated for each year in addition to the Test Year amount.

5. The RCI includes an industry-specific inflation factor and a productivity factor. The RCI is expressed as: RCI=I–X, with "I" representing the inflation factor and "X" representing the productivity factor.

6. NextBridge proposes to adopt the OEB's calculation of the RCI "I" parameter, which for 2020 is 2.0%. 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%. The derivation of this is shown in the following table.

Inputs and Assumptions												
Year	Non-Labour GDP-IPI (FDD) - National							Labour AWE - All Employees - Ontario			Resultant Values - Annual Growth for the 2-factor IPI	
	Q1	Q2	Q3	Q4	Annual	Annual % Change	Weight	Annual	Annual % Change	Weight	Annual	Annual % Change
2017	108	108.5	108.3	109	108.45			$ 992.42			106.5	
2018	109.4	109.8	110.5	111.1	110.20	1.6%	70%	$1,021.40	2.9%	30%	108.6	2.0%

7. 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. This fixed nature of costs allows for ratepayer protection from inflation or other variables but does not allow for NextBridge to recognize cost efficiencies over the IR Term. Notably, there are Indigenous reserve crossing permits, within OM&A that are expected to inflate annually at the City of Toronto's annual CPI. If greater than the 2.0% inflation rate mentioned above, NextBridge will bear the burden.

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 (as further described in the capital expenditures plan in Exhibit B). NextBridge expects to have additions to gross plant in service, and therefore rate base, annually over the IR Term but has not included in the revenue requirement being submitted.

Therefore, RCI = 2.0% + 0.0%, or 2.0%

Table 4. Calculation of Revenue Requirement for Test Year

Calculation of Revenue Requirement			
Line No.	**Particulars**		**Test Year ($ Millions) (a)**
	Cost of Service		
1	Operating, maintenance & administrative	$	4.9
2	Depreciation		9.3
3	Income taxes		0.6
4	Cost of service excluding return on capital	$	14.8
5	Return on capital		41.0
6	Base revenue requirement	$	55.7

ACCURACY OF LOAD FORECAST AND VARIANCE ANALYSES

1. This section is not applicable as NextBridge does not have a load forecast.

OTHER REVENUE

1. This section is not applicable as NextBridge does not have other revenue.

OPERATING COSTS

Operating Costs Summary

1. This Exhibit presents an overview of NextBridge's operating costs and includes the following elements, for which the overall costs are shown in Table 1 below:

   - OM&A;
   - Depreciation and Amortization; and
   - Income Taxes.

Table 1. Summary of Operating Costs ($ Millions)

Cost Category	2022
OM&A	4.94
Depreciation	9.26
Income Taxes	0.58
Total Operating Costs	**14.77**

2. The proposed operating costs for the Test Year are forecast to be $14.77 million, which is documented in this Exhibit. NextBridge's operating cost forecast has been developed to sustain the safe and reliable operation of its transmission assets.

BENCHMARKING STUDY – OM&A

1. Charles River Associates was engaged by NextBridge to prepare a benchmarking study of transmission projects comparable to that of its East-West Tie line. A copy of this report can be found at Exhibit B, Tab 1, Schedule 7, Attachment 1. CRA was asked to review the OM&A benchmarking for Bruce to Milton and Niagara Reinforcement rate case filings. 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. NextBridge's rates were found to be cost competitive to Bruce to Milton and Niagara Reinforcement.

Table 1. OM&A Benchmarking Study Results

$ K (CAD)	Niagara 2020	Bruce-Milton 2019	East-West Tie
O&MA Expenses	320	600	1,275
Admin. & Corporate[9]	510	200	1,665
Regulatory			65
Total OM&A	**830**	**1,600[10]**	**3,005[11]**
Total km	76	180	450
OM&A / km (CAD)	**10.92**	**8.89**	**6.68**
OM&A / km (USD)	8.40	6.84	5.14

[9] The figure for the Niagara project includes costs associated with the Managing Director's office.
[10] Includes "Incremental expenses of $800k (CAD).
[11] The East-West Tie line also includes expenses for Indigenous Participation and Compliance costs. As these are not directly comparable to the other projects, and unique to the East-West Tie line, they have been excluded from this total.

OM&A

2. NextBridge has competitively sourced HONI who will conduct the operations and maintenance services on the East-West Tie line pursuant to the HONI SLA, while certain corporate and administrative support will be provided by NextBridge by way of an agreement with its partner affiliate NEET under the NEET Agreement as described in Exhibit B, Tab 1, Schedule 4. The estimated total OM&A expense is $4.94 million in the Test Year. Further details on the OM&A costs are provided in Exhibit F, Tab 1, Schedule 1.

Depreciation and Amortization

3. To determine its depreciation expense, NextBridge utilized a study that Foster Associates Inc. prepared for HONI in support of its 2020 to 2022 rate application (EB-2019-0082). This methodology is consistent with that approved for use by B2M LP and HONI in previous proceedings. The estimated depreciation expense is $9.26 million. Further details are provided in Exhibit F, Tab 11, Schedule 1.

Income Taxes

4. Under the *Income Tax Act*, a partnership is not taxable but is required to compute its taxable income, which is then allocated to its partners. The estimated income tax expense that will be required to be paid by the partners from the income generated in NextBridge is $0.58 million in the Test Year. Details of the calculation of the income tax expense are shown in Exhibit F, Tab 12, Schedule 1.

ANTICIPATED SOURCES OF EFFICIENCIES

1. The majority of NextBridge's OM&A services (accounting for approximately 75% of the 2022 forecast)[12] will be provided by HONI through the HONI SLA, with the remaining to be provided by the partner companies under the NEET Agreement. 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. The NEET Agreement and the resulting charges are in accordance with the Affiliate Relationships Code and are billed on a fully allocated cost basis. Given the proximity of the assets, there are meaningful efficiencies inherent in having HONI plan and perform all of the work on assets located in the same region. NextBridge's directly controllable costs are minimal but do include caretaking administrative expenses (*e.g.*, insurance and the Project Director's office), which are being passed through to ratepayers.

2. NextBridge is a new company owning circuits which are yet to be placed into service. However, the staff involved have considerable experience in the electricity transmission industry. The general partner, UCT, is able to manage NextBridge successfully by leveraging that expertise along with the availability of significant resources afforded by the agreements with HONI.

[12] 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 maintenance, operation, and administration that HONI will conduct.

SUMMARY OF OM&A EXPENDITURES

1. The proposed OM&A expenses represent the work required to meet public and personnel safety objectives, maintain transmission reliability, and to comply with regulatory and environmental requirements. Key components of OM&A requirements include:

   - Operations & Maintenance Services;
   - Regulatory (such as annual/periodic filings, OEB/IESO proceedings monitoring, general support);
   - Compliance & Administration (such as land filings/matters, audit/tax filing fees, hourly personnel support charges, stakeholder relations, insurance);
   - Indigenous Participation;
   - Indigenous Compliance (such as compliance with conditions of Species at Risk permits); and
   - Property Taxes & Land Rights Payments.

2. Table 1 below presents the required funding for OM&A in the Test Year (April 1, 2022 to March 31, 2023) for each of these key components. 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. This relates primarily to the characteristics of the assets that it owns. NextBridge's East-West Tie line is a 230 kV double-circuit transmission line that requires periodic vegetation management expenses and operating services costs, but otherwise very little additional operation given that NextBridge owns no station assets. Additionally, this type of asset is extremely reliable and has a low probability of fault or other incident requiring corrective maintenance or repair expenditures. As explained in Exhibit 3 (Rate Base), NextBridge does not capitalize overheads and therefore there is zero OM&A expense for capitalized overheads.

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.

PROGRAM DELIVERY COSTS

1. OM&A expenses required to satisfy NextBridge's obligations and objectives are described below and presented in Table 1 (above) for these services in the Test Year.

Operations and Maintenance ($1.27 million)

2. These O&MA expenses relate to ensuring the safety and reliability of the East-West Tie line. Approximately half of the annual O&MA 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. Examples of the services HONI will provide are listed below:

   - Crew dispatching for 24/7 emergency response and assessment
   - Recording of maintenance work and findings, including retention of logged items
   - Maintaining initial spare structures, conductors, and other items necessary for the safe and reliable operations of the East-West Tie line
   - Overhead transmission lines maintenance including thermovision, helicopter and ground patrols, and maintenance findings repairs
   - Transmission ROW maintenance, including mandatory annual NERC FAC-003-4 vegetation patrols, line clearing, brush control, condition patrol, and property owner notifications

3. Further details on the maintenance services are presented in Exhibit B. Examples of services and items which will not be covered by the HONI SLA and will be arranged by or carried out by NextBridge field personnel include:

   - Management of the services contract(s)
   - Validation of services and works
   - Independent inspections

- Spare parts audits
- Procurement of spare equipment in non-emergency situations
- Remediation associated with localized extreme weather event(s) (*e.g.*, icing, lightning and fire related damage)
- Bird nest removal and bird excrement-associated damage remediation
- Remediation of unexpected damage from ROW users or wildlife (*e.g.,* vandalism, bears eating plastic guy-wire markers or snowmobilers accidentally damaging a tower or guy-wire)
- Monitoring and response management of tower lighting
- Coordination of work and outages not performed by HONI
- Potential future reliability projects (*i.e.,* camera and bird deterrent installations)
- Potential works, services, parts, planning, and execution related to findings

4. The potential future procurement of these items and/or services will be dependent on urgency and availability. NEET will follow NextBridge's procurement policy as described more fully in Exhibit C, Tab 2, Schedule 4.

5. During the EA process, an Operation Environmental Management Plan ("**OEMP**") was developed to identify key environmental information, instructions, and mitigation measures specific to the operations and maintenance phase of the project. A copy of that plan can be found at Exhibit F, Tab 4, Schedule 2, Attachment 1. Regular maintenance services outlined in the July 2019 OEMP, including NERC FAC-003-04 vegetation management standards, will be managed by HONI under the HONI SLA.

Regulatory ($0.07 million)

6. Ongoing regulatory support will be required through the life of the East-West Tie line. These support items include:

- Annual filings (licence fees/renewals, RRR filings, etc.)
- Periodic filings (deferral/variance account balances)
- OEB/IESO activity monitoring and stakeholder participation
- General support (*e.g.,* ongoing compliance activities, permitting, review of public materials)
- External legal counsel support, as needed

Compliance and Administration ($1.67 million)

7. Ongoing compliance and administration support will be required through the life of the East-West Tie line in order to manage the efficient operation of the East-West Tie line. These costs include the continued operation of the Project Director's Office and maintaining a point of contact for property owners and non-Indigenous communities.

Project Director's Office

8. NextBridge has a Project Director, who is employed by NEET. The Project Director oversees and operates the NextBridge partnership, as well as provides governance support and manages corporate affairs. The duties of the Project Director include:

- Working with HONI and other entities to ensure that NextBridge and its assets are properly maintained and administered
- Managing and chairing advisory committee meetings with the partners on a regular basis

- Ensuring that the NextBridge partners are kept well informed and advised of operations, and educated on what it means to be a transmission owner and operator in Ontario
- Managing the activities of the two dedicated field personnel
- Authorizing the disbursement of funds by NextBridge to meets its obligations and expenses, as outlined in Exhibit B
- Instituting communications with Indigenous and non-Indigenous communities and the public at large, through meetings, websites and other media
- Representing NextBridge with various stakeholders at hearings, industry events and other situations
- Any and all other duties that may be required to represent NextBridge and effectively support its operations
- 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.

Property Owner Relations

9. NextBridge will continue to engage and be available to discuss project and operational items throughout the life of the asset with impacted property owners.

10. Land rights related to the occupation of public lands in perpetuity requires annual fees or periodic recurring payments as set out by the governing bodies approvals. In the case of the land tenure issued for the occupation of lands under the management of the MNRF, an annual fee is required as set out in the Land Use Permit. Additionally, a series of encroachment permits from the Ontario Ministry of Transportation ("**MTO**") require periodic renewal payments which take place every ten years on the anniversary of the original permit.

11. Access for operations and maintenance activities is expected to take place predominately through public lands and public roads, and along the ROW, avoiding additional off ROW access or private access where possible. Periodic filings may be required in order to ensure access on public lands on an as-needed basis. Additionally, if off ROW or private road use is required to perform operations and maintenance activities, agreements will be acquired on an as-needed basis.

12. Property owners may, from time to time, be impacted by transmission line O&MA. Land rights secured with property owners include clauses relative to access to the ROW for general operation and maintenance. NextBridge will notify property owners in advance of operations activities being undertaken on their property, where possible. In the event that damage occurs on a property owner's property or assets, during operations and maintenance, NextBridge will engage with the landowner to determine the impact and secure a damage release.

13. It is anticipated that there will be instances where legal counsel is required to ensure efficient resolution of claims and ensure NextBridge's land rights are accurately represented on parcel titles where ownership changes occur.

14. In order to ensure accurate record keeping, property owner records will be updated as changes in ownership are communicated to NextBridge required under the Transmission Easement Agreements. A property owner line list refresh will also be conducted periodically.

Non-Indigenous Stakeholder Relations

15. NextBridge will conduct further outreach at the end of construction to inform of operational activities and remediation work that may take place after the project is in-service. This may include coffee talk sessions and conveying this information via newsletter, the project website, and Facebook group. These meetings will be tied to activities that require

attendance in the communities to reduce travel costs when possible. However, additional meetings with municipal stakeholders may be scheduled should they be needed.

16. Engagement that is required by regulatory processes, including notifications and responding to inquiries and comments on regulatory filings, will continue. Other inexpensive but effective methods of stakeholder and municipal outreach will also continue, including East-West Tie line update letters, newsletters and regular updating of the project web site and Facebook group for access to timely information and project documentation.

Corporate Services

17. 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. The resources will be supplied by the partner entities to leverage high levels of expertise in managing regulated financial entities. 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.

Insurance

18. NextBridge is obligated, by good utility practice, to maintain an appropriate level of insurance to protect its assets, its owners and its customers from catastrophic loss.

19. To complete and oversee these tasks, the Project Director's Office is provided with an annual Compliance and Administration budget. In addition to the aforementioned items, other components in this budget include salary, office space fees, audit and tax filing fees, communication, and other expenses that may be required.

Indigenous Participation ($0.89 million)

20. 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. These agreements ensure that the policy objectives are met to include Indigenous economic participation in transmission projects, as outlined in the TSP at Exhibit B.

Indigenous Compliance ($0.44 million)

21. 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.

22. The approved Amended EA called for the ACAB to be ongoing through the operations phase of the project, which includes one annual meeting, ongoing capacity funding to support participation in the ACAB, travel costs, management and labour costs, and honorariums.

Property Taxes and Land Rights Payments ($0.6 million)

Property Tax

23. To determine its property tax, NextBridge retained services from Ryan, LLC., a global tax services firm with a Canadian practice headquartered in Toronto, to estimate the tax liability for the East-West Tie line with the expectation that towers and transmission lines are exempt from property taxation.

24. The East-West Tie line crosses eight municipal areas, plus a number of unincorporated municipal areas. In order to obtain property tax values, NextBridge provided Ryan, LLC with the applicable Parcel Identification Numbers to identify the corresponding Assessment Roll Number in each municipality and unincorporated area and applied the appropriate property tax rates to estimate the tax liability. At the time of the estimated calculation, the 2020 municipal and provincial property tax rates had not yet been released as new rates depend on updated municipal budgets. Therefore, the 2019 property tax rates were applied to the 2020 assessment values to create a 2020 property tax liability estimate which is used as the basis for the Test Year estimate, as the variables are expected to remain consistent.

25. Based on Ryan LLC's calculations, using the methodology described above, NextBridge estimates total annual property taxes for the East-West Tie line to be $4,900 for the Test Year (April 1, 2022 to March 31, 2023).

Land Rights Payments

26. The East-West Tie line requires Section 28(2) Permits to cross Reserve Lands. Negotiated payments with two First Nations (Pays Plat and Michipicoten) are included to account for the financial obligations related to these payments. The fees for these permits, as set out in Table 1 below, under direction from the federal government started while NextBridge

occupies the Reserve Land during construction and continue annually during the life of the project.

Table 1. NextBridge Taxes Other than Income Tax (TOIT) ($ Millions)

	2022
Property Tax	0.00
Rights Payments	0.59
Total TOIT	**0.60**

OPERATION ENVIRONMENTAL MANAGEMENT PLAN

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ACRONYMS AND ABBREVIATIONS

Term	Definition
ATV	all-terrain vehicle
CEAA	Canadian Environmental Assessment Agency
CEPP	Construction Environmental Protection Plan
CLVA	critical landform/vegetation association
DFO	Fisheries and Oceans Canada
EA	Environmental Assessment
ECA	Environmental Compliance Approval
ECCC	Environment and Climate Change Canada
EHA	Environmental Hazard Assessment
kV	kilovolt
MNRF	Ministry of Natural Resources and Forestry
MECP	Ministry of the Environment Conservation and Parks
NERC	North American Electric Reliability Corporation
NextBridge	NextBridge Infrastructure LP
OEB	Ontario Energy Board
OEMP	Operation Environmental Management Plan
ROW	Right-of-Way
SARA	*Species at Risk Act*
SARO	Species At Risk in Ontario
SWH	Significant Wildlife Habitat
TAC	Transportation Association of Canada
the Project	East-West Tie Transmission Line Project
TS	Transformer Station
TVMP	Transmission Vegetation Management Program

1. INTRODUCTION

1.1. Scope of Operation Environmental Management Plan

This Operation Environmental Management Plan (OEMP) is intended to identify key environmental information, instructions and mitigation measures specific to the operation and maintenance phase of NextBridge Infrastructure LP (NextBridge)'s East-West Tie Transmission Project (the Project).

The Project consists of a new, approximately 450 kilometer (km) long, double-circuit 230 kilovolt (kV) transmission line that connects the Lakehead Transformer Station (TS) in the Municipality of Shuniah near the City of Thunder Bay, to the Wawa Transformer Station in the Municipality of Wawa (with a connection at the Marathon Transformer Station, in the Town of Marathon). The majority of the Project is located on provincial Crown land. From west to east, the Project traverses the Lakehead, Black Spruce, Lake Nipigon, Kenogami, Pic River, Big Pic, White River and Algoma Forest Management Units.

The construction phase is expected to occur over approximately two years, with mobilization in August 2019, and construction activities from August 2019 through November 2021, pending receipt of the necessary approvals and permits to construct. Upon commissioning, the Project will operate on a continuous basis and will be maintained by NextBridge. Electricity will be transmitted through the conductors between Lakehead TS and Wawa TS with a tie in to the Marathon TS.

The majority of the proposed environmental protection measures and mitigation currently in this OEMP are typical to transmission line operation and maintenance in the environmental setting of the Project. As the Environmental Assessment (EA) review and environmental permitting processes are ongoing, it is anticipated that additional mitigation, commitments or conditions may be identified in consultation with regulators, Indigenous communities, and stakeholders. As such, it is anticipated that this OEMP will be updated with the following as required:

- Commitments and approval conditions arising from the EA review process;
- provincial and federal environmental permitting commitments and conditions; or,
- applicable updates to provincial and federal environmental regulatory requirements between August 2019 and the start of Project operation.

This OEMP is a compilation of environmental protection and contingency measures from various sources that are intended to address known and anticipated environmental conditions that can occur during operation and maintenance.

Operation and maintenance includes the following activities:

- inspection of Project components (e.g., transmission structures, guys and anchors, conductors);
- maintenance and repairs;
- vegetation management; and
- emergency response.

The transmission line will be inspected on a semi-annual to annual basis for signs of physical damage (e.g., broken or missing insulators), loose or eroded parts (e.g., bolts), and condition of the conductors (e.g., frayed or areas of reduced clearance). Minor adjustments such as bolt tightening may be done during the inspections. The transmission line right-of-way (ROW) will be patrolled once each year to identify vegetation that could pose a risk to the transmission line. Annual patrols will ensure that vegetation that could grow into or fall into the transmission line

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are identified and removed before they could cause a potential power outage. These inspections will be done from the air or by ground.

Unforeseen conditions or circumstances can be encountered during the operation phase that may warrant the revision of a specific mitigation measure noted in this OEMP or additional mitigation measure(s) may be required to satisfactorily mitigate the potential effects of activities related to the operation phase. Also, new and innovative mitigation measures may be developed that are more beneficial to, or protective of, the environment.

In the event that an unforeseen environmental issue arises for which no mitigation measures are approved, or for which new or innovative mitigation measures are deemed appropriate, NextBridge will consult with the appropriate government agencies.

If regulatory requirements discussed in this OEMP differ from requirements outlined in Project approval conditions, or if the direction given by regulators is found to be conflicting, an attempt will be made by NextBridge to resolve the discrepancy with the available representatives of the affected government agencies.

Information collected throughout the implementation of this OEMP will be used to evaluate predictions made in the environmental assessment of the Project, and allow NextBridge to make corrective plans and take corrective actions where necessary. Therefore, the OEMP is a 'live' document and will be updated as the Project progresses.

1.2. Purpose

The purpose of this OEMP is to provide guidance to NextBridge, its authorized representatives, contractor(s), and subcontractors, for environmentally responsible working procedures and standards during the operation phase of the Project.

The key objectives of the OEMP are to:

- ensure that the Project operation and maintenance activities are in compliance with environmental regulations and Project commitments;
- provide a framework for the implementation of environmental management and protection measures for avoidance, minimization and mitigation of potential environmental impacts; and
- provide a guide to the management and notification of environmental incidents.

2. ENVIRONMENTAL REGULATIONS AND REQUIREMENTS

A preliminary list of relevant environmental regulations and requirements applicable to the Project operation phase is provided in Table 4-III-1. This list will be updated when there are additional requirements identified from the regulatory consultation and review process.

Operation of the transmission line currently does not require an Environmental Compliance Approval (ECA) for noise under the *Canadian Environmental Protection Act,* 1999*.* Ministry of the Environment and Climate Change (MOECC) had draft guidance (i.e., DRAFT – *MOECC Guideline for Assessing Audible Noise from High Voltage Electricity Transmission Lines,* 2011) for noise related to the operations of transmission lines; however, this guidance is not publicly available for use and the MOECC's intentions with it are unknown. Therefore, at this time, the operation of the transmission line has not been considered a stationary source with substantial potential noise emissions that require an ECA.

The transmission line operation is not expected to require an ECA for emissions to air, based on the information provided to date on the transmission line operation.

Table 4-III-1: Preliminary Identification of Applicable Federal and Provincial Environmental Regulations and Municipal By-laws for Project Operation

Agency	Federal and Provincial Regulations and Municipal By-laws	Applicability to the Project
Federal		
Environment and Climate Change Canada (ECCC)/ Canadian Wildlife Service (CWS)	■ *Species at Risk Act, section 73* (Government of Canada 2002) ■ *Permits Authorizing an Activity Affecting Listed Wildlife Species Regulations* (Government of Canada 2013)	A permit *or* agreement is required if Project activities during operation affect species listed under Schedule 1 of the *Species at Risk Act* (SARA) or its habitat, and which contravene the Act's general or critical habitat prohibitions
Provincial		
Ministry of Natural Resources and Forestry (MNRF)	*Endangered Species Act,* - section 17 (Government of Ontario 2007)	■ A permit may be required if Project activities during operation affect a species designated as endangered or threatened on the Species At Risk in Ontario [SARO] (Government of Ontario 2016) list or its habitat (aquatic or terrestrial, vegetation or wildlife) ■ Mitigation and avoidance measures may also be required in consultation with MNRF and other associated agencies (ECCC), to align with management objectives and conservation/protection measures for species listed as special concern and their habitat
MNRF	*Ontario Fish and Wildlife Conservation Act* (Government of Ontario 2002)	Prohibition applies in the event Project operation and maintenance activities are anticipated to impact scheduled species, nesting areas, beavers or black bears (e.g., destroy the nests or eggs of birds, a beaver dam, or the den of a black bear or some furbearing mammals, or interfere with a black bear in its den).
MECP	*Pesticides Act* (Government of Ontario 1990)	A permit is required for the application, transportation, storage and disposal of pesticides under the Pesticides Act for vegetation maintenance during operation
Municipality		
Municipality of Shuniah	By-Law No. 2739-14 - The Noise By-Law (Municipality of Shuniah 2015)	Compliance of Project operation and maintenance with local municipal noise by-laws. Noise is unlikely to be a substantial impact since operation and maintenance activities (except in emergencies) are conducted during daytime hours and only vehicles or all-terrain vehicles (ATVs) are used.

Agency	Federal and Provincial Regulations and Municipal By-laws	Applicability to the Project
Township of Dorion	To be confirmed	To be confirmed
Township of Red Rock	By-Law No. 2001-852 - Noise Control (Township of Red Rock 2001)	Compliance of Project operation with local municipal noise by-laws. Noise is unlikely to be a substantial impact since operations (except in emergencies) are conducted during daytime hours and only vehicles or ATVs are used.
Township of Nipigon	To be confirmed	To be confirmed
Township of Schreiber	By-law No. 41-2001 - Noise Control (Township of Schreiber 2001)	Compliance of Project operation with local municipal noise by-laws. Noise is unlikely to be a substantial impact since operations (except in emergencies) are conducted during daytime hours and only vehicles or ATVs are used.
Township of Terrace Bay	By-law No. 3-2011 - Regulate Noise (Township of Terrace Bay 2011)	Compliance of Project operation with local municipal noise by-laws. Noise is unlikely to be a substantial impact since operations (except in emergencies) are conducted during daytime hours and only vehicles or ATVs are used.
Town of Marathon	By-law No. 1190 - Noise (Town of Marathon 1998)	Compliance of Project operation with local municipal noise by-laws. Noise is unlikely to be a substantial impact since operations (except in emergencies) are conducted during daytime hours and only vehicles or ATVs are used.
Township of White River	To be confirmed	To be confirmed
Municipality of Wawa	By-law No. 22-67 - Noise (Municipality of Wawa 1996)	Compliance of Project operation with local municipal noise by-laws. Noise is unlikely to be a substantial impact since operations (except in emergencies) are conducted during daytime hours and only vehicles or ATVs are used.

ATV = all-terrain vehicle; CWS = Canadian Wildlife Service; ECCC = Environment and Climate Change Canada; MNRF = Ministry of Natural Resources and Forestry; MECP = Ministry of the Environment Conservation and Parks; SARA = Species at Risk Act; SARO = Species at Risk Ontario

3. ROLES AND RESPONSIBILITIES

The Area Operations Lead (refer to Appendix A for contact information) will be responsible for implementation of all aspects of the OEMP. This position is responsible for providing the resources necessary to complete the required tasks and in a manner consistent with this OEMP.

4. ENVIRONMENTAL COMPLIANCE

4.1. Approvals, Permits and Licences for Operation

Any permits required during operation activities will be appended in this OEMP. All designated NextBridge personnel shall review and clearly understand the conditions relating to operation activities that are attached to the permit documents. The required additional approvals will be confirmed as Project planning and design progress.

4.2. Environmental Inspection

NextBridge will oversee implementation of the environmental management measures described in the OEMP during operation.

4.3. Compliance Reporting

Permits typically require submission of compliance reports at specified intervals during the life of the Project. These records will be retained with other appropriate Project documentation in Project files.

A compliance self-assessment will be carried out to document compliance with the commitments made in the amended EA Report for the Project, including implementation of mitigation (impact management measures) and conditions of approval. The MECP will be updated regarding compliance at regular intervals during operation, depending on the monitoring reporting requirements specified in approval conditions.

5. ENVIRONMENTAL MANAGEMENT DURING OPERATION

Upon commissioning, the Project will operate on a continuous basis and will be maintained by NextBridge. Maintenance activities will include regular inspection of the transmission line and associated infrastructure, and vegetation management along the ROW. Operation and maintenance activities will be conducted in accordance with permits and regulations.

Typical transmission line maintenance activities include visual inspections. The maintenance inspections may indicate that repairs may be required that could involve the replacement of insulators, anchors, or guy wires, requiring the use of heavier equipment such as backhoes or cranes. NextBridge will attempt to fix identified issues during maintenance inspections, but return trips may be required.

Emergency repairs may be required in the event of bad weather or power outages. Emergency repairs will be carried out in the most time sensitive manner. Spare parts and poles will be stored in a storage yard or warehouse in case emergency repairs are required. The quantity of this material and storage location will be determined by NextBridge.

Typical maintenance activities include:

- Detailed structure climbing and helicopter inspections;
- line hardware and insulator thermography;
- comprehensive vegetation management (NERC -FAC-003);
- ROW inspections; and
- visual patrol.

A summary of anticipated maintenance activities is provided in Table 4-III-2.

Table 4-III-2: Anticipated Maintenance Activities

Activity	Estimated Frequency
Detailed structure climbing or helicopter inspections	3 year cycle initially
Line hardware and insulator thermography	As needed
ROW inspections	Annually by air and ground patrol
Visual patrol	Annually

NextBridge anticipates sufficient access to maintain and operate the Project. If there is a maintenance or emergency response activity that requires additional access or additional permitting requirements, NextBridge will identify these requirements and consult with the appropriate regulatory authorities and relevant stakeholders (e.g., landowners of private land), as required.

Potential environmental concerns during the Project operation and maintenance include:

- compliance with applicable environmental regulations, including conditions and requirements of approvals and permits;
- spill prevention;
- emergency management and incident response;
- erosion and sedimentation at access road crossings of water bodies;
- introduction of noxious weeds;
- disruption or disturbance of wildlife;
- damage to sensitive environmental features; and
- responding to landowner complaints and concerns.

5.1. General Mitigation Measures

The following general mitigation measures will be implemented by NextBridge, its authorized representatives, contractor(s), and subcontractors, to minimize potential environmental effects of activities associated with operation and maintenance:

5.1.1. Regulatory Approvals and Notifications

- Acquire applicable local, municipal, provincial and federal licences, permits and approvals for operation and maintenance, and adhere to applicable conditions throughout the lifecycle of the Project.
- Notify applicable federal and provincial regulatory agencies, interested municipal officials and relevant stakeholders (e.g., landowners of private land) of maintenance activities as warranted.

5.1.2. Wildlife and Wildlife Habitat

- Contractors will report issues and incidents with wildlife or nuisance wildlife as soon as it is safe to do so to NextBridge, who shall determine corrective and/or emergency action to be taken in the field. NextBridge will determine what regulatory reporting is required.
- Project personnel will be prohibited from carrying firearms on the Project footprint (i.e., transmission line ROW and permanent access roads).
- Project personnel will be prohibited from bringing pets (e.g., dogs and cats) on site.
- Hunting and fishing on the Project footprint by Project personnel is prohibited.
- Do not harass or feed wildlife.
- Recreational use of all-terrain vehicles by Project personnel is prohibited in the Project footprint. Vehicles, including all-terrain vehicles, are to be driven in a responsible and environmentally respectful manner.
- Vehicles will not exceed speed limits established for the Project footprint.
- Vehicles will yield to wildlife on the roads when safe to do so.

5.1.3. Water Bodies

- Follow applicable measures from DFO's *Measures to Avoid Causing Harm to Fish and Fish Habitat Including Aquatic Species at Risk* (DFO 2016).
- Follow applicable measures from MNRF's *Environmental Guidelines for Access Roads and Water Crossings* (MNR 1990)*, Forest Management Guide for Conserving Biodiversity at the Stand and Site Scales* (MNR 2010a) and its associated Background Rationale document (MNR 2010b).
- Fording of water bodies is not permitted, unless approved by the regulatory agencies.
- Periodically (e.g., before and/or after spring freshet) inspect and maintain culverts to prevent blockages from forming and causing ponding or backwater effects. Where culverts are installed at fish bearing water bodies, debris removal activities will follow DFO's guidance (i.e., gradual removal such that flooding downstream, extreme flows downstream, release of suspended sediment, and fish stranding can be avoided).
- Re-fuelling or equipment maintenance activities are not to occur within 100 m of a water body.

5.1.4. Noxious Weeds

- The Weed Management Plan outlined in the Construction Environmental Protection Plan (CEPP; refer to Appendix 4-II, Section 8.4) will be implemented, when required.
- During the Project orientation, Project personnel will be made aware of the weeds management strategies.
- Project personnel will also be reminded that all vehicles and equipment must be clean (i.e., free of soil and vegetative debris) in accordance with the *Clean Equipment Protocol for Industry* (Halloran et al. 2013) prior to Project footprint entry, and of the importance of maintaining clean equipment, and minimizing transportation of weed seeds.
- NextBridge may inspect equipment and vehicles prior to Project footprint entry.

5.1.5. Erosion and Sedimentation Control

- Specific measures such as installing temporary sediment barriers (e.g., berms, silt fences) will be undertaken as required to prevent sediment laden water from entering a water body.
- Regrade areas with vehicle ruts and erosion gullies to conform to the local topography to maintain drainage patterns.
- In areas where reseeding is required for erosion control, seeds will be applied in low reseeding rates to encourage the growth of native vegetation.

5.1.6. Spill Prevention

- NextBridge will adhere to the Spill Prevention and Response Contingency Plan (refer to Appendix C) to prevent spills and/or release.
- Equipment for ROW maintenance activities will be routinely inspected for leaks.
- Equipment is to arrive on site in a clean condition in accordance with the *Clean Equipment Protocol for Industry* (Halloran et al. 2013) and is to be maintained free of fluid leaks.
- Re-fuelling or equipment maintenance activities will follow mitigation measures outlined in the Spill Prevention and Response Contingency Plan (refer to Appendix C).
- In the event that any spills occur, implement the reporting measures provided in the Spill Prevention and Response Contingency Plan (refer to Appendix C).

5.1.7. Noise Concerns

- Maintenance activities will typically occur during the daytime period from 07:00 to 19:00. In the event maintenance will occur beyond the daytime period, NextBridge will re-evaluate the potential Project-related effects and if required, review mitigation requirements.
- Comply with local municipal noise by-laws and the MOECC draft guidance (i.e., DRAFT – MOECC Guideline for Assessing Audible Noise from High Voltage Electricity Transmission Lines, 2011).Address noise concerns as they arise through a noise complaint process.

5.1.8. Reporting

- In addition to annual reports summarizing activities and general findings, technical reports will be prepared at appropriate intervals during the operation and maintenance phase of the Project. These reports will include compilation and analysis of monitoring results during the relevant period, and make recommendations concerning the need for any changes to the mitigation or monitoring approach.

5.2. Access and Travel on Right-of-Way

Access roads required during the operation of the Project will be maintained by NextBridge and used to access the Project area for maintenance purposes, to complete inspections, and for emergency purposes. Maintenance associated with these roads will include regular inspections (annually) and vegetation maintenance.

Routine operations activities and access for repairs to transmission lines may require travel on the ROW, which may have the potential to cause:

- Introduction of noxious weeds;
- disruption or disturbance of wildlife; and
- damage to sensitive environmental features, including water bodies.

The Access and Construction Environmental Maps, and Environmental Alignment Sheets that have been prepared as part of the amended EA Report for the Project provide operations staff with the necessary information to plan the activity focussing on identification of areas of concern (e.g., access road crossings of water bodies), and implementation of mitigation measures to prevent or minimize the potential environmental effects of the activity.

The following environmental protection measures will be implemented by NextBridge, its authorized representatives, contractor(s), and subcontractors, to minimize potential impacts related to utilizing access roads and travelling on the ROW during the Project operation and maintenance.

5.2.1. Access Roads Management

- Existing roads and trails identified in Access and Construction Environmental Maps will be used.
- If there is a maintenance or emergency response activity that requires additional access or additional permitting requirements, NextBridge will identify these requirements and consult with the appropriate regulatory authorities, as required.

5.2.2. Vehicles and Equipment

- NextBridge may inspect equipment and vehicles arriving on the Project footprint prior to arriving at the job.
- Turn off vehicles and equipment when not in use and minimize idling, unless weather and/or safety conditions dictate the need for them to remain turned on and in a safe operating condition.
- Ensure that noise abatement, emission and pollution control equipment on machinery are in place, properly maintained and in good working order.
- Keep equipment well maintained.
- The Weed Management Plan outlined in the CEPP (refer to Appendix 4-II, Section 8.4) will be implemented, when required.
- Vehicles will not exceed speed limits established by NextBridge and will lower speeds in specific conditions such as areas of high erosion hazard.
- Vehicles and equipment will cross water bodies using existing and/or approved equipment crossings.
- Recreational use of all-terrain vehicles by Project personnel is prohibited in the Project footprint. Vehicles, including all-terrain vehicles, are to be driven in a responsible and environmentally respectful manner.
- Project personnel will avoid unnecessary wheel spin.

5.2.3. Wildlife and Wildlife Habitat

- NextBridge will post signs warning Project personnel of high use wildlife areas to the extent practicable.
- NextBridge will provide the appropriate resource specialist, if required, to assess sensitive features and to inspect or monitor Project activities at or near sensitive areas.
- Vehicles will yield to wildlife on the roads when safe to do so.
- Project personnel will receive wildlife awareness training.
- Avoid physical disturbance to existing anthropogenic structures located outside of the ROW and access roads that could be roosts for bats (e.g., sheds, barns, houses, buildings, and bridges).

5.2.4. Water Bodies

- Vehicles and equipment will cross water bodies using existing and/or approved equipment crossings.
- Fording of a water body is not permitted, unless approved by the appropriate regulatory agencies.
- Travel in the 30 m water body buffer at a water body crossing will be perpendicular to the water body.
- No turning of vehicles and equipment will be allowed in the 30 m water body buffer to minimize soil disturbance.
- DFO's *Measures to Avoid Causing Harm to Fish and Fish Habitat Including Aquatic Species at Risk* (DFO 2016a) will be applied.
- Applicable measures from MNRF's *Environmental Guidelines for Access Roads and Water Crossings* (MNR 1990), and *Forest Management Guide for Conserving Biodiversity at the Stand and Site Scales* (MNR 2010a) and its associated Background Rationale document (MNR 2010b) will be followed.

5.3. Vegetation Management Program

A Transmission Vegetation Management Program (TVMP) is required by North American Electric Reliability Corporation (NERC) Standard FAC-003 for transmission lines operating at 200 kV and higher (NERC 2006). The purpose of the plan is to improve the reliability of electric transmission systems by preventing outages from vegetation located in the transmission line ROW, minimizing outages from vegetation located adjacent to the ROW, and maintaining clearances between conductors and vegetation in, and along, the preferred route ROW (NERC 2009). The TVMP will also include vegetation management standards to be implemented with a goal to ensure vegetation does not interfere with the safe and reliable operation and maintenance of the transmission line, or prohibit access to the transmission line structures, with a compatible vegetation height of approximately 2 m or less. Vegetation maintenance will also be require to ensure worker and public safety. Vegetation management vehicles can include pickup trucks and other vehicles necessary to perform vegetation management duties adjacent to and in the ROW.

A summary of anticipated vegetation maintenance activities is provided in Table 4-III-3.

Table 4-III- 3: Anticipated Vegetation Management Activities

Activity	Estimated Frequency
Comprehensive vegetation management (NERC -FAC-003)	Annually by air or ground patrol
ROW inspections	Annually by air or ground patrol

It is anticipated that vegetation will not be removed in areas where clearance-to-ground levels allow for increased vegetation height (i.e., where the line spans water bodies and in canyons and ravines). However, vegetation removal will be required in areas with lower clearance levels as tall-growing vegetation has potential to fall onto the conductors and interfere with electricity transmission. Prior to vegetation clearing, conductor-to-ground clearances will be matched with acceptable vegetation retention levels to minimize the amount of clearing required while maintaining appropriate safety margins.

Maintenance activities associated with vegetation will generally include mechanical, manual, and chemical (herbicide) methods for keeping vegetation at an appropriate height to protect the facility and improve public and worker safety. Determination of the method to be used (i.e., mechanical, manual, or chemical) will be based on season (time of year), the type of vegetation, site-specific features (i.e., topography, terrain, sensitivity), cost, aesthetics, and environmental and socio-economic features.

Visual ground and aerial patrols will be completed to identify areas that require vegetation clearing, and the schedule will be based on growth cycles, system security, public health/safety, protecting the environment, and maintenance associated with the existing East-West Tie transmission line. Based on the results, spot treatment via ground crews may occur. No aerial application of herbicides is planned in the preferred route 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.

NextBridge will develop and implement a TVMP that is similar to the TVMP developed by NextEra (refer to Appendix D), as required by NERC Standard FAC-003 for transmission lines operating at 200 kV and higher.

The following key environmental protection measures will be implemented by NextBridge or its contractors to minimize the potential environmental impacts of vegetation management.

5.3.1. Activity Schedule

- NextBridge, its authorized representatives, contractor(s), and subcontractors, will adhere to the recommended timing windows and restrictions described in Table 4-III-4.
- Planning of mechanical vegetation management will consider the sensitive wildlife periods described in Table 4-III-4.

Table 4-III-4: Recommended Timing Windows and Restrictions

Natural Feature, Habitat, or Species	Recommended Timing Window	Recommended Restrictions
Migratory birds	Migratory bird nesting period: **April 15 to August 31**[(a)]	Avoid clearing activities during the migratory bird nesting period Recommended setbacks from nesting sites varies from 20 m to 300 m depending on the species
Water bodies[(b)]	Proposed restricted activity timing windows: **September 1 to June 20** (fall and spring spawning; and **September 1 to July 15** (fall and spring extended spawning).	Avoid activities below the high water mark (e.g., clearing vegetation) during the restricted activity timing window
SWH – Bat maternity roost habitat	Rankings[(c)]: Known/High Potential: April 1 to October 1 Moderate Potential: **May 1 to July 31** Low-No Potential: no timing restriction on clearing activities	Avoid clearing activities during the maternity roosting period

Natural Feature, Habitat, or Species	Recommended Timing Window	Recommended Restrictions
SWH – Bat hibernacula habitat	Hibernation period: **October 1 to April 1**©	Avoid clearing activities within a minimum of 400 m up to 1,000 m from a known bat hibernaculum entrance. Setbacks for each hibernaculum known to be occupied must be determined in consultation with MNRF on a case by case basis Conduct pre-clearing surveys in suitable habitat affected by the Project to determine whether candidate hibernacula are occupied
SWH – Sharp-tailed grouse's lek	General mating season: **March to June**	Recommended setbacks from lek is 200 m all year round
SWH – Raptor's nesting sites	Nesting period: **March 5 to August 31** Bald eagle: March 5 to August 31 Osprey: April 1 to August 15 Northern goshawk: **March to June** Cooper's Hawk: **March to July** Sharp-shinned Hawk: **April to July** Red-shouldered Hawk: **March to July**	Recommended setbacks from a raptor nesting site varies from 50 m to 800 m depending on the species: ■ minimum of 400 m radius buffer on bald eagle nesting site; ■ minimum of 300m radius buffer on osprey nesting site; ■ minimum of 400 m radius buffer or 28 hectares of suitable habitat in the SWH on northern goshawk nesting site; ■ minimum of 200 m radius buffer on barred owl nesting site; ■ minimum of 100 m radius buffer on broad-winged Hawk, coopers hawk, great horned owl, red-tailed hawk, and long-eared owl nesting site; and, ■ minimum of 50 m radius buffer on merlin and sharp-shinned hawk nesting site.
SWH – Amphibian breeding habitat (wetlands/woodlands)	Breeding period: **March 15 to June 7** Hibernation Period: **October 1 to March 15**	Recommended setbacks from breeding sites varies from 30 m to 120 m depending on the type of habitat and species
SWH – Turtle breeding habitat	Nesting period: **May 15 to July 15**	Recommended setbacks from breeding sites varies from 30 m to 300 m depending on the type of habitat and species
SWH – Caribou nursery areas	Nursery areas period: **May 1 to July 14** (very low tolerance) July 15 to September 15 (low tolerance)	Avoid activities within 10 km of known or potential caribou high use areas
SWH – Caribou winter use areas	Wintering period: **December 1 to March 31**	Avoid activities within 10 km of known or potential caribou high use areas
SWH – Caribou travel corridor	April and November	Avoid activities within 10 km of known or potential caribou high use areas
SWH – Moose wintering areas	Wintering period: **November 1 to March 31**	Avoid clearing activities within 300 m from a 3E ecodistrict (refer to Appendix 12-VIII of the amended EA Report)
SWH – Moose aquatic feeding areas	Aquatic feeding period: **May 1 to June 30**	Avoid clearing activities within 120 m from a known aquatic feeding area

a) If vegetation removal must be completed during the migratory bird nesting period, implement the procedures in the Nest Sweep Protocol outlined in the CEPP (refer to Appendix 4-II, Appendix G).

b) The proposed restricted activity timing window for each waterbody is shown in Appendix J in the CEPP. One of the four categories of proposed restricted activity timing windows is applicable for each waterbody crossing. For each waterbody crossing, a proposed restricted activity timing window was determined using the restricted activity timing windows for each fish species and the documented presence of each fish species in the water body and/or tertiary watershed. For waterbodies that have both spring spawning fish species and fall spawning fish species a timing window was applied. Work below the high water mark (e.g., installing/improving culverts, removing riparian vegetation) within the restricted activity timing window may not be completed, unless approval from MNRF and DFO is obtained. The restricted activity timing windows for each water body crossing will be finalized by MNRF during permitting, but proposed restricted activity timing windows have been included in the EA as they are a key mitigation measure.

c) The rankings are based on the ground-truthing and acoustic data collected in 2017.

-=not applicable, km=kilometre, m=meter; MNRF = Ministry of Natural Resources and Forestry; PSW = provincially significant wetlands; SWH = specific wildlife habitat; .

5.3.2. Wildlife and Wildlife Habitat

- If vegetation removal must be completed during the migratory bird nesting period, implement the procedures in the Nest Sweep Protocol in the CEPP (refer to Appendix 4-II, Appendix G). Similar measures to the procedures in the Nest Sweep Protocol will be taken for vegetation removal during routine ROW maintenance.
- In the event that a nest is found, implement the Wildlife Features of Concern Discovery Contingency Plan outlined in the CEPP (refer to the Appendix 4-II, Section 7.5).
- Similar measures to the procedures in the Nest Sweep Protocol outlined in the CEPP will be taken for vegetation removal during routine ROW maintenance (refer to Appendix 4-II, Appendix G).
- Allow compatible vegetation in the ROW to grow back to a maximum height of 2 m to provide cover and reduce line-of-sight for predators.
- Retain snags (i.e., standing or partially fallen dead trees) to provide wildlife habitat, where practicable.
- Identify hazard trees that are located off-ROW. Permission will be obtained from the landowner or MNRF to fell hazardous trees.
- Where clearing or construction activities are planned during the breeding season, in or adjacent to potential active amphibian breeding areas, capture and relocate amphibians and reptiles off the Project footprint during the breeding season, prior to and during clearing.

5.3.3. Clearing Equipment

- Use clearing equipment that minimizes surface disturbance, soil compaction and topsoil loss (e.g., equipment with low ground pressure tires, or wide track), when working in wet areas, under wet conditions, or during spring break-up).
- Clearing may be accomplished by harvesting equipment, mulchers, and hand cutting.

5.3.4. Erosion and Sedimentation Control

- Selectively cut vegetation and restrict grubbing within areas with steep slopes or soils with risk of erosion.
- Mechanical clearing and other equipment activity will be minimized within the 30 m water body buffer.
- No turning of equipment, or vehicles within the 30 m water body buffer (i.e. straight in, straight out) to the extent practicable.
- Specific measures such as installing temporary sediment barriers (e.g., berms, silt fences) will be undertaken as required to prevent sediment laden water from entering a water body.

5.3.5. Canoe Routes and Portages

- Vegetation clearing within a minimum of 90 m around Category A canoe routes (i.e., Pukaskwa River canoe route, White River canoe route and Dog River canoe route) and their associated portage will be limited to where necessary for safety and compatible vegetation (e.g., below 2 m in height) will be retained where practicable (MNRF 2015);
- Vegetation clearing within a minimum of 30 m around Category B canoe route (i.e., White River canoe route, Michipicoten River canoe route and Magpie River canoe route) and their associated portage will be limited to where necessary for safety and compatible vegetation (e.g., below 2 m in height) will be retained where practicable (MNRF 2015);

- Vegetation clearing around a canoe route will be limited to where necessary for safety and compatible vegetation (e.g., below 2 m in height) will be retained where practicable to meet regulatory requirements and minimize visual evidence of disturbance from activities;
- Retain compatible vegetation (e.g., below 2 m in height) around a portage, where practicable to meet regulatory requirements;
- Maintain visibility of portage on either side of the ROW (e.g., no stockpiled vegetation or soils at the portage access points) and access roads for recreational user accessibility; and
- No disturbance of portages outside of the Project Site and access roads will be permitted.

5.3.6. Areas with Critical Landform/ Vegetation Association (CLVA)

- Reduce the removal of compatible vegetation (e.g., below 2 m in height) in CLVAs to the extent practicable.
- Use clearing equipment that minimizes surface disturbance, soil compaction and topsoil loss (e.g., equipment with low ground pressure tires, or wide track), when working in wet areas, under wet conditions, or during spring break-up.
- Clearing may be accomplished by harvesting equipment, mulchers, and hand cutting.
- Clear merchantable timber by hand, where required.
- Mechanical clearing and other equipment activity will be minimized and no turning of equipment, or vehicles (i.e., straight in general application, straight out) to the extent practicable.
- Restrict the general application of herbicide in CLVAs to the extent practicable.

5.3.7. Water Bodies

- Vegetation clearing within the 30 m water body buffer will be limited to where vegetation may present a health, safety and environmental (HSE) hazard to Project operation and maintenance.
- Travel in the 30 m water body buffer at a water body crossing will be perpendicular to the water body.
- No turning of vehicles and equipment will be allowed in the 30 m water body buffer to minimize soil disturbance.
- Immediately remove debris (i.e., except trees) or soil inadvertently deposited below the high watermark of water bodies to minimize disturbance to the bed and banks.
- Trees naturally or accidently felled below the high watermark of water bodies will be left where they fall.
- Do not skid logs across or push logs into water bodies.
- Complete brushing and clearing activities to prevent siltation of water bodies.
- Multi-stage drainage and sediment controls will be employed at work sites as appropriate.
- Maintain low vegetation or vegetated ground mat within the 30 m water body buffer to the extent practicable.

5.3.8. Noxious Weeds

- NextBridge will conduct a weed monitoring program to identify and prioritize weeds for removal.
- The Weed Management Plan outlined in the CEPP (refer to Appendix 4-II, Section 8.4) will be implemented, when required.

5.3.9. Use of Herbicides

- Use of herbicides/pesticides will follow requirements under the Ontario Pesticides Act.
- Necessary permits will be obtained for the application, transportation, storage, and disposal of pesticides. Only herbicide products registered for use in Canada by the Pest Management Regulatory Agency of Health Canada will be used.
- No aerial application of herbicides is planned in the ROW. If herbicide use is necessary it will be applied on the ground as spot application.
- No herbicides will be used in sensitive areas including reserve lands, provincial parks, within 30 m of water bodies and certain other edible and medicinal plant harvesting areas the communities have identified as a priority.
- Apply approved herbicides under the direction of a provincially-licensed applicator.
- Restrict the general application of herbicide near rare plants or rare ecological communities. Spot spraying, wicking, mowing, or hand-picking are acceptable measures for weed control in these areas.
- Prohibit the use of herbicides within the 30 m water body buffer unless the herbicide application is conducted by ground application equipment or otherwise approved by the relevant regulatory agency.
- Storage, handling and application of herbicide will comply with the Ontario Clean Water Act. Do not use herbicides within 100 m of identified wells.
- NextBridge will post on their website (www.nextbridge.ca) relevant information about the application of herbicide (e.g., anticipated dates, areas to be sprayed, sprayed dates) to advise the public of herbicide use along the ROW.

5.3.10. Rare Plants/ Rare Vegetation Communities

- Restrict the general application of herbicide near rare plants or rare ecological communities. Spot spraying, wicking, mowing, or hand-picking are acceptable measures for weed control in these areas.
- In the event that a rare plant species or a rare vegetation community are suspected or encountered unexpectedly, implement the Rare Plant Discovery Contingency Plan outlined in the CEPP (refer to Appendix 4-II, Section 7.6).

5.3.11. Traditional Use Plant Species

- Specific plant and/or material harvesting sites such as blueberry patches identified by First Nation communities will be allowed to naturally revegetate (i.e., will not be removed as incompatible vegetation) in the ROW.
- In the event that a previously unidentified Indigenous land and resource use site is suspected or encountered during operation, follow the Indigenous Land and Resource Use Site Contingency Plan outlined in the CEPP (refer to Appendix 4-II, Section 7.8).
- Restrict the general application of herbicide near rare plants or rare ecological communities. Spot spraying, wicking, mowing, or hand-picking are acceptable measures for weed control in these areas.

5.4. Emergency Response Plan

Occasionally, emergencies occur requiring an immediate response. These emergencies may include events such as structure collapse resulting from tornadoes, ice storms, fires, and other natural events. An immediate response is required and may involve the use of helicopters or heavy equipment. These emergencies generally are localized in nature. The impact of not responding quickly can result in serious effects on people who depend on electricity for heating in winter and air conditioning in summer and for economic development and commerce. An Emergency Response Plan will be developed for the Project operation and maintenance phase and will also include procedures for responding to environmental emergency incidents.

Mitigation measures for spill prevention and response to environmental incidences are outlined in Appendix C.

5.5. Fire Prevention

The transmission line will be maintained in accordance with the *Ontario Occupational Health and Safety Act* (Government of Ontario 1990b) and other relevant regulations that establish clearances from other man-made and natural structures as well as tree-trimming requirements to reduce/avoid fire hazards. NextBridge will maintain the transmission line ROW and immediate area in accordance with existing regulations and accepted industry practices that will include identification and abatement of fire hazards.

The following mitigation measures will be implemented by NextBridge, its authorized representatives, contractor(s), and subcontractors, for fire prevention:

- All work will adhere to the *Forest Fire Prevention Act* (Government of Ontario 1990c) and Regulation O. Reg. 207/96. The Act provides direction for the prevention and suppression of wildland fires in forest areas within the fire region during the fire season, normally April 1 to October 31.
- Adhere to the *Industrial Operations Protocol* (MNRF 2015) and provide to MNRF upon request fire prevention and preparedness plans, planned fire preparedness activities and planned modifications and/or mitigation actions.
- Each vehicle will carry the fire-fighting equipment (e.g., fully charged fire extinguisher, shovel) required by the *Ontario Forest Fire Prevention Act* (Government of Ontario 1990c).
- Keep equipment well-maintained.
- Turn-off engines prior to refuelling of equipment.
- Maintain an adequate supply of fire-fighting equipment on hand that is capable of controlling fire that may occur as a result of their activities, as regulated by provincial regulations and government agencies.

6. ENVIRONMENTAL TRAINING

NextBridge will make sure that Project personnel receive environmental orientation in relation to the OEMP. Project-personnel will be made aware and have an understanding of commitments, their obligations and duties described in this OEMP. NextBridge will also develop and deliver advanced environmental training to relevant Project personnel (e.g., inspectors, consultants resources specialists, contractors). NextBridge will provide orientation on the Environmental Hazard Assessment program (refer to Appendix B). Project personnel who show neglect for the environment or disregard for the OEMP may be removed from the Project by NextBridge.

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7. GLOSSARY

Term	Definition
Commitment	Represents a guarantee from a proponent about a certain course of action. Proponents acknowledge these guarantees by documenting obligations and responsibilities, which they agree to follow, in EA documentation (Terms of Reference or the amended EA Report). Once the Minister approves the documents, the commitments within the document are often made legally binding as a condition of approval.
Conductor	A wire or combination of wires not insulated from one another, designed to carry electric current. The conductor may be bare or insulated.
Critical Landform/Vegetation Associations	Areas identified as unique habitat because of the combination of unique landforms with unique vegetation communities, and have been identified in provincial parks and other conservation areas
Easement	An agreement that provides a proponent with a limited right to use property owned by another party to construct, own and operate a Project within the agreed upon area. The agreement sets out the rights and obligations of both the proponent and the party in regards to the use of the lands and will often specify restrictions on the use of the land.
Environment	As defined in the Ontario *Environmental Assessment Act* (Government of Ontario 2003) as: a) air, land or water, b) plant and animal life, including human life, c) the social, economic and cultural conditions that influence the life of humans or a community, d) any building, structure, machine or other device or thing made by humans, e) any solid, liquid, gas, odour, heat, sound, vibration or radiation resulting directly or indirectly from human activities, or f) any part or combination of the foregoing and the interrelationships between any two or more of them, in or of Ontario.
Environmental concerns	The negative effect that a proposed undertaking or its alternative has or could potentially have on the environment, direct or indirect, short or long-term.
First Nation	A term that came into common usage in the 1970s to replace the word Indian, which some people found offensive. Although the term First Nation is widely used, no legal definition of it exists. The term has generally come to refer to Aboriginal groups that have status under the *Indian Act* (Government of Canada 1985b). Some Aboriginal groups have also adopted the term First Nation to replace the word “band” in the name of their community.
Fish habitat	As defined in the *Fisheries Act* (Government of Canada 1985a), “spawning grounds and any other areas, including nursery, rearing, food supply and migration areas, on which fish depend directly or indirectly in order to carry out their life processes.
Ford	A shallow place in a water body allowing one to drive through the water body from one side to the other, or the action of a vehicle drive through the water body from one side to the other at a shallow place.
Guy wire	A tensioned cable designed to add stability to a free-standing structure. One end of the cable is attached to the structure and the other is anchored to the ground at a distance from the structure’s base. The tension in the diagonal guy-wire combined with the compressional strength of the structure allows the structure to withstand lateral loads such as wind or the weight of the conductors.
Habitat	The place or environment where a plant or animal naturally or normally lives or occurs. Habitat provides the physical and biological elements of an ecosystem, including food, cover, and space, that create a suitable environment for plant and animal livelihood.
Indigenous	‘Indigenous peoples' is a collective name for the original peoples of North America and their descendants. In Canada, Indigenous peoples includes First Nation, Métis and Inuit peoples. These are three distinct peoples with unique histories, languages, cultural practices and spiritual beliefs.
Land use	Use of the land by individual for a specific type of activities. Land use assessments typically include considerations of land tenures and other registered interests, as well as consumptive and non-consumptive resource uses. Examples are recreational and tourism activities, forestry, agriculture, oil and gas, activity and mining.
Mitigation measures	An action taken to lessen or reduce the severity of potential adverse environmental effects or enhance positive environmental effects. These measures could include construction techniques, compensation or community enhancement.
Portage	Portage or portaging is the practice of carrying water craft or cargo over land, either around an obstacle in a river, or between two water bodies. A place where this carrying occurs is also called a portage.

Term	Definition
Project footprint	The preferred route ROW and permanent access roads.
Rare plant	A native plant species found in restricted areas, at the edge of its range, or in low numbers within a province, state, territory, or country
Rare vegetation community	An association of plants of various species found growing together that is described as unusual, uncommon, of limited extent or encountered infrequently
Right-of-way	A type of easement granted or reserved over the land for the purposes of construction, operation, maintenance, inspection, alteration, removal, replacement, reconstruction, repair and/or expansion of existing services
Riparian	Describes terrain, vegetation, or a position next to or associated with a stream, floodplain, or standing water body
Riparian Area	A geographic area containing interdependent aquatic, terrestrial, and wetlands ecosystems. Riparian area is defined as approximately 15 m from the high-water mark of water bodies. Riparian areas support important biodiversity functions by providing unique habitat for vegetation and wildlife. Riparian areas also provide a buffer for water bodies by absorbing excess water runoff, breaking down pollutants and holding sediments
Species at risk	Plant or animal species identified as being of special concern, threatened, or endangered as defined by the Ontario Endangered Species Act (Government of Ontario 2007) or as defined by the federal Species at Risk Act (Government of Canada 2002)
Spring freshet	Increase in flow of water in a water body when compared to background caused by rain events or melted snow
Topsoil	The uppermost layer of soil, usually the top 5 to 20 cm. Topsoil includes the organic layer, litter, fibric and, humic (LFH) horizon, and mineral A horizon. Topsoil has the highest concentration of organic matter and microorganisms and is where most of the biological activity occurs. Plants generally concentrate their roots in and obtain most of their nutrients from this layer
Vegetation	A term to describe all plants or plant life in an area
Water body	Areas with defined bed and banks, whether or not water is continuously present. A water body may be permanent, intermittent, or ephemeral. Types of water bodies include watercourses (e.g., streams, rivers), lakes, ponds, and wetlands. A water body may be natural or artificial
Water body buffer	A 30 metre area extending from the ordinary high water mark of a water body that is to be protected for many functions (hydrologic, biological, ecological, aesthetic, recreational, and educational).
Water table	The level at which ground water pressure equals atmospheric pressure; the upper surface of groundwater, above which the soil can be aerated and below which the soil is saturated
Watercourse	A defined channel with perennial or intermittent flow in a definite direction. Watercourses include rivers, creeks, streams, brooks, and springs
Weed	A plant that is defined as a controlled noxious weed by the Ontario Weed Control Act
Wetland	Land with the water table at, near or above the ground surface and/or saturated long enough to promote wetland or aquatic processes as indicated by hydric soils, hydrophytic vegetation and other biological activity adapted to wet environments
Wildlife	A species, subspecies, variety, or geographically or genetically distinct population of plant or animal that is wild by nature

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APPENDIX A

Contacts

NEXTBRIDGE INFRASTRUCTURE

APPENDIX 4-III
OPERATION ENVIRONMENTAL MANAGEMENT PLAN

CONTACT	LOCATION	PHONE NUMBER
Ontario Provincial Police (OPP)	Ontario-wide	911
Ambulance	Ontario-wide	911
Hospitals	Thunder Bay, Ontario	Thunder Bay Regional Health Sciences Center 1-807-684-6000
	Nipigon, Ontario	Nipigon District Memorial Hospital 1-866-797-0007 (TTY)
	Terrace Bay, Ontario	McCausland Hospital 1-807-825-3273
	Wawa, Ontario	Lady Dunn Health Center 1-866-832-3321 (TTY)
	Marathon, Ontario	Wilson Memorial General Hospital 1-807-229-1740
Fire	Ontario-wide	911
Forest Fire	Ontario-wide	911 or 310-FIRE
MECP	Ontario-wide	Spills Action Center 1-800-268-6060 (toll-free, province-wide, 24/7) 1-855-515-3759 (TTY)
Agricultural Information Contact Centre	Ontario-wide	1-877-424-1300
NextBridge Area Operation Lead *TBD*	Project	Office: *TBD* Cell: *TBD*
NextBridge High Voltage Lead *TBD*	Project	Office: *TBD* Cell: *TBD*

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APPENDIX B

Environmental Hazard Assessment

Rev. 2

ENVIRONMENTAL HAZARD ASSESSMENT

NEXTBRIDGE INFRASTRUCTURE

Section 1 - GENERAL

Project:	**Date of Assessment:**
Contractor:	**Location Range (KP/KM, Legals, Tract #s):**
Crew Activity:	**SWP No.:**

Section 2 - SCOPE OF WORK

☐ Access Development	☐ Fencing	☐ Lowering-in	☐ Tie In(s)
☐ Backfilling	☐ Final Clean Up	☐ Machine Clean-Up	☐ Timber Salvaging
☐ Bending	☐ Geotechnical Drilling	☐ Monitoring Well Commissioning	☐ Topsoil Stripping
☐ Bore (Auger / Slip / HD Mini)	☐ Grading	☐ Monitoring Well Decommissioning	☐ Trenching
☐ Bridge Install and Removal	☐ Groundtruthing	☐ Post Construction Monitoring	☐ Watercourse Crossing(s)
☐ Clay Ramp Install and Removal	☐ Horizontal Direction Drilling (HDD)	☐ Refueling	☐ Weed Treatment
☐ Clearing & Grubbing		☐ Sediment Control Devices (Interim / Final)	☐ Welding
☐ Coating	☐ Hydrostatic Testing	☐ Stringing	☐ Wetland Crossing(s)
☐ Environmental Surveys	☐ Hydrovacing	☐ Surface Water Pump-Off	☐ _____
☐ Erosion Control Devices (Interim / Final)	☐ Land Surveying	☐ Temporary Water Diversion	☐ _____

Section 3 - PRE-PLANNING

Indicate the plans reviewed and discussed prior to starting work.

☐ Environmental Protection Plan	☐ Biosecurity	☐ Watercourse Crossing	☐ _____
☐ Environmental Alignment Sheets	☐ Caribou Protection	☐ Wetland Crossing	☐ _____
☐ Hydrostatic Testing	☐ Wildlife	☐ Restoration	☐ _____
☐ Hydrotesting Notification Form	☐ HDD	☐ Refueling	☐ _____
☐ Dewatering	☐ HD Mini Bore	☐ _____	☐ _____
☐ Weed Management	☐ Slip/Auger Bore	☐ _____	☐ _____

Section 4 - PERMITS

Have all relevant environmental regulatory permits / approvals / notifications been:

☐ PROVIDED ☐ REVIEWED ☐ ON SITE

Comments:

Section 5 - ENVIRONMENTAL HAZARD(S)

LAND HAZARD(S):			**WATER HAZARD(S):**	
☐ Archaeological Feature(s)	☐ Soil Erosion	☐ _____	☐ Amphibian Habitat	☐ _____
☐ Bird Nest(s)	☐ Soil Salinity	☐ _____	☐ Bird Nest(s)	☐ _____
☐ Clubroot	☐ Soil Scalping	☐ _____	☐ Contaminated Water	☐ _____
☐ Garbage, Debris, Waste	☐ Soil Sedimentation	☐ _____	☐ Coarse/Sport Fish	☐ _____
☐ Groundwater	☐ Thawing Soils	☐ _____	☐ Dewatering	☐ _____
☐ Hydrotest Water Release	☐ Underground Spring	☐ _____	☐ Inadvertent Return (Frac-Out)	☐ _____
☐ Inadvertent Return (Frac-Out)	☐ Vegetated Buffer	☐ _____	☐ Hydrotest Water Release	☐ _____
☐ Organic Lands	☐ Wet Soils	☐ _____	☐ Hydrotest Water Withdrawal	☐ _____
☐ Prohibited / Noxious Weed(s)	☐ Wildlife Feature(s)	☐ _____	☐ Rare Plant(s)	☐ _____
☐ Rare Plant(s)	☐ _____	☐ _____	☐ Siltation	☐ _____
☐ Steep Slope	☐ _____	☐ _____	☐ Watercourse Flow Velocity	☐ _____
☐ Soil Admixing	☐ _____	☐ _____	☐ _____	☐ _____
☐ Soil Compaction	☐ _____	☐ _____	☐ _____	☐ _____
☐ Soil Contamination	☐ _____	☐ _____	☐ _____	☐ _____

Section 6 - ENVIRONMENTAL MITIGATION MEASURE(S)

LAND MITIGATION MEASURE(S):			**WATER MITIGATION MEASURE(S):**	
☐ Access Matting	☐ Hydroseeding	☐ Wattles	☐ Approved Disposal Facility	☐ Water Quality Monitoring
☐ Approved Mud Disposal	☐ Lined Diversion Ditch & Berm	☐ Straw	☐ Approved Upland Vegetated Location	☐ Wildlife Salvage
☐ Approved Seed Mixture	☐ Livestock Fencing	☐ Aspen excelsior		☐ Willow Plugs
☐ Bermed and Lined Cell	☐ Multi-Flow Subdrain	☐ Weed Treatment	☐ Clay Ramping	☐ Waterbody Crossing
☐ Bleach Solution Misting	☐ Nest Sweeps	☐ Handpicking	☐ Dewatering Diffuser	☐ Aquadam
☐ Buffer Staking and Flagging	☐ Polyethylene Layer	☐ Mowing	☐ Erosion Control Devices	☐ Bean Bags
☐ Catch Basin	☐ Posted Signage	☐ Spraying	☐ Filter Bag(s)	☐ Sand Bags
☐ Clay Ramping	☐ Proper Containment	☐ Wet Weather Shutdown	☐ Fish Salvage	☐ Sheet Pilings
☐ Clean Equipment before Entry	☐ Proper Constructed Sump	☐ Wildlife Breaks	☐ Fish Screen (max. 2.54mm)	☐ Steel Plates
☐ Cleaning Station(s)	☐ Resource Specialist Monitor	☐ Snow	☐ Housekeeping	☐ _____
☐ Rough Clean (Shovels, Brushes)	☐ RoW Narrow Down	☐ Soil Pile(s)	☐ Livestock Fencing	☐ _____
☐ Mechanical (Compressed Air)	☐ Secondary Containment	☐ Trench	☐ Minimize Habitat Impacts	☐ _____
☐ Fine Clean (Wash and Bleach)	☐ Sediment Fencing	☐ Roach	☐ No Fueling within 100m	☐ _____
☐ Clean Up Bucket	☐ Setback Distance	☐ Strung Pipe	☐ Pig Pen(s)	☐ _____
☐ Compaction Relief	☐ Snow Packing	☐ Welded Pipe	☐ Regulated Pumping Pressure	☐ _____
☐ Corduroy	☐ Soil Pile Breaks	☐ Woody Rollback	☐ Rip Rap	☐ _____
☐ Cultivation	☐ Soil Pile Identification	☐ _____	☐ Scour Protection	☐ _____
☐ Dewatering Diffuser	☐ Soil Separation	☐ _____	☐ Sediment Fencing	☐ _____
☐ Drip Tray	☐ Soil / Water Samples	☐ _____	☐ Sediment Control Devices	☐ _____
☐ Erosion Control Blanket	☐ Tackification	☐ _____	☐ Sheen/Odour Testing	☐ _____
☐ Equipment Attachment (e.g., prairie protector)	☐ Timber Matting	☐ _____	☐ Sediment Curtains	☐ _____
	☐ Tertiary Containment	☐ _____	☐ Snow - free of deleterious material/debris	☐ _____
☐ Equipment Move-Around	☐ Traffic Restriction(s)	☐ _____		☐ _____
☐ Filter Bag(s)	☐ 3-lift (B-horizon)	☐ _____	☐ Soil Wrap	☐ _____
☐ Frac Watch	☐ Transplanting	☐ _____	☐ Sufficient Back-Up Pump(s)	☐ _____
☐ Geotextile or Comparable	☐ Trench Breaker	☐ _____	☐ Water Basket	☐ _____
☐ Geotextile Winged Walls & T-Posts	☐ Trench Plug (hard, soft)	☐ _____	☐ Water Pump Monitoring	☐ _____
☐ Housekeeping	☐ Topsoil Stripping	☐ _____	☐ Water Sampling	☐ _____

Additional Description(s) of Environmental Mitigation Measures:

Section 7 - ASSESSMENT

Work cannot begin until completing and reviewing the assessment and the required signatures obtained in this section. All personnel performing this work shall comply with the Environmental Protection Plan and any other environmental plans, as well as provincial/federal regulations. If changes are required to the form during the day, re-evaluate and update the appropriate sections during the course of work. This assessment is only valid for the location(s) noted in Section 1. If moving to a new area, fill out a new assessment form and notify the signatories.

Assessor Representative: **Name:** _____ **Signature:** _____

Reviewer Representative: **Name:** _____ **Signature:** _____

Section 8 - ENVIRONMENT

Environmental Inspector Review:

Signature: _____ **Date:** _____ **Time:** _____

White - Enbridge Environment Yellow - Assessor Pink - Reviewer

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APPENDIX C

Spill Prevention and Response Contingency Plan

Spill Prevention and Response Contingency Plan

NextBridge Measures

Reporting

1) NextBridge will report spills in accordance with the provincial requirements (refer to Table 4-III-C-1).

Table 4-III-C-1: Reportable Spill Quantities

Substance	Quantity	External Reporting Requirements
Any Spill	Any amount	N/A
Oil and Waste Oil	≥100 litres	Call within 24 hours: Ontario Spills Action Center Spills Action Center **1-800-268-6060** (toll-free, province-wide, 24/7) **1-855-515-3759** (TTY) *record file number
	Any amount of material in areas that are outside of the ROW	
Oil with >50 ppm PCB	≥1 kilogram	
Flammable or Non-Flammable Gas	≥10 kilograms	
Toxic or Corrosive Waste	≥5 kilograms	
Hazardous Waste	≥5 litres or kilograms	
Explosives	Any quantity that could pose a danger to the public or 50 kilograms	

2) Releases that require external report include spills that:

- cause harm or material discomfort to any person;
- injure or damages property or animal life;
- impair the quality of the natural environment air, water or land;
- cause adverse health effects;
- present a safety risk;
- render property, plant or animal life unfit for use;
- lead to the loss of enjoyment of the normal use of property; or
- interfere with the normal conduct of business.

3) The immediate report must include:

- your name and phone number;
- name of the company or individual responsible for the spill;
- time and location of the spill;
- type and quantity of material spilled (if you know); and
- status of the spill, including actions being taken to control the spill.
- Information provided to the center will be forwarded to Environment Canada, who will in turn contact DFO if warranted. The following information will be required during the notification process:
- your name and phone number;
- name of the company or individual responsible for the spill;
- time and location of the spill;
- type and quantity of material spilled (if you know); and
- status of the spill, including actions being taken to control the spill.

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Contractor Measures

Equipment	1) Maintain an adequate supply of spill prevention and emergency response equipment onsite at all times and train Project personnel on the use of this equipment. The risk for site-specific spills will be used to determine the appropriate type of response equipment and suitable location for storage. The Contractor will also provide a list of required stand-by equipment and required spill response container supplies to respond to large volume spills. 2) Vehicles/equipment used on site are equipped with individual spill kits and Project personnel will have appropriate training on the location and use of spill kits. 3) The contents of spill kit must be replenished as soon as possible following its use. 4) Maintain equipment in good operating condition and inspect regularly for cleanliness, leaks, excess oil or grease. Identified problems or deficiencies shall be corrected in a timely manner. 5) 18) Maintain documentation (e.g., inspection record) in accordance with applicable regulations and local requirements. 6) Fuel and servicing vehicles will carry at a minimum: ▪ fire extinguishers; ▪ shovels; ▪ an impermeable barrier for placing under vehicles to be serviced; and ▪ hydrocarbon spill kits complete with a minimum of 10 kilograms (kg) of sorbent material for cleanup of small spills. 7) Wash, re-fuelling or equipment maintenance activities are not to occur within 100 m of a water body. If re-fuelling within 100 m of a water body cannot be avoided, the Contractor is to provide and implement a site-specific spill prevention plan. 8) Perform equipment servicing, such as oil changes and hydraulic repairs with potential for spills over an impervious tarp to contain spills when done on site or within the ROW. 9) Employ the following measures to reduce the risk of fuel spills ▪ containers, hoses, nozzles are free of leaks; ▪ equip fuel nozzles with automatic shutoffs; and ▪ if both ends of the hose are not visible have operators stationed at both ends of the hose during fuelling.
Transportation, Storage, and Handling	10) The transportation, storage, and handling of hazardous materials (e.g., fuel, hydrocarbon, brake fluids) will be in compliance with the *Technical Standards and Safety Act* (Government of Ontario 2000), the *Transportation of Dangerous Good Act, 1992*, the *National Fire Code* (National Fire Code of Canada 2010),, and the *Occupational Health and Safety Act* (Government of Ontario 1990b). 11) Project personnel will be trained for handling, receiving, shipping hazardous materials. 12) Hazardous materials will be transported in approved containers in licensed vehicles. 13) Hazardous materials will be stored in appropriate containers and placed in suitable designated areas: ▪ Store fuel storage tanks in a secondary containment tub to prevent fuels from escaping; ▪ store fuel storage tanks larger than 25 L in a secondary containment system (e.g., tidy-tank, double-walled containment tub) with a holding capacity equal to 110% of the volume stored; and ▪ store hydrocarbon storage containers greater than 23 L in a secondary containment (e.g., polyethylene containment tub) with a holding capacity of 110% of the volume stored. 14) Fuel storage tanks will be visually inspected on a regular basis to ensure that they do not leak, are sealed with a properly lip, and labelled accordingly. Identified problems or deficiencies shall be corrected in a timely manner. 15) Implement controls and utilize containment and/or spill trays when transferring hazardous materials between containers or working near surface drainages and environmentally sensitive features. 16) Maintain documentation (e.g., inspection record) in accordance with applicable regulations and local requirements.
Reporting	17) Report all spills and releases immediately to NextBridge. 18) Prepare a spill report using the Spill Reporting Form (refer to Appendix E)and submit all spill reports to NextBridge.

APPENDIX 4-III
OPERATION ENVIRONMENTAL MANAGEMENT PLAN

Release	19)	Contain and cleanup all spills on land immediately and/or as quickly as possible when safe to do so.
	20)	Spill containment will depend on the physical and chemical properties of the substance: ▪ If solid, cover material with plastic. Contain plastic bags in the spill kit for temporary storage of soiled material and place the bags in a pickup or a designated area for transport to an appropriate waste disposal facility. If liquid, contain the spill using spill booms or other materials designed for this purpose.Hazardous waste drums may be utilized to contain free agent or contaminated liquids cleaned from a site.Isolate/block any pathways to watercourses or surface drainage.
	22)	Recover contained liquid spill material through suction methods (e.g., vacuum trucks) wherever practicable. If such equipment is not readily available or cannot access the spill site, other appropriate recovery techniques (e.g., burning, absorbents) should be applied.
	23)	Identified leaks shall be contained and repaired as soon as possible. Relocate leaking equipment to a level ground away from environmentally sensitive features provided that temporary containment is in place and moving the equipment does not increase the risk of environmental contamination.
	24)	Restore the areas to the satisfaction of the Area Operations Lead and/or regulatory agencies.
Instream and Onshore Release	25)	Instream and onshore containment and cleanup objectives include the following: **Instream** ▪ divert water around the fluid release to the extent practicable;install silt fencing around the release point, if conditions permit;remove fluid from the water body by pumping or other suitable means; and dispose of recovered fluid in accordance with MECP requirements. **Onshore** ▪ contain the fluid release immediately to limit the area affected and prevent the fluid from entering the water body; anddispose of recovered fluid in accordance with MOECC requirements.Consider the following options for removal of fluid from instream: ▪ Use trash pumps or vacuum truck. If trash pumps are used, the water pumped to the discharge must not drain back into a water body, or construct a sediment/water holding area if there is potential for sedimentation from discharge water. ▪ In consultation with MOECC and DFO biologists, leave fluid if current water body levels and flow inhibit removal or if removal will result in unacceptable shore or instream damage.
	27)	If not accessible, construct bale and filter cloth weirs and a containment area where appropriate.
	28)	Conduct water quality sampling as appropriate.
	29)	The Contractor will prepare a report summarizing the events leading to the release and the measures taken to minimize the impact on the environment. As directed by the regulatory agencies, written reports may be required.
Waste Management	30)	Dumping of oil or other deleterious materials on the ground or in any water body is strictly prohibited.

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APPENDIX D

Vegetation Management Program

NEXTera ENERGY
Transmission Vegetation Management Program (TVMP)

REQUIREMENT: NERC FAC-003-1

Version: 2.3
Date: 11-22-2013

Section 1 – Introduction

1.1 Scope

This standard shall apply to all transmission lines operated at 200 kV and above and to any lower voltage lines designated by a Regional Entity as critical to the reliability of the electric system in the region.

The Leader Vegetation Mgmt - 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.

1.2 Objectives

The objective of this vegetation management program is to establish an integrated vegetation management program on transmission right-of-way in the NextEra Energy System to improve the reliability of the electric transmission systems by preventing outages from vegetation located on transmission rights-of-way (ROW) and minimizing outages from vegetation located adjacent to ROW, maintaining clearances between transmission lines and vegetation on and along transmission ROW.

The basic philosophy of the program is to target only those plants that are incompatible with FPL's use of the land with the following objectives:

- Transmission Reliability – the reliability of electrical service through vegetation control regardless of accessibility or workability.
- Minimizing Fire Hazards - through first identifying potential problems and then by reducing fuel levels to acceptable limits.
- Compliance - ensuring that FPL is compliant with all governmental vegetation related regulations and restrictions. Adherence to NERC Standard FAC 003-1 Vegetation Management and state statutes is paramount.
- Resource Management - the ability to control resources by identifying work load. Treatments will be applied only on an as needed basis, thus allowing allocated resources to be utilized efficiently. As a result, work load and resources will be balanced.
- Improving/Maintaining Accessibility - promoting accessibility to structures and right-of-way by controlling vegetation on and around structure pads and patrol roads where practical.

1.3 Terms, Definitions and Acronyms:

- **Right-of-Way (ROW):** The corridor of land under a transmission line(s) needed to operate the line(s). The width of the corridor is established by engineering or construction standards as documented in either construction documents, pre-2007 vegetation maintenance records, or by the blowout standard in effect when the line was built. The ROW width in no case exceeds the Transmission Owner's legal rights but may be less based on the aforementioned criteria. Inspector: Individual assigned with the responsibility of evaluating clearances in the Transmission Right of Way.

- **Transmission Vegetation Management Program (TVMP):** The document that outlines the objectives procedures, processes, standards, and methodology used to ensure that vegetation is maintained to allow high voltage transmission lines to operate reliably.

- **Transmission Vegetation Management System (TVMS II):** The software application utilized by NextEra Energy to record Vegetation Management inspections, scheduling and maintenance activities.
- **Trigger Distance:** The distance between the conductor and vegetation in real time that initiates implementation of a control method (ANSI Z133.1, table 1). Vegetation inside the trigger distance will initiate the imminent threat process.
- **Imminent Threat:** Is a tree encroaching on the conductor at a distance of less than the Trigger Distance, or is a tree that could reasonably be expected to fall into or make contact with the transmission electrical facilities within the next 24 hours.

2 Section 2 –Transmission Vegetation Management System (TVMS II)

2.1 Practices

NextEra Energy's vegetation management practices represent a system of managing plant communities through identifying compatible and incompatible vegetation. The evaluation, selection and implementation of the most appropriate control method or methods to achieve set objectives are taken into consideration. The choice of control method or methods are based on environmental impact and anticipated effectiveness, along with site characteristics, security, economics, current land use and other factors. These methods include, but are not limited to pruning, removal, herbicide application and mowing. They are represented in the TVMS II database as prescriptions.

2.1.1 Organizing the Workload

The transmission system is first organized by the Transmission Management Areas. Within those areas the corridors are identified. A corridor is a single line circuit or several lines circuits running parallel and organized in such a manner that can be efficiently managed together. Whenever possible the corridors should begin and end at substations. The corridor should be easily identifiable and follow normal patrol patterns. Corridors are the largest management unit in a transmission area.

The corridors are subdivided into stands. A stand is the basic management unit, generally longer than a span length, represented by an area of vegetation sufficiently uniform in species, composition, age, condition and/or land use to manage as a unit. For the purpose of these procedures the Florida Land Use Identification System (FLUX) is used. The stand is the basic management unit.

Individual stands are identified and quantified for the ROW. The stand is then field inventoried to develop a description (identifying stand types and use, species composition, acreage, density, height, growth, fire hazard, and accessibility) and prescription (prescribing an individual, site specific vegetation control method based on the stand description and a date).

2.1.2 Description

The description identifies the location, classifies the type of land use (Florida Land Use Identification System or FLUX), quantifies the size and identifies other attributes that would affect management of the land.

2.1.3 Prescription (procedures)

Each stand shall have a prescription. The prescription defines what work activity is scheduled to meet the objectives of the plan, quantifies the work and sets an estimated schedule of when the work should be done.

Our methods / prescriptions are defined as follows:

- Remove Trees - To cut a tree or shrub (4" or greater at DBH, 5" or greater stump) at ground level and treat with the appropriate herbicide where necessary to prevent re-sprouting. Unit is number of trees.
- Mow - normal - Mow, cut or chop grass and brush in right-of-way to a height of less than six (6) inches. Brush diameter in right-of-way is less than two (2) inches. Unit is number of acres.
- Mow - heavy - Mow, cut or chop grass and brush in right-of-way to a height of less than six (6) inches. Brush diameter in right-of-way is greater than two (2) inches. Unit is number of acres.
- Mow - wet - Mow, cut or chop grass and brush in right-of-way to a height of less than six (6) inches. The average soil in right-of-way is sufficiently wet to require low ground pressure equipment (ground pressure ratio of less than 4 pounds per square foot). Unit is number of acres.
- Mow - Specialized – Vegetation clearing using unique methods with specialized equipment. Unit is number of acres.
- Mow Pads & Roads - Mow, cut or chop grass and brush Thirteen (13) feet on each side of the center line of the road or structure to a height of less than six (6) inches. Unit is number of acres.
- Roll ROW – Roll the grass down using the tracks and a chopper (under wet conditions).
- Trim Trees to Standard - To remove branches from a tree in accordance with ANSI A300 standards as they apply to utility pruning.. Unit is number of trees.
- Spot Treat Light - Application of an approved herbicide to the target species on a plant by plant basis. The application shall achieve a 90% kill after three months of all target species. Care should be taken to minimize over spray and drift so as to retain the native plant community. Excessive kill of non-target species will not be permitted. Target species density is less than two hundred (200) stems per acre or less than thirty percent (30%) of the area of the span. Unit is number of acres.
- Spot Treat - heavy - Application of an approved herbicide to the target species on a plant by plant basis. The application shall achieve a 90% kill after three months of all target species. Care should be taken to minimize over spray and drift so as to retain the native plant community. Excessive kill of non-target species will not be permitted. Target species density is greater than two hundred (200) stems per acre or greater than thirty percent (30%) of the area of the span. Unit is number of acres.
- Broadcast Treat - Application of a herbicide to the entire right-of-way to achieve a species shift in the right-of-way diversity (necessary when one or two incompatible species dominate the right-of-way). Contractor shall achieve a 90% kill after three months of those target species. The process of broadcast spray recognizes that the entire right-of-way will brown-out. Unit is number of acres.
- Clear and Treat Brush - Remove woody species and apply herbicide to stumps or basal treat stems from around poles, guys, fence right-of-ways, ditch banks as directed. Unit is number of acres.
- Critical Trim - A tree or group of trees that poses an increased risk to the system and must be trimmed or removed within a short period of time. These trees are directly related to reliability. Unit is number of trees.
- TGR - Apply an approved tree growth regulator to a tree in order to slow its growth. Results should be evident within six (6) months and last for three years. Unit is number of trees.

- Pad Treatment - Spray structure pad to remove woody species for a minimum distance of ten (10) feet around the structure and one and one-half feet (1.5) around down guys. The area may vary. Unit is number of acres.
- Chop right-of-way - Chop right-of-way to a height of less than eighteen (18) inches. Unit is Number of acres.
- Linear Trim - To trim specifically identified spans of trees of high enough density that it is not practical to obtain a tree count in advance of trimming. In many cases, there will be some trees that require removal during the linear trimming process. It is not necessary to document the count of these removals during linear trimming because linear trimming is based on length of work (not tree counts). Unit is based on linear footage for each side of right-of-way.
- Aerial Spray – To broadcast treat using helicopters or fixed wing aircraft.
- Critical Removal – To remove a tree that is designated as critical (tree must be removed out of cycle and on short notice).
- Imminent Threat – Removal or Tree Trim to Standard of a tree that has been designated as an Imminent Threat.
- Widen ROW Edge – To extend the existing ROW wall beyond the point that it is currently cleared.
- Restricted Work – Vegetation work being done under restrictions placed on the site or job by a governmental agency.
- Remove Vines – The severing of vines at the base of the pole or above ground line and treating them with the appropriate approved herbicide. (Under no circumstances are vines to be removed from the pole if they are closer in elevation than ten (10) feet below energized facilities).
- Tree Group Removed – Trees removed and treated with appropriate herbicide in a specified area. (trees counted)
- Tree Group Trim – Trees trimmed to standard in a specified area. (trees counted)
- Clear Area – Vegetation removed in a specified area. (measured by area)
- Trim Area – Vegetation in a specific area that is trimmed to standard. (measured by area)
- Special – Unique vegetation work that is not currently in the prescription List.

2.1.4 Right of Way (ROW) Vegetation Inspection Schedule

Generally, scheduled work will be determined by the inspection process. Routine inspections will normally occur on the ground. NextEra Energy may elect to utilize aerial inspections or LiDAR. The following describes scheduled inspections.

2.1.4.1 Inspection Purpose:

- To inventory vegetation conditions that may impact the safe reliable operation of the transmission line.
- To identify and prioritize work appropriate to species and site specific conditions.
- To identify vegetation that has grown faster than predicted and prevent encroachment of Clearance 2 area.

2.1.4.2 Annual Inspection Schedule:

All transmission circuits subject to FAC-003-1 shall be completely inspected at least twice annually. The inspection interval should not exceed eight months from the last inspection. The inspection frequency is set to catch changes in the site due to intervention by man and tree mortality. Growth would not be expected to encroach on clearance zones within this inspection cycle.

Transmission lines in arid areas that have few trees and slow growth rates with a very low risk of fall-in trees may be considered for only one inspection each year. The inspecting Vegetation Specialist will request that the Vegetation Leader review the findings. With concurrence that the risk is low the Vegetation Leader will document that the line is approved for only one inspection each year. The inspection may be done at any time during the year but the inspection interval shall not be greater than 18 months.

The timing and number of inspections is flexible in order to respond to changing conditions such as fuel loading from drier than normal conditions. Other conditions resulting in adjusted schedules could include heavy rain falls, high winds, landowner intervention and tree mortality caused by disease outbreaks or insect infestations.

An inspection may be delayed greater than eight months provided that the area arborist gets approval from the Leader Vegetation Mgmt - T/S. Approval can be granted provided there is sufficient knowledge of the line that no vegetation outage would be expected.

2.1.4.3 Inspection Elements:

These inspections will identify the following:

- Work that is covered by this TVMP and any potential violation of FAC-003-1 requirements.
- Any trees approaching the **Trigger Distance**, taking into consideration species, site specific conditions, local climate conditions and the maximum sag and sway of the line.
- Trees posing a fall-in threat should be examined to determine if they are danger trees.
- Tree hazards caused by man that pose a risk of fall-in.
- Potential fire hazards or fuel loading in the transmission ROW.

Additionally a review of completed routine annual maintenance will be documented.

2.1.4.4 Inspection Records:

- Any observed conditions requiring work, which are identified through the inspection process, will be recorded in **TVMS II**. **TVMS II** is the software application utilized by NextEra Energy to record Vegetation Management inspections, scheduling and maintenance activities.
- The inspection records will identify and prioritize work based on the risk to the line reliability and secondly, to economics.
- Each inspection shall be documented in **TVMS II** with the date completed and the name of the Inspector.
- When TVMS II is not available the inspection will be documented on paper for later entry to TVMS II.

2.2 Vegetation Clearances

2.2.1 Clearance 1 (NERC Standard FAC-003-1, Requirement R1.2.1)

The minimum clearance distances to be achieved at the time of transmission vegetation management work. NextEra Energy incorporates local conditions, impact on the vegetation, and expected time period in which NextEra Energy plans to return for future vegetation management work. For Clearance 1, the minimum clearance distances are specified in Table 2 of ANSI Z133.1-2006.

Clearance 1 is comprised of the following combined attributes:

- Clearance 1 minimum distance is determined by the distances identified in (Appendix 1, Clearance 1) Table 2 of ANSI Z133.1-2006.
- Hazard trees outside the ROW should also be pruned or removed as needed to minimize the risk of outages (.within the legal rights to perform the work).
- As a general rule, trees capable of growing greater than 14 feet should be removed from under the conductors. In situations where the trees cannot be removed, the maintenance and inspection schedules shall be adjusted sufficiently to prevent a violation of Clearance 2. In situations such as valley crossings where conductor to ground distances are so large as to allow tall trees to grow to maturity without violating the Trigger Distance, these trees can be left, but these locations must be documented in TVMS II.

2.2.2 Clearance 2 (NERC Standard FAC-003-1, Requirement R1.2.2.)

The radial clearances to be maintained between vegetation and conductors under all rated electrical operating conditions. NextEra Energy shall maintain the distances specified in the Institute of Electrical and Electronics Engineering (IEEE) Standard 516-2003 (Guide for Maintenance Methods on Energized Power Lines) and as specified in its Section 4.2.2.3, Minimum Air Insulation Distances (MAID) without Tools in the Air Gap as is required for Unknown Transmission System Transient Overvoltage Factors. NextEra Energy has elected to not calculate the Transient Over-voltages to provide extra distance for reliability and safety. These Distances are found in Appendix 2 Table 5 MAID 516-2003.

Clearance 2 is a radial distance around the conductor. In the special situations described, for clearance below the conductor, Clearance 2 will not be violated. Where Clearance 1 cannot be achieved, the Arborist must establish a mitigation plan to ensure that Clearance 2 is never violated by vegetation.

2.2.3 Trigger Distances

To avoid violating Clearance 2 or needing a clearance or line right of way to trim the trees, the Arborist should schedule trimming before vegetation is expected to encroach the radial distance listed in ANSI Z133.12006, Table 1 (the Trigger Distances).

2.2.4 Application of Clearances

When inspecting lines and establishing prescriptions (work type, date needed, quantity) the arborist should plan work to meet one of the following conditions.

Below the line (sag)

1. Maintain the trees below the reference height (generally fourteen (14) feet) either by eliminating all vegetation capable of growing greater than the reference height or by trimming trees below the reference height minus the expected growth before the next cycle.
2. Where the minimum conductor height at rated thermal sag is known, prescription schedules will be set to meet the following maximum tree height with the following formula.

> Minimum conductor to ground distance at rated thermal sag – Clearance 1 – expected growth before the next cycle = maximum tree height at time of maintenance.

3. Where the minimum conductor height at rated thermal sag is not known, prescription schedules will be set to meet the following maximum tree height.

   Conductor to ground distance at time of inspection – maximum estimated thermal sag – Clearance 1 – expected growth before the next cycle = maximum tree height at time of maintenance.

Beside the line (blowout)

1. Clear vegetation from the side to the designed corridor width.
2. Where the maximum rated blowout is known, prescription schedules will be set to meet the following maximum side clearances from the outside conductor at rest with the following formula.

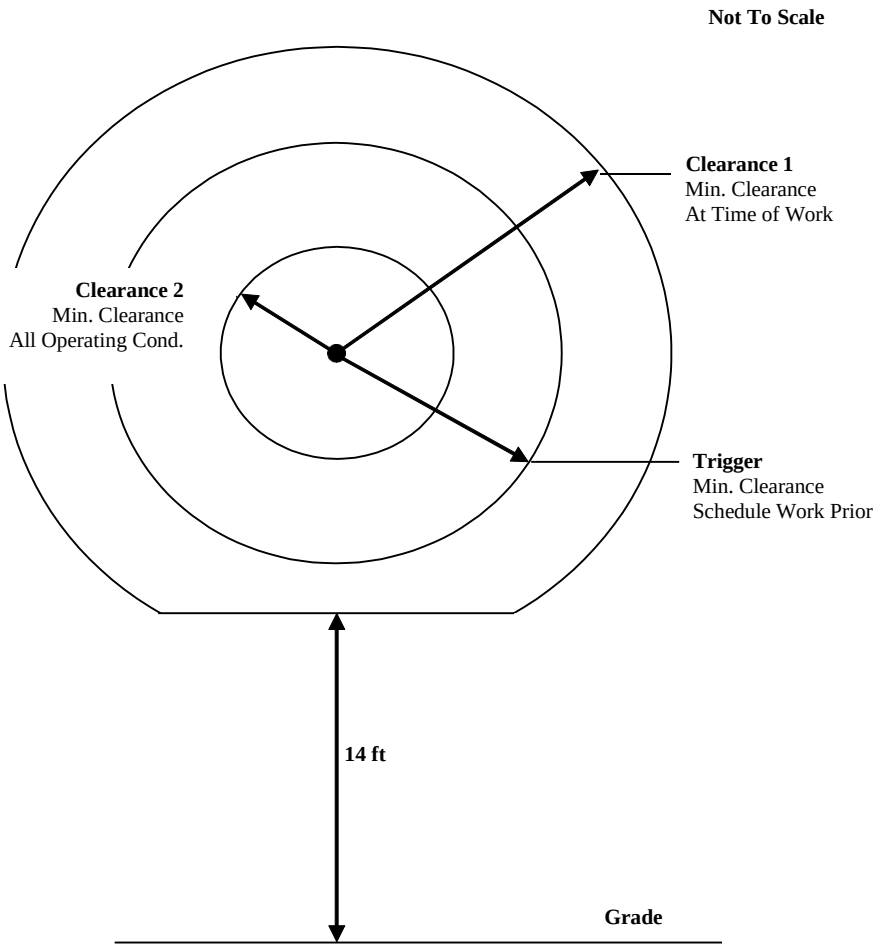
   Maximum blowout + Clearance 1 + expected side growth before the next cycle = minimum side clearance at time of maintenance.
3. Where the maximum rated blowout is not known, prescription schedules will be set to meet the following maximum side clearances from the outside conductor at rest with the following formula.

   Maximum blowout + Clearance 1 + expected growth before the next cycle = minimum side clearance at time of maintenance.

When determining the estimated sag and blowout the inspector will utilize the tables provided by Engineering Services in Appendix 5

Corridor widths vary from site to site. They may or may not coincide with the easement or other legal right. When exercising Option 1 for blowout the Arborist will verify that the Corridor width is our maximum legal right.

Special Situations In some special situations, conductors may be constructed at the minimum conductor height allowed by the National Electrical Safety Code (ANSI C2-2007). In these situations the NESC allows the maximum height for human activity to be 14'. This may mean that ANSI Table 2 may not be met below the conductor. In this situation vegetation must not exceed 14' in height from the original design grade of the line.



In some design situations trees may need to be allowed to grow to their mature height that is greater than 14'. This could result due to environmental conditions; historical trees, orange groves, or trees with a politically designated protected status. In these locations the line will be designed to be greater that Clearance 1 at maximum load.

When the Inspector finds one of these Special Situations it should be recorded in TVMS II so that the appropriate prescriptions are applied to meet these design considerations.

2.3 Personnel Qualifications and Training (NERC Standard FAC-003-1, Requirement R1.3)

NextEra Energy maintains a full time staff devoted to line inspection, maintenance and operations. Required vegetation management work is generally contracted out to qualified vegetation management companies and the work is overseen by NextEra Energy management.

NextEra Energy defines the following as those required to meet NERC Standard FAC 003-1 Requirement R1.3. These positions are directly involved in the design and oversight of the TVMP and are responsible for the following activities:

- Develop the TVMP and other vegetation policy for approval by Management
- Complete condition assessments of the ROW and set prescriptions and schedules.
- Have the authority to adjust prescriptions and schedules.
- Issue work tickets to contractors.

Personnel assigned to transmission vegetation management prior to 11/22/2013 were qualified under the previous TVMP by education, certification and experience. Those qualifications were:

- Manager, Transmission Vegetation Management

  Education: BS in forestry, horticulture, or related environmental management field.
  Certifications: Certified Arborist by the International Society of Arboriculture.
  Experience: Ten (10) years' experience in utility arboriculture.

- Leader Vegetation Mgmt - T/S

  Education: BS in forestry, horticulture, or related environmental management field.
  Certifications: Certified Arborist by the International Society of Arboriculture
  Experience: Seven (7) years' experience in utility vegetation management.

- Senior Vegetation Specialist – T/S

  Education: AA in forestry, horticulture, or related environmental management field.
  Certifications: Certified Arborist by the International Society of Arboriculture
  Experience: Five (5) years' experience in utility arboriculture.

- Vegetation Specialists – T/S

  Education: AA in forestry, horticulture, or related environmental management field.
  Certifications: Certified Arborist by the International Society of Arboriculture.
  Experience: Two (2) years' experience in utility arboriculture.

Those personnel qualified before 11/15/2013 are listed in Appendix 6.

Personnel not certified as qualified in Appendix 6 must be certified by a Certified Transmission Leader T/S as completing the Transmission Vegetation Management Training Program prior to being assigned transmission work. Personnel entering the training program may do transmission vegetation work under the direct supervision of a Certified Transmission Leader T/S.

Inspections of completed work may be made by un-certified personnel provided they have been trained on the clearance requirements and prescriptions for that specific line by a Vegetation Specialist qualified to do transmission work as indicated above.

2.3.1 Contractors

Contractors are qualified at the time the contracts are awarded. It is the contractor's responsibility to ensure that their employees are qualified for the tasks assigned.

If contractors are assigned the following responsibilities, NextEra Energy will define the requirements for the positions in the contract or in a supplementary document.

- Develop the TVMP and other vegetation policy for approval by Management
- Complete condition assessments of the ROW and set prescriptions and schedules.
- Have the authority to adjust prescriptions and schedules.
- Issue work tickets to contractors.

- Make final inspections of completed work. (Inspections will be performed by a Certified Arborist or by plant personnel trained by a Certified Arborist. This training will be site specific to the lines serving the plant.)

2.4 Mitigation Measures (NERC Standard FAC-003-1, Requirement R1.4)

Clearance 1 requirements define the expected extent of clearing. If the Clearance 1 specifications cannot be achieved at the time of scheduled maintenance, NextEra Energy shall implement mitigation measures. These measures shall be documented as prescriptions or inspections in the TVMS II program. These may include short prescription cycles or more frequent inspections to monitor the risk to the system.

Restrictions on scheduled work may include refusals by property owners to access or perform work, orders to stop work by local authorities, or restrictions by federal and state agencies. These restrictions will be brought to management for action. While negotiations or legal action with governmental entities or landowners is under way the field arborist will manage the restriction to prevent encroachment into Clearance 2 with actions documented in TVMS II.

2.5 2.1.5. Communication of Imminent Outage Threat (NERC Standard FAC-003-1, Requirement R1.5)

NextEra Energy shall communicate vegetation conditions that present an imminent threat to the appropriate control center.

Immediate Communication Requirements for NextEra Energy Employees and Contractors:

When a vegetative condition presenting an imminent threat is discovered, it will be promptly reported to the field arborist, Production Manager, Area Manager, Operations, Lead or the designated person responsible for handling emergencies. The threat will be verified by NextEra Energy Transmission Vegetation Management or area operations. After the Imminent Threat is verified, the verifying employee will establish communications with the appropriate control center and area operations. In that communication they will jointly formulate a plan and schedule to remove the risk safely and at the least risk to the system.

Action:

After the appropriate personnel are apprised of the imminent threat, action will be delegated to appropriate personnel to remediate the emergency as quickly as practical. Safety and system reliability shall be the guiding factors for any plan of action. Actions may reduce line load or switch the line out of service until the vegetative threat has been removed.

The Leader Vegetation Mgmt - T/S shall review all imminent threat actions and approve the documentation.

Documentation:

The Arborist will maintain a detailed log of the event to track the work until completion. The Imminent Threat reporting will be documented and maintained by Transmission Vegetation Management.

3 Section 3 – Annual Plan for Vegetation Management Work (NERC Standard FAC-003-1, Requirement R2)

3.1 Annual Plan

During the budget process Transmission Vegetation Management will review in TVMS II the most current inspection and data collected on the condition of vegetation in the ROW. Work shall be prioritized and scheduled according to the following specifications:

- Clearance 1 shall be achieved by reducing all site specific variables of vegetation to a non-risk level within the ROW, complying with ANSI A300, Part 1 and Part 7, and ANSI Z133.1.
- Maintains the requirements of this TVMP, including Clearance 1 and Clearance 2.
- Reduces risk of trees falling into the corridor from outside of the ROW.
- Local site specific variables include operating voltage, appropriate vegetation management techniques, fire risk, reasonably anticipated tree and conductor movement, species types and growth rates, species failure characteristics, local climate and rainfall patterns, line terrain and elevation, location of the vegetation within the span, worker approach distance requirements, and protected species.
- Any trees approaching the Trigger Distance, taking into consideration species, site specific conditions, local climate conditions and the maximum sag and sway of the line will be mitigated to avoid violating Clearance 2.
- Allows the appropriate lead times for resolving permits, permissions, and resources.
- Is adjustable to accommodate changing conditions during implementation.
- All changes will be documented in the Vegetation Management Annual Plan (VMAP).

Annually the Leader Vegetation Mgmt - T/S will designate TVMS II batches as the Annual Work Plan in. Periodically the plan will be reviewed in conjunction with the Vegetation Leader and field arborist and adjusted for changing condition of the vegetation. Deletion of entire batches will be documented in a spread sheet. Individual prescriptions can be adjusted or changed by the field arborist based on the field conditions.

3.2 Work Specifications

Work specifications will be developed for each vegetation contract or job. The specifications will be consistent with Clearance 1 set forth in this document and will comply with the objectives of FAC 003-1 in the context of the specific prescription in the Vegetation Management Annual Plan. The specifications should take into consideration those standards set forth in the following documents:

- ANSI Z133.1-2006 Safety Requirements for Arboricultural Operations.
- OSHA 1910.269 Electric Power Generation, Transmission and Distribution.
- ANSI A300 (Part 1) 2006 Pruning for Tree Care Operations—Tree, Shrub and Other Woody Plant Maintenance—Standard Practices
- ANSI A300 (Part 7) 2006 IVM Tree, Shrub, and Other Woody Plant Maintenance—Standard Practices (Integrated Vegetation Management a. Electric Utility Rights-of-way)
- Integrated Vegetation Management Best Management Practices, Companion publication to ANSI A300 Part 7.

The Vegetation Management Annual Plan for the current year is maintained in **TVMS II**.

The methods utilized for vegetation management at NextEra Energy are further described in NextEra Energy contract specifications. Specific work specifications will be developed as work is bid or assigned. The specifications will be in compliance with the standards set forth for Clearance 1 and Clearance 2 of this document.

The Annual Plan and schedule shall be maintained by NextEra Energy personnel in the Transmission Vegetation Management System (TVMS II). Work and status updates by NextEra Energy and contract personnel shall be kept current in **TVMS II**.

3.3 Implementation

Tracking – Monthly, the Vegetation Leader review the progress of inspections, and work scheduled in the Annual Work Plan. They consult with the Area Arborist in situations where the progress to completion is not on schedule. The Vegetation Leader can allocate resources if necessary to insure the Annual Work Plan and Inspections are complete by the end of the year. Periodically the Leader Vegetation Mgmt - T/S should monitor the inspection documentation and if necessary complete field visits to insure that the system is within NERC Vegetation Standards. The Annual Plan completion is due at the end of the calendar year.

Quality Assurance and Auditing - Upon completion the contractor will certify the work as completed to the specification. In addition the work is inspected documented in TVMS II by the field arborist.

Documentation - The arborist maintains the work in TVMS II. The Vegetation Leader reviews the data to ensure that there is an audit trail from the identification of work (inspection) through the completion. Discrepancies shall be resolved and documented. Archiving the documentation in **TVMS II** occurs and ends the process**.**

4 Section 4 – Reporting of Transmission Line Outages Caused by Vegetation (NERC Standard FAC-003-1, Requirement R3)

4.1 Quarterly Reporting to the Regional Entity (RE)

NextEra Energy shall report at least quarterly to the RE, sustained transmission line outages determined by NextEra Energy to have been caused by vegetation. (Some RE's require monthly reporting) The Leader Vegetation Mgmt - T/S will review the Event Response Database for tree interruptions. Any outages occurring should be reviewed against the requirements for reporting in R 3 of FAC 003-1 of the NERC Standards.

If outages have occurred that meet the requirements for reporting, The Leader Vegetation Mgmt - T/S will review with the corporate compliance group prior to submission. Data required for the report is listed in Appendix 4 Required Information for Reporting.

4.2 Annually

Annually the Leader Vegetation Mgmt - T/S shall review the documents supplied by the NextEra Energy Compliance Manager. Based on a review of the inspections, the documentation of the completed vegetation Annual Work Plan, and a review of the TVMP the Leader Vegetation Mgmt - T/S shall certify that the NextEra Energy transmission system is in compliance with the NERC Standard FAC 003-1 as required by each RE.

5 Document Information and Revision History

Update version on cover page to reflect below version.

Version	Date	Author(s)	Revision Notes
1.0	10/15/1990	John Tamsberg, JM Sparkman	New
60.00.00-A	10/11/2000	John Tamsberg, VM Staff	Transferred to TSO Notes Database
60_00_00-B	10/31/2008	John Tamsberg	Revised for NERC Standard FAC 003-1
2.0	12/21/2011	John Tamsberg, Dan Marsh	Consolidated for NextEra Energy, Inc.
2.1	02/14/2012	John Tamsberg, VM Staff	Correct typo errors
2.2	5/11/2012	John Tamsberg, VM Staff	Allow one inspection areas per year in arid slow growth areas.
2.3	11/22/2013	John Tamsberg, Dan Marsh	Revised Qualifications

Filed: 2020-11-04
EB-2020-0150
Exhibit F
Tab 4
Schedule 2
Attachment 1
Page 49 of 50

APPENDIX E

Spill Reporting Form

Spill Reporting Form

Project:			**Project Manager:**			
Type of Material Spilled:						
☐ Gasoline	☐ Hydraulic Fluid	☐ Other (specify):				
☐ Diesel	☐ Vehicle Antifreeze					
☐ Lube Oil	☐ Developing Fluids					
Date and Time of Spill or Discovery:						
Source of Spill:						
Area of Spill (m^2):						
Depth of Spill (cm):						
Volume of Spill (L):						
Estimated Release Rate:						
Duration of Release:						
Location (land, water, land and water):						
Soil Type (*e.g.,* sandy, clay, etc.):						
Location:	Township		Lot #		Concession #	
	Easting		Northing		KP	
Land Use:						
Environmentally sensitive areas potentially affected:						
Weather conditions at time of discovery:						
Procedures taken to minimize, control or stop the release:						
Remediation plan and schedule of implementation, if required:						
Current status of the remediation program:						
(dd/mm/yy) (hr:min):						
Form Completed by:						
Name	*(printed)*			*(signed)*		

EMPLOYEE COMPENSATION

1. This section of the Application is not applicable as NextBridge has no employees (all personnel used to support NextBridge work for the affiliate partners or through a service agreement with HONI).

SHARED SERVICES AND CORPORATE COST ALLOCATION

1. 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. The estimation of these costs have been reflected in the OM&A budget. Since NextBridge is requesting an IR Term of 10 years, any potential overages in charges will be paid by NextBridge. Examples of corporate services are listed below:

   - **Governance support:** compliance, internal audit, legal counsel
   - **Construction & Operations Support:** power delivery operations, engineering & construction, integrated supply chain, environmental. NextBridge can leverage NEE's commercial and technical practices and knowledge regarding construction, compliance and operations capabilities.
   - **Corporate Support:** accounting, finance, corporate tax, treasury, cash management, human resources, benefits administration, time and payroll processing, information technology, and corporate communications.

PURCHASE OF NON-AFFILIATE SERVICES

1. NextBridge's process for procuring and purchasing non-affiliate services can be found in Exhibit B and a copy of NextBridge's Procurement Policy can be found at Exhibit C, Tab 2, Schedule 4, Attachment 1. An example of NextBridge's process for procuring non-affiliate services was the competitive process for a general contractor. An EOI process was held in 2014 in order to pre-qualify potential EPC companies or general contractors. Twelve companies participated in the EOI process, and five were short-listed to participate in the final project RFP process. The short-listed companies were selected based on 20 specific criteria, including, among others, experience with transmission projects; evidence of projects completed with similar complexities in terms of size, climate conditions and environmental restrictions; safety records; and contracting and employment strategies for inclusion of First Nation and Métis communities. The final RFP process was initiated in 2016. The bidders were provided with detailed project technical and constructability information, including tower design and assembly details, foundation preliminary design, construction access plans, routing based on fieldwork, environmental constraints analysis, safety requirements, and direction on NextBridge's expectation that First Nation and Métis communities would be offered economic participation opportunities.

ONE-TIME COSTS

1. NextBridge is not seeking recovery of any one-time costs.

OEB REGULATORY COSTS

1. This item has been addressed in Exhibit C, Tab 2, Schedule 4 as part of construction and Exhibit F, Tab 4, Schedule 1 as part of operational costs.

CHARITABLE AND POLITICAL DONATIONS

1. NextBridge is not seeking to recover charitable and political donations.

DEPRECIATION, AMORTIZATION AND DEPLETION

1. The purpose of this section is to summarize the method and amount of NextBridge's depreciation and amortization expense for the Test Year (April 1, 2022 to March 31, 2023). 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. Also, the use of the Foster Associates study, which allows NextBridge to not have to incur the costs of another depreciation study, provides direct savings to ratepayers. NextBridge proposes that utilizing a separate asset specific depreciation study would be useful after the asset has been in-service for an extended period, thus allowing increased measurement of unique conditions on the East-West Tie that could impact its useful life.

Depreciation Expense

2. Using the Foster Associates Inc. study, including their respective methodologies and useful life assumptions, NextBridge used the depreciation rates for specified assets in the calculation of depreciation expense for 2022. A depreciation schedule is included in Table 1.

Table 1. NextBridge Depreciation and Amortization Expenses ($ Millions)

Categories	2022
Depreciation	9.26
Total Expense	9.26

NextBridge

Depreciation and Amortization Expenses
Test Year 12 Months
($ Millions)

Line No.	Particulars	Deprn Rate	Provision
	Depreciation Expenses		
1	Major Fixed Assets		
2	Land-Rights	1.00%	0.35
3	Towers and Fixtures	1.11%	6.42
4	Overhead Conductors and Devices	1.54%	2.49
5			
6			
7	Depreciation on Fixed Assets		9.26
8			
9	Less Capitalized Depreciation		
10	Asset Removal Costs		
11	Total Depreciation Expenses		9.26
12			
	Amortization Expenses		
13	Other Amortization		
14	Total Amortization Expenses		-
15	Total Depreciation & Amortization Expenses		9.26
16	Depreciation & Amortization for recovery		9.26

TAXES OR PAYMENTS IN LIEU OF TAXES (PILS)

1. This section explains how NextBridge calculates its income tax expenses for the purposes of rate recovery. Attachment 1 to this Exhibit contains detailed calculations of income tax for the Test Year, including supporting schedules and reconciliations, as needed. Attachment 2 to this Exhibit includes a copy of the partnership's most recent tax return.

2. Over the Test Year, NextBridge is expected to incur general income tax expenses in the form of Ontario corporate minimum tax ("**OCMT**") as the allowable CCA deduction is expected to exceed the taxable income**.**

3. NextBridge is not a corporation exempt from tax under Section 149(1) of the Income Tax Act (Canada) and the Taxation Act, 2007 (Ontario), and is therefore not subject to payment in lieu of corporate income taxes ("PILs") under the Electricity Act, 1998.

DETAILED CALCULATIONS OF INCOME TAX FOR THE TEST YEAR

NextBridge
Calculation of Utility Income Taxes
Test Year 12 Months
($ Millions)

SUMMARY OF TAX EXPENSE

	2022
NEE	0.29
ENB	0.14
OMERS	0.14
BLP	0.00
Total	**0.58**

NBI LP

Line No.	Particulars		2022 (b)	
	Determination of Taxable Income			
1	Regulatory Net Income (before tax)		26.84	
2	Book to Tax Adjustments:			
3	Depreciation and amortization		9.26	
4	Capital Cost Allowance		-91.41	
5	Other		0.00	
6	Total Adjustments		-82.15	
7	**Regulatory Taxable Income/(Loss) before Loss Carry Forward**	**$**	**-55.32**	**$**
	Allocation of Taxable Income			
8	NEE		-22.13	
9	ENB		-11.06	
10	OMERS		-11.06	
11	BLP		-11.06	
12	Total	$	-55.32	$
	Tax Rates			
13	Federal Tax	%	15.00	%
14	Provincial Tax	%	11.50	%
15	Total Tax Rate	%	26.50	%

NextBridge
Calculation of Utility Income Taxes
Test Year 12 Months
($ Millions)

NEE

Line No.	Particulars		2022 (a)	
	Determination of Income Taxes			
1	Allocation of Taxable Income from NextBridge		-22.13	
2	Loss Carryforward		22.13	
3	Taxable Income after loss carryforward		0.00	
4	Tax Rate	%	26.50	%
5	**Income Tax Expense**	**$**	**0.00**	**$**
	Loss Continuity Schedule			
6	Opening Losses Carryforward		0.00	
7	Losses (Incurred)/Utilized during the year		-22.13	
8	Closing Losses Carryforward		-22.13	
	Determination of Corporate Minimum Tax			
9	Allocation of Accounting Income from NextBridge		10.73	
10	Corporate Minimum Tax Rate	%	2.70	%
11	Corporate Minimum Tax Potentially Applicable		0.29	
12	Ontario Income Tax		0.00	
13	**Corporate Minimum Tax Payable (Utilized)**	**$**	**0.29**	**$**
14	Opening CMT Credit Carryforward		0.00	
15	CMT Credit Incurred/(utilized)		0.29	
16	Closing CMT Credit Carryforward		0.29	
17	**Total Taxes Expense for NEE**	**$**	**0.29**	**$**

NextBridge
Calculation of Utility Income Taxes
Test Year 12 Months
($ Millions)

ENB

Line No.	Particulars		2020	
			(a)	
	Determination of Income Taxes			
1	Allocation of Taxable Income from NextBridge		-11.06	
2	Loss Carryforward		11.06	
3	Taxable Income after loss carryforward		0.00	
4	Tax Rate	%	26.50	%
5	Sub Total		0.00	
6	Additional Taxes due to Negative ACB		0.00	
7	**Income Tax Expense**	**$**	**0.00**	
	Loss Continuity Schedule			
8	Opening Losses Carryforward		0.00	
9	Losses (Incurred)/Utilized during the year		-11.06	
10	Closing Losses Carryforward		-11.06	
	Determination of Corporate Minimum Tax			
11	Allocation of Accounting Income from NextBridge		5.37	
12	Corporate Minimum Tax Rate	%	2.70	%
13	Corporate Minimum Tax Potentially Applicable		0.14	
14	Ontario Income Tax		0.00	
15	**Corporate Minimum Tax Payable (Utilized)**	**$**	**0.14**	**$**
16	Opening CMT Credit Carryforward		0.00	
17	CMT Credit Incurred/(utilized)		0.14	
18	Closing CMT Credit Carryforward		0.14	
19	**Total Taxes Expense for ENB**	**$**	**0.14**	**$**

NextBridge
Calculation of Utility Income Taxes
Test Year 12 Months
($ Millions)

OMERS

Line No.	Particulars		2020 (a)	
	Determination of Income Taxes			
1	Allocation of Taxable Income from NextBridge		-11.06	
2	Loss Carryforward		11.06	
3	Taxable Income after loss carryforward		0.00	
4	Tax Rate	%	26.50	%
5	Sub Total		0.00	
6	Additional Taxes due to Negative ACB		0.00	
7	**Income Tax Expense**	**$**	**0.00**	
	Loss Continuity Schedule			
8	Opening Losses Carryforward		0.00	
9	Losses (Incurred)/Utilized during the year		-11.06	
10	Closing Losses Carryforward		-11.06	
	Determination of Corporate Minimum Tax			
11	Allocation of Accounting Income from NextBridge		5.37	
12	Corporate Minimum Tax Rate	%	2.70	%
13	Corporate Minimum Tax Potentially Applicable		0.14	
14	Ontario Income Tax		0.00	
15	**Corporate Minimum Tax Payable (Utilized)**	**$**	**0.14**	**$**
16	Opening CMT Credit Carryforward		0.00	
17	CMT Credit Incurred/(utilized)		0.14	
18	Closing CMT Credit Carryforward		0.14	
19	**Total Taxes Expense for OMERS**	**$**	**0.14**	**$**

NextBridge
Calculation of Utility Income Taxes
Test Year 12 Months
($ Millions)

BLP

Line No.	Particulars		2020 (a)	
	Determination of Income Taxes			
1	Allocation of Taxable Income from NextBridge		-11.06	
2	Tax Rate	%	0.00	%
3	**Income Tax Expense**	**$**	**0.00**	**$**
	Determination of Corporate Minimum Tax			
4	Allocation of Accounting Income from NextBridge		5.37	
5	Corporate Minimum Tax Rate	%	0.00	%
6	**Corporate Minimum Tax Payable**	**$**	**0.00**	**$**
7	**Total Taxes Expense for BLP**	**$**	**0.00**	**$**

NEXTBRIDGE'S 2019 INCOME TAX RETURN

Canada Revenue Agency / Agence du revenu du Canada

Partnership Financial Return

Protected B when completed

T5013 Financial

055 **For internal use only**

Complete this financial return using the instructions in Guide T4068, Guide for the Partnership Information Return (T5013 Forms). You can file this return electronically without a web access code using the File a return service in My Business Account at **canada.ca/my-cra-business-account** or in Represent a Client at **canada.ca/taxes-representatives** for authorized representatives.

Note: All legislative references on this form refer to the Income Tax Act.

Identification

Partnership account number:
001 81444 7330 RZ0001

Partnership name:
006 NextBridge Infrastructure LP
007

Partnership operating or trading name:
008
009

Location of the partnership head office:

Has this location changed since the last time you filed a partnership information return? **010** ☐ Yes ☒ No

If **Yes**, enter the address of the new location on lines 011 to 018:

011
012

015 City
016 Province/State
017 Country
018 Postal or zip code

Mailing address of the partnership:
(if different from the head office address)

Has this address changed since the last time you filed a partnership information return? **020** ☐ Yes ☒ No

If **Yes**, enter the new mailing address on lines 021 to 028:

021 c/o
023
024

025 City
026 Province/State
027 Country
028 Postal or zip code

Location of the partnership's books and records:
(if different from the head office address)

Has this location changed since the last time you filed a partnership information return? **030** ☐ Yes ☒ No

If **Yes**, enter the address of the new location on lines 031 to 038:

031
032

035 City
036 Province/State
037 Country
038 Postal or zip code

Is this an amended return? **040** ☐ Yes ☒ No

Fiscal period to which this information return applies:

060 Fiscal period start (Year Month Day): From 2019-01-01

061 Fiscal period end* (Year Month Day): to 2019-12-31

*If you answer **Yes** to question 078 below, enter the date when the partnership ceased to exist.

The end members of this partnership are
(tick the applicable boxes):

062 01 ☐ Individuals (including trusts)
02 ☒ Corporations

Is this the first year of filing? **070** ☐ Yes ☒ No

If **Yes**, enter the date the partnership was created (Year Month Day): **071**

Number of T5013 slips: **073** 4

Is this the partnership's final information return up to dissolution? **078** ☐ Yes ☒ No

If an election was made under section 261 by one or more partners, enter the functional currency code used for this return: **079**

Was the partnership a Canadian partnership throughout the fiscal period? **082** ☒ Yes ☐ No

Type of partnership at the end of the fiscal period:

086

Non tax shelter	Tax shelter
☐ 01 General partnership	☐ 11 General partnership
☒ 02 Limited partnership	☐ 12 Limited partnership
☐ 03 Limited liability partnership	☐ 13 Co-ownership
☐ 08 Investment club	☐ 19 Other (specify below)

If the partnership is a tax shelter (TS), enter the TS identification number: **087**

Industry code (NAICS): **098** 221121

Partnership account number:

001 81444 7330 RZ0001

Fiscal period end
Year Month Day

061 2019-12-31

Documents required to be attached to this T5013 FIN, Partnership Financial Return

1. Form T5013 SUM, Summary of Partnership Income, and a copy of each T5013, Statement of Partnership Income, issued to partners and nominees or agents.
2. The General Index of Financial Information (GIFI) schedules; T5013SCH100, Balance Sheet Information, T5013SCH125, Income Statement Information, T5013SCH140, Summary Statement (when more than one schedule 125 is filed), and T5013SCH141, Financial Statement Notes Checklist (not required for investment clubs).
3. Schedules: T5013SCH1, Net Income (Loss) for Income Tax Purposes (If you are an inactive partnership, see line 280 in Guide T4068 for more information) and T5013SCH50, Partner's Ownership and Account Activity.
4. For each **Yes** answer to the following questions, **attach** the related schedule or form to the partnership return, unless otherwise instructed.

				Schedule or form
At any time during the fiscal period, was the partnership a member of another partnership? (directly; or indirectly through one or more partnerships)	**150**	☐ Yes	☒ No	9
Has the partnership had any transactions, including sections 97 and 98 transactions or subsection 85(2) transfers with its members or employees, other than transactions in the ordinary course of business? (Do not include non-arm's length transactions with non-residents.)	**162**	☐ Yes	☒ No	T2058, T2059, or T2060
Did the partnership have a total amount over $1 million of reportable transactions with non-arm's length non-residents?	**171**	☐ Yes	☒ No	T106
Does the partnership have to file Form T1134 in respect of any foreign affiliates in the fiscal period?	**172**	☐ Yes	☒ No	T1134
Has the partnership made any charitable donations, gifts of cultural or ecological property, gifts of medicine, or federal, provincial, territorial, or municipal political contributions?	**202**	☐ Yes	☒ No	2
Does the partnership have a permanent establishment in more than one jurisdiction?	**205**	☐ Yes	☒ No	5
Has the partnership realized any capital gains or incurred any capital losses during the fiscal period?	**206**	☐ Yes	☒ No	6
Does the partnership have any property that is eligible for capital cost allowance?	**208**	☒ Yes	☐ No	8
Does the partnership have any resource-related deductions (not including renounced expenditures)?	**212**	☐ Yes	☒ No	12
Is the partnership allocating any investment tax credits (ITCs)? If **Yes**, attach a document to this return providing a detailed calculation of the partnership's ITCs and their allocation to one or more partners.	**231**	☐ Yes	☒ No	Calculation and allocation
Did the partnership incur any scientific research and experimental development (SR&ED) expenditures?	**232**	☐ Yes	☒ No	T661
Did the partnership allocate renounced resource expenses to its members?	**252**	☐ Yes	☒ No	52
Did the partnership own or hold specified foreign property for which the total cost amount, at any time in the fiscal period, was more than CAN$100,000?	**259**	☐ Yes	☒ No	T1135

Partnership account number:
001 81444 7330 RZ0001

Fiscal period end
Year Month Day
061 2019-12-31

Additional information

Did the partnership use the international financial reporting standards (IFRS) when it prepared its financial statements?	**270**	☐ Yes	☒ No
Was a slip issued to one or more nominees or agents?	**271**	☐ Yes	☒ No
Does the partnership agreement require that the nominee(s) or agent(s) complete and file any of the documents identified on page 2?	**272**	☐ Yes	☒ No
Does the partnership have one or more new nominees or agents?	**273**	☐ Yes	☒ No
Did the partnership allocate any amount of income tax deducted at source?	**274**	☐ Yes	☒ No
Did the partnership make any other election(s) under the Act during the fiscal period?	**275**	☐ Yes	☒ No
If **Yes**, attach a copy of each election form to this return. Is this partnership the continuation of one or more predecessor partnerships since its last partnership information return was filed?	**277**	☐ Yes	☒ No
If **Yes**, provide the business number(s) of the predecessor partnership(s):	**278**		
	279		
Was the partnership inactive throughout the fiscal period this information return applies to?	**280**	☐ Yes	☒ No
If **Yes**, see Guide T4068 to verify your filing requirements.			
Did members of the partnership immigrate to Canada during the fiscal period?	**291**	☐ Yes	☒ No
Did members of the partnership emigrate from Canada during the fiscal period?	**292**	☐ Yes	☒ No
If the major business activity is construction, did you have any subcontractors during the fiscal period?	**295**	☐ Yes	☒ No
Did the partnership report its farming or fishing income using the cash method?	**296**	☐ Yes	☒ No
Is this a publicly traded partnership?	**297**	☐ Yes	☒ No
If **Yes**, did the partnership issue T5008 information slips to report transactions of interests in the partnership?	**298**	☐ Yes	☐ No

Miscellaneous information

For tax deductions withheld at source, was an NR4 information return filed for the fiscal period?	**301**	☒ Yes	☐ No
If **Yes**, enter the non-resident account number:	**302**	NRK212369	
If **Yes**, were NR4 slips issued?	**303**	☒ Yes	☐ No
Is this partnership a specified investment flow-through (SIFT) partnership?	**304**	☐ Yes	☒ No
If **Yes**, enter the taxable non-portfolio earnings for the fiscal period:	**305**		
If **Yes**, enter the tax payable under Part IX.1 for the fiscal period:	**306**		
Enter the amount of the late-filing penalty from line 307 of Schedule 52:	**307**		
Amount of payment enclosed with this return:	**308**		

Partnership account number:
001 81444 7330 RZ0001

Fiscal period end
Year Month Day
061 2019-12-31

Additional information for all partnerships (including tax shelters that are partnerships)

Name and identification number of the partner designated under subsection 165(1.15) of the Act

400 _____ (Name of designated partner)

402 _____ (Identification number)

Additional information for tax shelters only

Principal promoter

500 _____ (Last name (print))

501 _____ (First name (print))

502 _____ (Identification number)

Certification

950 I, Beilhart (Last name (print)) **951** Kathy.A (First name (print)) **954** Treasurer (Position or title)

certify that the information given on this form is correct and complete. I also certify that the method of calculating income, deductions and credits for this fiscal period is consistent with that of the previous fiscal period except as noted in a statement attached to this return.

955 2020-05-22 (Year Month Day) _____ (Signature of the authorized partner) **956** (561) 694-6405 (Telephone number)

Language of correspondence

Indicate your language of correspondence . . . . . **990** [X] English [ ] French

Privacy Statement

Personal information (including the SIN) is collected for the purposes of the administration or enforcement of the Income Tax Act and related programs and activities including administering tax, benefits, audit, compliance, and collection. The information collected may be used or disclosed for purposes of other federal acts that provide for the imposition and collection of a tax or duty. It may also be disclosed to other federal, provincial, territorial or foreign government institutions to the extent authorized by law. Failure to provide this information may result in interest payable, penalties or other actions. Under the Privacy Act, individuals have the right to access their personal information, request correction, or file a complaint to the Privacy Commissioner of Canada regarding the handling of the individual's personal information. Refer to Personal Information Bank CRA PPU 224 on Info Source at **canada.ca/cra-info-source**.

Canada Revenue Agency / Agence du revenu du Canada

PARTNERSHIP'S BALANCE SHEET INFORMATION

T5013
SCHEDULE 100

Partnership name	Partnership account Number	**Fiscal period end** Year Month Day	Original [X] Amended [ ]
NextBridge Infrastructure LP	81444 7330 RZ0001	2019-12-31	

Is this a NIL schedule? . . . . . **999** Yes [ ] No [X]

Balance sheet information

Account	Description	GIFI		Current year	Prior year
Assets					
	Total current assets	**1599**	+	43,324,952.00	5,582,925.00
	Total tangible capital assets	**2008**	+	181,822,070.00	75,237,063.00
	Total accumulated amortization of tangible capital assets	**2009**	–		
	Total intangible capital assets	**2178**	+		
	Total accumulated amortization of intangible capital assets	**2179**	–		
	Total long-term assets	**2589**	+		
	* Assets held in trust	**2590**	+		
	Total assets (mandatory field)	**2599**	=	225,147,022.00	80,819,988.00
Liabilities					
	Total current liabilities	**3139**	+	39,635,612.00	9,570,706.00
	Total long-term liabilities	**3450**	+		
	* Subordinated debt	**3460**	+		
	* Amounts held in trust	**3470**	+		
	Total liabilities (mandatory field)	**3499**	=	39,635,612.00	9,570,706.00
Partner's capital					
	Total partners' capital (mandatory field)	**3575**	+	185,511,410.00	71,249,282.00
	Total liabilities and partners' capital	**3585**	=	225,147,022.00	80,819,988.00

* Generic item

Canada Revenue Agency / Agence du revenu du Canada

T5013
SCHEDULE 125

Form identifier 125

GENERAL INDEX OF FINANCIAL INFORMATION (GIFI)

Partnership name	Partnership account number	Fiscal period end (Year Month Day)	
NextBridge Infrastructure LP	81444 7330 RZ0001	2019-12-31	Original [X] Amended [ ]

Income statement information

Description	GIFI

Is this a NIL schedule? . . . . . 999 [ ] Yes [X] No

Operating name 0001
Description of the operation 0002
Sequence Number 0003 01

Account	Description	GIFI		Current year	Prior year
Income statement information					
	Total sales of goods and services	8089	+		
	Cost of sales	8518	–		
	Gross profit/loss	8519	=		
	Cost of sales	8518	+		
	Total operating expenses	9367	+		3,677,503.00
	Total expenses (mandatory field)	9368	=		3,677,503.00
	Total revenue (mandatory field)	8299	+	3,762,128.00	2,162,844.00
	Total expenses (mandatory field)	9368	–		3,677,503.00
	Net non-farming income	9369	=	3,762,128.00	-1,514,659.00
Farming income statement information					
	Total farm revenue (mandatory field)	9659	+		
	Total farm expenses (mandatory field)	9898	–		
	Net farm income	9899	=		
	Net income/loss before extraordinary items – all operations	9970	=	3,762,128.00	-1,514,659.00
	Total other comprehensive income	9998	=		
Extraordinary items and income (linked to Schedule 140)					
	Extraordinary item(s)	9975	–		
	Legal settlements	9976	–		
	Unrealized gains/losses	9980	+		
	Unusual items	9985	–		
	Current income taxes	9990	–		
	Deferred income tax provision	9995	–		
	Total – Other comprehensive income	9998	+		
	Net income/loss after taxes and extraordinary items (mandatory field)	9999	=	3,762,128.00	-1,514,659.00

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Financial Statement Notes Checklist

Protected B when completed

T5013
Schedule 141

Partnership name	Partnership account number	Fiscal period end (Year Month Day)	
NextBridge Infrastructure LP	81444 7330 RZ0001	2019-12-31	[X] Original [ ] Amended

- Fill out this schedule from the perspective of the person (referred to in this schedule as the "accountant") who prepared or reported on the financial statements.
- All the information requested in this form and in the documents supporting your information return is "prescribed information".
- For more information, see Guide T4068, *Guide for the Partnership Information Return (T5013 forms)*, and Guide RC4088, *General Index of Financial Information (GIFI)*.
- Attach the original copy of this completed schedule, along with any "Notes to the financial statements" and the auditor's or accountant's report, to Form T5013 FIN, *Partnership Financial Return*.

Part 1 – Information on the accountant who prepared or reported on the financial statements

Does the accountant have a professional designation?	095	1 Yes	[X]	2 No	[ ]
Is the accountant connected with the partnership? *	097	1 Yes	[ ]	2 No	[X]

Note: If the accountant does not have a professional designation or is connected with the partnership, you do not have to complete parts 2 and 3 below.

* A person connected with a partnership can be: (i) a member of the partnership who owns more than 10% of the partnership units; (ii) an employee of the partnership; or (iii) a person not dealing at arm's length with the partnership.

Part 2 – Type of involvement with the financial statements

Choose the option that represents the accountant's highest level of involvement: **198**

Completed an auditor's report	1	[X]
Completed a review engagement report	2	[ ]
Conducted a compilation engagement	3	[ ]

Part 3 – Reservations

If you selected option 1 or option 2 **in part 2** above, answer the following question:

Has the accountant expressed a reservation?	099	1 Yes	[ ]	2 No	[X]

Part 4 – Other information (continued on page 2)

If you have a professional designation and are not the accountant associated with the financial statements in part 1 above, choose one of the following options: **110**

Prepared the information return (financial statements prepared by client)	1	[ ]
Prepared the information return and the financial information contained therein (financial statements have not been prepared)	2	[ ]

Were notes to the financial statements prepared?	101	1 Yes	[X]	2 No	[ ]

If **yes**, answer the following four questions:

Are subsequent events mentioned in the notes?	104	1 Yes	[X]	2 No	[ ]
Is re-evaluation of asset information mentioned in the notes?	105	1 Yes	[ ]	2 No	[X]
Is contingent liability information mentioned in the notes?	106	1 Yes	[ ]	2 No	[X]
Is information regarding commitments mentioned in the notes?	107	1 Yes	[X]	2 No	[ ]
Does the partnership have investments in joint ventures? If **yes**, complete question 109 below	108	1 Yes	[ ]	2 No	[X]
Are you filing joint venture(s) financial statements?	109	1 Yes	[ ]	2 No	[ ]

Partnership account number	**Fiscal period end** Year Month Day
81444 7330 RZ0001	2019-12-31

Part 4 – Other information (continued)

Impairment and fair value changes

In any of the following assets, was an amount recognized in net income or other comprehensive income as a result of an impairment loss in the fiscal period, a reversal of an impairment loss recognized in a previous fiscal period, or a change in fair value during the fiscal period? . . . . . **200** 1 Yes ☐ 2 No ☒

If **yes**, enter the amount recognized:		**In net income** Increase (decrease)		**In other comprehensive income** Increase (decrease)
Property, plant and equipment	**210**		**211**	
Intangible assets	**215**		**216**	
Investment property	**220**			
Biological assets	**225**			
Financial instruments	**230**		**231**	
Other	**235**		**236**	

Financial instruments

Did the partnership derecognize any financial instrument(s) during the fiscal period (other than trade receivables)? . . . . . **250** 1 Yes ☐ 2 No ☒

Did the partnership apply hedge accounting during the fiscal period? . . . . . **255** 1 Yes ☐ 2 No ☒

Did the partnership discontinue hedge accounting during the fiscal period? . . . . . **260** 1 Yes ☐ 2 No ☒

Adjustments to opening partners' capital

Was an amount included in the opening balance of partners' capital, in order to correct an error, to recognize a change in accounting policy, or to adopt a new accounting standard in the current fiscal period? . . . . . **265** 1 Yes ☐ 2 No ☒

If **yes**, you have to maintain a separate reconciliation.

SCHEDULE 100

GENERAL INDEX OF FINANCIAL INFORMATION – GIFI

Form identifier 100

Partnership name	Partnership account number	**Fiscal period end** Year Month Day
NextBridge Infrastructure LP	81444 7330 RZ0001	2019-12-31

Is this a NIL schedule? . . . . . **999** Yes ☐ No ☒

Assets – lines 1000 to 2599

1000	35,544,609.00	**1060**	392,269.00	**1066**	3,949,094.00
1480	3,438,980.00	**1599**	43,324,952.00	**1920**	181,822,070.00
2008	181,822,070.00	**2599**	225,147,022.00		

Liabilities – lines 2600 to 3499

2620	39,635,612.00	**3139**	39,635,612.00	**3499**	39,635,612.00

Partner's capital – lines 3540 to 3575

3545	3,762,128.00	**3550**	3,762,128.00	**3560**	0.00
3561	71,249,282.00	**3562**	3,762,128.00	**3564**	110,500,000.00
3571	185,511,410.00	**3575**	185,511,410.00	**3585**	225,147,022.00

SCHEDULE 125

GENERAL INDEX OF FINANCIAL INFORMATION – GIFI

Form identifier 125

Partnership name	Partnership account number	**Fiscal period end** Year Month Day
NextBridge Infrastructure LP	81444 7330 RZ0001	2019-12-31

Is this a NIL schedule? . . . . **999** ☐ Yes ☒ No

Description

Sequence number **0003** 01

Revenue – lines 8000 to 8299

8100	392,206.00	**8230**	3,373,078.00	**8231**	-3,156.00
8299	3,762,128.00				

Operating expenses – lines 8520 to 9369

9368	0.00	**9369**	3,762,128.00

Farming revenue – lines 9370 to 9659

9659	0.00

Farming expenses – lines 9660 to 9899

9898	0.00

Extraordinary items and taxes – lines 9970 to 9999

9970	3,762,128.00	**9999**	3,762,128.00

Canada Revenue Agency / Agence du revenu du Canada

Net Income (Loss) for Income Tax Purposes

Protected B when completed

T5013 Schedule 1

Partnership name	Partnership account number	Fiscal period end (Year Month Day)	
NextBridge Infrastructure LP	81444 7330 RZ0001	2019-12-31	[X] Original [ ] Amended

- Fill out this schedule to reconcile the partnership's net income (loss) reported on the financial statements and its net income (loss) for income tax purposes.
- All the information requested in this form and in the documents supporting your information return is "prescribed information".
- Fill out this schedule using the instructions in Guide T4068, Guide for the Partnership Information Return (T5013 forms).
- Fill out a worksheet to identify the source of all the amounts reported on the T5013 information slips.
- Attach the original copy of this completed schedule to Form T5013 FIN, Partnership Financial Return.

Is this a NIL schedule? . . . 999 [ ] Yes [X] No

(If **yes**, do not use zeroes (000 00), dashes (-), nil, or N/A on the lines.)

Amount calculated on line 9999 from Schedule 125 or Schedule 140	500		3,762,128.00
Add:			
Provision for Part IX.1 specified investment flow through (SIFT) taxes	101		
Amortization/depreciation of tangible assets	104		
Amortization of natural resource assets	105		
Amortization of intangible assets	106		
Recapture of capital cost allowance from Schedule 8	107		
Income or loss for tax purposes from partnerships	109		
Loss in equity of affiliates	110		
Loss on disposal of assets per financial statements	111		
Charitable donations and gifts from Schedule 2	112		
Political contributions from Schedule 2	114		
Current fiscal period's holdbacks	115		
Deferred and prepaid expenses	116		
Depreciation in inventory – end of fiscal period	117		
Scientific research and experimental development (SR&ED) expenditures deducted per financial statements	118		
Capitalized interest and property taxes on vacant land	119		
Non-deductible club dues and fees	120		
Non-deductible meals and entertainment expenses	121		
Non-deductible automobile expenses	122		
Non-deductible life insurance premiums	123		
Non-deductible company pension plans	124		
Reserves from financial statements – balance at the end of the fiscal period	126		
Soft costs on construction and renovation of buildings	127		
Salaries and wages paid to partners deducted on financial statements	150		
Cost of products available for sale that were consumed	151		
Personal expenses of the partners paid by the partnership	152		
Dividend rental arrangement compensation payment deductions	154		
Renounced exploration, development and resource property expenses deducted per financial statements from Schedule 52	155		
Certain fines and penalties	156		
Amount from line 508 on page 2 of this schedule	199		
Total (**Add** lines 101 to 199. Enter this amount on line 501)		▶ 501	+
Deduct: Amount from line 511 on page 3 of this schedule		502	– 3,141,400.40
Net income (loss) for income tax purposes – (line 500 **plus** line 501 **minus** line 502)		503	= 620,727.60
Deduct: Net income (loss) for general partners		504	– 62.07
Net income (loss) for income tax purposes for limited and non-active partners (line 503 **minus** line 504)		505	= 620,665.53

Protected B when completed

Partnership account number	**Fiscal period end** Year Month Day
81444 7330 RZ0001	2019-12-31

Add:

Accounts payable and accruals for cash basis – closing	201		
Accounts receivable and prepaid for cash basis – opening	202		
Accrual inventory – opening	203		
Accrued dividends – prior fiscal period	204		
Book loss on joint ventures or partnerships	205		
Capital items expensed	206		
Debt issue expense	208		
Deemed dividend income	209		
Deemed interest on loans to non-residents	210		
Deemed interest received	211		
Development expenses claimed in current fiscal period	212		
Dividend stop-loss adjustment	213		
Dividends credited to the investment account	214		
Exploration expenses claimed in current fiscal period	215		
Financing fees deducted in books	216		
Foreign accrual property income	217		
Foreign affiliate property income	218		
Foreign exchange included in retained earnings	219		
Gain on settlement of debt – income inclusion under subsection 80(13)	220		
Interest paid on income debentures	221		
Limited partnership losses	222		
Loss from international banking centres	223		
Mandatory inventory adjustment – included in current fiscal period	224		
Non-deductible advertising	226		
Non-deductible interest	227		
Non-deductible legal and accounting fees	228		
Optional value of inventory – included in current fiscal period	229		
Other expenses from financial statements	230		
Recapture of SR&ED expenditures from Form T661	231		
Resource amounts deducted	232		
Sales tax assessments	234		
Write-down of capital property	236		
Amounts received in respect of qualifying environmental trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237		
Contractors' completion method adjustment: revenue net of costs on contracts under 2 years – previous fiscal period	238		
Taxable/Non-deductible other comprehensive income items	239		

Total (**Add** lines 201 to 239. Enter this amount on line 506) ▶ **506** +

Other additions:

600		290	
601		291	
602		292	
603		293	
604		294	

Total (**Add** lines 290 to 294. Enter this amount on line 507) ▶ **507** +

Total (**Add** lines 506 and 507) **508** =

Enter the amount from line 508 on line 199 on page 1 of this schedule.

Partnership account number	**Fiscal period end** Year Month Day
81444 7330 RZ0001	2019-12-31

Deduct:

Accounts payable and accruals for cash basis – opening	300	
Accounts receivable and prepaid for cash basis – closing	301	
Accrual inventory – closing	302	
Accrued dividends – current fiscal period	303	
Bad debt	304	
Book income of joint venture or partnership	305	
Equity in income from affiliates	306	
Exempt income under section 81	307	
Income from international banking centres	308	
Mandatory inventory adjustment – included in prior fiscal period	309	
Contributions to a qualifying environmental trust	310	
Non-Canadian advertising expenses – broadcasting	311	
Non-Canadian advertising expenses – printed materials	312	
Optional value of inventory – included in prior fiscal period	313	
Other income from financial statements	314	
Payments made for allocations in proportion to borrowing and bonus interest payments	315	
Contractors' completion method adjustment: revenue net of costs on contracts under 2 years – current fiscal period	316	
Non-taxable/Deductible other comprehensive income items	347	

Other less common deductions:

700	Capitalized expenses	390	3,064,936.00	
701	Capitalized expenses included M & Ent.	391	8,257.00	
702	Correction to prior year M & Ent.	392	68,207.40	
703		393		
704		394		

Total (**Add** lines 300 to 394. Enter this amount on line 509) 3,141,400.40 ▶ **509** + 3,141,400.40

Other deductions:

Gain on disposal of assets per financial statements	401	
Non-taxable dividends under section 83	402	
Capital cost allowance from Schedule 8	403	
Terminal loss from Schedule 8	404	
Foreign non-business tax deduction under subsection 20(12)	407	
Prior fiscal period's holdbacks	408	
Deferred and prepaid expenses	409	
Depreciation in inventory – end of prior fiscal period	410	
SR&ED expenditures claimed in the fiscal period from Form T661 (line 460)	411	
Reserves from financial statements – balance at the beginning of the fiscal period	414	
Patronage dividends	416	
Contributions to deferred income plans	417	

Total (**Add** lines 401 to 417. Enter this amount on line 510) ▶ **510** +

Total (**Add** lines 509 and 510) **511** = 3,141,400.40

Enter this amount on line 502 on page 1 of this schedule.

Filed: 2020-11-04
EB-2020-0150
Exhibit F
Tab 12
Schedule 1
Attachment 2
Page 15 of 31

Canada Revenue Agency / Agence du revenu du Canada

Capital Cost Allowance (CCA)

T5013 Schedule 8
Protected B when completed

Partnership's name	Partnership account number	Fiscal period end (Year Month Day)	
NextBridge Infrastructure LP	81444 7330 RZ0001	2019-12-31	[X] Original [ ] Amended

- Fill out this schedule to calculate the amount of capital cost allowance (CCA) the partnership is claiming for the fiscal period and to account for acquisitions and/or dispositions of depreciable property
- Fill out this schedule using the instructions in the T4068, Guide for the Partnership Information Return (T5013 forms)
- If you do not have enough space to list all the information, use an additional Schedule 8
- Attach the original copy of this completed schedule to form T5013 FIN, Partnership Financial Return

1 Class number (See note 1) 200	2 Undepreciated capital cost (UCC) at the beginning of the fiscal period 201	3 Cost of acquisitions during the fiscal period (new property must be available for use) (See note 2) 203	4 Cost of acquisitions from column 3 that are accelerated investment incentive property (AIIP) or zero-emission vehicle (ZEV) (See note 3) 225	5 Adjustments and transfers (show amounts that reduce the UCC in brackets) (See note 4) 205	6 Amount from column 5 that is assistance received or receivable during the fiscal period for a property, subsequent to its disposition (See note 5) 221	7 Amount from column 5 that is repaid during the fiscal period for a property, subsequent to its disposition (See note 6) 222	8 Proceeds of dispositions (See note 7) 207	9 UCC (column 2 **plus** column 3 **plus** or **minus** column 5 **minus** column 8) (See note 8)
50	5,510.86							5,510.86
47	59,475,566.46	103,511,813.88						162,987,380.34
12	17,720.03							17,720.03
Totals	59,498,797.35	103,511,813.88						163,010,611.23

10 Proceeds of disposition available to reduce the UCC of AIIP and ZEV (column 8 **plus** column 6 **minus** column 3 **plus** column 4 **minus** column 7) (if negative, enter "0")	11 Net capital cost additions of AIIP and ZEV acquired during the fiscal period (column 4 **minus** column 10) (if negative, enter "0")	12 UCC adjustment for AIIP and ZEV acquired during the fiscal period (column 11 **multiplied** by the relevant factor) (See note 9)	13 UCC adjustment for property acquired during the fiscal period other than AIIP and ZEV (0.5 **multiplied** by the result of column 3 **minus** column 4 **minus** column 6 **plus** column 7 **minus** column 8) (if negative, enter "0") (See note 10) 224	14 CCA rate % (See note 11) 212	15 Recapture of CCA (See note 12) 213	16 Terminal loss (See note 13) 215	17 CCA (for declining balance method, the result of column 9 **plus** column 12 **minus** column 13, **multiplied** by column 14 or a lower amount) (See note 14) 217	18 UCC at the end of the fiscal period (column 9 **minus** column 17) 220
				55.00				5,510.86
			51,755,906.94	8.00				162,987,380.34
				100.00				17,720.03
			51,755,906.94	**Totals**	230	240	250	163,010,611.23

Enter the amount from line 230 on line 107 of the T5013 SCH1.
Enter the amount from line 240 on line 404 of the T5013 SCH1.
Enter the amount from line 250 on line 403 of the T5013 SCH1.

Approval code: RC-19-P010

Filed: 2020-11-04
EB-2020-0150
Exhibit F
Tab 12
Schedule 1
Attachment 2
Page 16 of 31

Note 1. If a class number has not been provided in Schedule II of the Income Tax Regulations for a particular class of property, use the subsection provided in Regulation 1101.

Note 2. Include any property acquired in previous fiscal periods that has now become available for use. This property would have been previously excluded from column 3. List separately any acquisitions of property in the class that are not subject to the 50% rule. See Income Tax Folio S3-F4-C1, General Discussion of Capital Cost Allowance, for exceptions to the 50% rule.

Note 3. AIIP is a property (other than ZEV) that you acquired after November 20, 2018 and became available for use before 2028. ZEV is, subject to certain exceptions, a new motor vehicle included in Class 54 or 55 that you acquired after March 18, 2019 and became available for use before 2028. See Guide T4068 for more information.

Note 4. Enter in column 5, "Adjustments and transfers", amounts that increase or reduce the UCC (column 9). Items that increase the UCC include amounts transferred under subsection 97(2). Items that reduce the UCC include government assistance received or entitled to be received in the fiscal period. See the Guide T4068 for other examples of adjustments and transfers to include in column 5.
Also include the UCC of each property acquired in a non-arm's length transaction (other than by virtue of a right referred to in paragraph 251(5)(b) of the Act) if the property was a depreciable property continuously owned by the transferor for at least 364 days before the end of your fiscal period.

Note 5. Include all amounts of assistance you received (or were entitled to receive) after the disposition of a depreciable property that would have decreased the capital cost of the property by virtue of paragraph 13(7.1)(f) if received before the disposition.

Note 6. Include all amounts you have repaid during the fiscal period with respect to any legally required repayment, made after the disposition of a corresponding property, of:

- assistance that would have otherwise increased the capital cost of the property under paragraph 13(7.1)(d), and
- an inducement, assistance or any other amount contemplated in paragraph 12(1)(x) received, that otherwise would have increased the capital cost of the property under paragraph 13(7.4)(b)

Also include the UCC of each property acquired in a non-arm's length transaction (other than by virtue of a right referred to in paragraph 251(5)(b) of the Act) if the property was a depreciable property continuously owned by the transferor for at least 364 days before the end of your fiscal period.

Note 7. For each property disposed of during the fiscal period, deduct from the proceeds of disposition any outlays and expenses to the extent that they were made or incurred for the purpose of making the disposition(s). The amount reported in respect of the property cannot exceed the property's capital cost, unless that property is a timber resource property as defined in subsection 13(21).
The proceeds of disposition of a ZEV that has been included in Class 54 and that is subject to the $55,000 capital cost limit will be adjusted based on a factor equal to the capital cost limit of $55,000 as a proportion of the actual cost of the vehicle.

Note 8. If the amount in column 5 reduces the UCC (i.e. it is shown in brackets), you must subtract it for the purposes of the calculation. Otherwise, add the amount in column 5 for the purpose of the calculation.

Note 9. The relevant factors for property of a class in Schedule II, that is AIIP or ZEV, available for use before 2024 are:

- 2 1/3 for property in Classes 43.1 and 54
- 1 1/2 for property in Class 55
- 1 for property in Classes 43.2 and 53
- 0 for property in Classes 12, 13, 14, and 15, as well as properties that are Canadian vessels included in paragraph 1100(1)(v) of the Regulations (see note 14 for additional information), and
- 0.5 for all other property that is AIIP

Note 10. The UCC adjustment for property other than AIIP or ZEV acquired during the fiscal period (formerly known as the half-year rule or 50% rule) does not apply to certain property. For special rules and exceptions, see Income Tax Folio S3-F4-C1, General Discussion of Capital Cost Allowance.

Note 11. Enter a rate only if you are using the declining balance method. For any other method (for example the straight-line method, where calculations are always based on the cost of acquisitions), enter N/A. Then enter the amount you are claiming in column 17.

Note 12. If the amount in column 9 is negative, you have a recapture of CCA. If applicable, enter the negative amount from column 9 in column 15 as a positive. The recapture rules do **not** apply to passenger vehicles in Class 10.1.

Note 13. If no property is left in the class at the end of the fiscal period and there is still a positive amount in column 9, you have a terminal loss. If applicable, enter the positive amount from column 9 in column 16. The terminal loss rules do not apply to:

- passenger vehicles in Class 10.1
- property in Class 14.1, unless you have ceased carrying on the business to which it relates, or
- limited-period franchises, concessions, or licences in Class 14 if, at the time of acquisition, the property was a former property of the transferor or any similar property attributable to the same fixed place of business, and you had jointly elected with the transferor to have the replacement property rules apply

Note 14. If the fiscal period is shorter than 365 days, prorate the CCA claim. Some classes of property do not have to be prorated. See Guide T4068 for more information. For property in class 10.1 disposed of during the fiscal period, deduct a maximum of 50% of the regular CCA deduction if you owned the property at the beginning of the fiscal period. For AIIP listed below, the maximum first fiscal period allowance you can claim is determined as follows:

- Class 13: the lesser of 150% of the amount calculated in Schedule III of the Regulations and the UCC at the end of the fiscal period (before any CCA deduction)
- Class 14: the lesser of 150% of the allocation for the fiscal period of the capital cost of the property apportioned over the remaining life of the property (at the time the cost was incurred) and the UCC at the end of the fiscal period (before any CCA deduction)
- Class 15: the lesser of 150% of an amount computed on the basis of a rate per cord, board foot or cubic metre cut in the fiscal period and the UCC at the end of the fiscal period (before any CCA deduction)
- Canadian vessels described under paragraph 1100(1)(v) of the Regulations: the lesser of 50% of the capital cost of the property and the UCC at the end of the fiscal period (before any CCA deduction)
- Class 41.2: use a 25% CCA rate. The additional allowance under paragraph 1100(1)(y.2) (for single mine properties) and 1100(1)(ya.2) (for multiple mine properties) of the Regulations is not eligible for the accelerated investment incentive. The additional allowance in respect of natural gas liquefaction under paragraph 1100(1)(yb) of the Regulations is eligible for the accelerated investment incentive

The AIIP also apply to property (other than a timber resource property) that is a timber limit or a right to cut timber from a limit as well as to industrial mineral mine or a right to remove minerals from an industrial mineral mine. See the Income Tax Regulations for more detail.

Canada Revenue Agency / Agence du revenu du Canada

Partner's Ownership and Account Activity

Protected B when completed

T5013
Schedule 50

Partnership name	Partnership account number	Fiscal period end (Year Month Day)	
NextBridge Infrastructure LP	814447330RZ0001	2019-12-31	[X] Original [ ] Amended

- Fill out this schedule to reconcile each partner's interest in the partnership (including partners who retired during the fiscal period).
- All the information requested in this form and in the documents supporting your information return is "prescribed information".
- Fill out this schedule using the instructions in Guide T4068, *Guide for the Partnership Information Return (T5013 forms)*.
- If you do not have enough space to list all the information, use an additional Schedule 50.
- Attach the original copy of this completed schedule to Form T5013 FIN, *Partnership Financial Return*.

Number of partners	**010**	4
Number of partners who disposed of all, or part of, their partnership interest	**011**	
Number of nominees or agents	**012**	
Total of all amounts from line 220	**015**	620,727.60

Partner 1

Ownership						Fiscal period's income (loss) allocation	Account activity
100	**101**	**105**	**106**	**107**	**110**	**220**	**300**
Partner name	Partner identification number	Type of partner	Partner code	Percentage (%) of partner's interest	Did the partner dispose of an interest during the fiscal period?	Partner's share of the net income (loss)	Cost base
Upper Canada Transmission Inc	816624001RC0001	2	2	0.0100	[ ] Yes [X] No	62.07	N/A

Account activity (continued)					At-risk amount (ARA) (for limited partners only)		
310	**320**	**330**	**340**	**350**	**410**	**420**	**430**
Cost of units acquired during the fiscal period	Partner's share of the previous fiscal period's net income (loss)	Capital contributions in the fiscal period	Withdrawals in the fiscal period	Other adjustment	Partner's share of the fiscal period's net income	Partner's share in certain reductions of resource expenses for the fiscal period	Non-arm's length debt owing and/or benefits receivable
	-545.74	11,050.00					

Partner 2

Ownership						Fiscal period's income (loss) allocation	Account activity
100	**101**	**105**	**106**	**107**	**110**	**220**	**300**
Partner name	Partner identification number	Type of partner	Partner code	Percentage (%) of partner's interest	Did the partner dispose of an interest during the fiscal period?	Partner's share of the net income (loss)	Cost base
NextEra Energy NextBridge Holding, Inc.	849397336RC0001	2	0	49.9900	[ ] Yes [X] No	310,301.73	1.00

Account activity (continued)					At-risk amount (ARA) (for limited partners only)		
310	**320**	**330**	**340**	**350**	**410**	**420**	**430**
Cost of units acquired during the fiscal period	Partner's share of the previous fiscal period's net income (loss)	Capital contributions in the fiscal period	Withdrawals in the fiscal period	Other adjustment	Partner's share of the fiscal period's net income	Partner's share in certain reductions of resource expenses for the fiscal period	Non-arm's length debt owing and/or benefits receivable
	-2,728,140.56	55,238,950.00			310,301.73		

Approval code: RC-19-P010

Partner 3	Ownership					Fiscal period's income (loss) allocation	Account activity
100	101	105	106	107	110	220	300
Partner name	Partner identification number	Type of partner	Partner code	Percentage (%) of partner's interest	Did the partner dispose of an interest during the fiscal period?	Partner's share of the net income (loss)	Cost base
Enbridge Inc.	119653384RC0001	2	0	25.0000	☐ Yes ☒ No	155,181.90	N/A

Account activity (continued)					At-risk amount (ARA) (for limited partners only)		
310	320	330	340	350	410	420	430
Cost of units acquired during the fiscal period	Partner's share of the previous fiscal period's net income (loss)	Capital contributions in the fiscal period	Withdrawals in the fiscal period	Other adjustment	Partner's share of the fiscal period's net income	Partner's share in certain reductions of resource expenses for the fiscal period	Non-arm's length debt owing and/or benefits receivable
	-1,364,343.15	27,625,000.00			155,181.90		

Partner 4	Ownership					Fiscal period's income (loss) allocation	Account activity
100	101	105	106	107	110	220	300
Partner name	Partner identification number	Type of partner	Partner code	Percentage (%) of partner's interest	Did the partner dispose of an interest during the fiscal period?	Partner's share of the net income (loss)	Cost base
Borealis NB Holdings Inc.	837050970RC0001	2	0	25.0000	☐ Yes ☒ No	155,181.90	N/A

Account activity (continued)					At-risk amount (ARA) (for limited partners only)		
310	320	330	340	350	410	420	430
Cost of units acquired during the fiscal period	Partner's share of the previous fiscal period's net income (loss)	Capital contributions in the fiscal period	Withdrawals in the fiscal period	Other adjustment	Partner's share of the fiscal period's net income	Partner's share in certain reductions of resource expenses for the fiscal period	Non-arm's length debt owing and/or benefits receivable
	-1,364,343.15	27,625,000.00			155,181.90		

Partner 5	Ownership					Fiscal period's income (loss) allocation	Account activity
100	101	105	106	107	110	220	300
Partner name	Partner identification number	Type of partner	Partner code	Percentage (%) of partner's interest	Did the partner dispose of an interest during the fiscal period?	Partner's share of the net income (loss)	Cost base
					☐ Yes ☐ No		

Account activity (continued)					At-risk amount (ARA) (for limited partners only)		
310	320	330	340	350	410	420	430
Cost of units acquired during the fiscal period	Partner's share of the previous fiscal period's net income (loss)	Capital contributions in the fiscal period	Withdrawals in the fiscal period	Other adjustment	Partner's share of the fiscal period's net income	Partner's share in certain reductions of resource expenses for the fiscal period	Non-arm's length debt owing and/or benefits receivable

Canada Revenue Agency / Agence du revenu du Canada

Fiscal period end / Exercice se terminant le: YYYY MM DD / AAAA MM JJ: 2019-12-31

T5013

Statement of Partnership Income
État des revenus d'une société de personnes

Filer's name and address – Nom et adresse du déclarant

NextBridge Infrastructure LP
1720-390 Bay Street
Toronto ON M5H 2Y2

Tax shelter identification number (see **statement** on reverse side *) / Numéro d'inscription de l'abri fiscal (lisez l'**énoncé** au dos *)

Partner code / Code de l'associé	Country code / Code du pays	Recipient type / Genre de bénéficiaire
002: 2	003: CAN	004: 3

Partnership account number (15 characters) / Numéro de compte de la société de personnes (15 caractères)	Total limited partner's business income (loss) / Total du revenu (de la perte) d'entreprise du commanditaire	Total business income (loss) / Total du revenu (de la perte) d'entreprise
001: 814447330RZ0001	010:	020: 62 07

Partner's identification number / Numéro d'identification de l'associé	Partner's share (%) of partnership / Part de l'associé (%) dans la société de personnes	Total capital gains (losses) / Total des gains (pertes) en capital	Capital cost allowance / Déduction pour amortissement
006: 816624001RC0001	005: 0.010000	030:	040:

Partner's name and address – Nom et adresse de l'associé

Last name (print) – Nom de famille (en lettres moulées) / First name – Prénom / Initials – Initiales

Upper Canada Transmission Inc
390 Bay Street
Suite 1720
Toronto ON M5H 2Y2

Box – Case	Code	Other information – Autres renseignements

Box Case	Code	Amount – Montant	Box Case	Code	Amount – Montant
116		62 07	118		376 21

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Canada Revenue Agency / Agence du revenu du Canada

Fiscal period end / Exercice se terminant le: YYYY MM DD / AAAA MM JJ: 2019-12-31

T5013

Statement of Partnership Income
État des revenus d'une société de personnes

Filer's name and address – Nom et adresse du déclarant

NextBridge Infrastructure LP
1720-390 Bay Street
Toronto ON M5H 2Y2

Tax shelter identification number (see **statement** on reverse side *) / Numéro d'inscription de l'abri fiscal (voir l'**énoncé** au dos *)

Partner code / Code de l'associé	Country code / Code du pays	Recipient type / Genre de bénéficiaire
002: 2	003: CAN	004: 3

Partnership account number (15 characters) / Numéro de compte de la société de personnes (15 caractères)	Total limited partner's business income (loss) / Total du revenu (de la perte) d'entreprise du commanditaire	Total business income (loss) / Total du revenu (de la perte) d'entreprise
001: 814447330RZ0001	010:	020: 62 07

Partner's identification number / Numéro d'identification de l'associé	Partner's share (%) of partnership / Part de l'associé (%) dans la société de personnes	Total capital gains (losses) / Total des gains (pertes) en capital	Capital cost allowance / Déduction pour amortissement
006: 816624001RC0001	005: 0.010000	030:	040:

Partner's name and address – Nom et adresse de l'associé

Last name (print) – Nom de famille (en lettres moulées) / First name – Prénom / Initials – Initiales

Upper Canada Transmission Inc
390 Bay Street
Suite 1720
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Box Case	Code	Amount – Montant	Box Case	Code	Amount – Montant
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Canada Revenue Agency / Agence du revenu du Canada

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Statement of Partnership Income
État des revenus d'une société de personnes

Fiscal period end / Exercice se terminant le: YYYY MM DD / AAAA MM JJ — 2019-12-31

Filer's name and address – Nom et adresse du déclarant

NextBridge Infrastructure LP
1720-390 Bay Street
Toronto ON M5H 2Y2

Tax shelter identification number (see **statement** on reverse side *) / Numéro d'inscription de l'abri fiscal (lisez l'**énoncé** au dos *)

Partner code / Code de l'associé	Country code / Code du pays	Recipient type / Genre de bénéficiaire
002: 0	003: CAN	004: 3

Partnership account number (15 characters) / Numéro de compte de la société de personnes (15 caractères)	Total limited partner's business income (loss) / Total du revenu (de la perte) d'entreprise du commanditaire	Total business income (loss) / Total du revenu (de la perte) d'entreprise
001: 814447330RZ0001	010: 310,301 73	020:

Partner's identification number / Numéro d'identification de l'associé	Partner's share (%) of partnership / Part de l'associé (%) dans la société de personnes	Total capital gains (losses) / Total des gains (pertes) en capital	Capital cost allowance / Déduction pour amortissement
006: 849397336RC0001	005: 49.990000	030:	040:

Partner's name and address – Nom et adresse de l'associé

Last name (print) – Nom de famille (en lettres moulées) / First name – Prénom / Initials – Initiales

NextEra Energy NextBridge Holding, Inc.
390 Bay Street
Suite 1720
Toronto ON MSH2Y2

Box – Case	Code	Amount – Montant	Box – Case	Code	Amount – Montant
104		310,301 73	105		81,242,702 88
106		81,242,702 88	118		1,880,687 79

Box – Case	Code	Other information – Autres renseignements	Box – Case	Code	Amount – Montant	Box – Case	Code	Amount – Montant

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Statement of Partnership Income
État des revenus d'une société de personnes

Filer's name and address – Nom et adresse du déclarant

NextBridge Infrastructure LP
1720-390 Bay Street
Toronto ON M5H 2Y2

Tax shelter identification number (see **statement** on reverse side *) / Numéro d'inscription de l'abri fiscal (lisez l'**énoncé** au dos *)

Partner code / Code de l'associé	Country code / Code du pays	Recipient type / Genre de bénéficiaire
002: 0	003: CAN	004: 3

Partnership account number (15 characters) / Numéro de compte de la société de personnes (15 caractères)	Total limited partner's business income (loss) / Total du revenu (de la perte) d'entreprise du commanditaire	Total business income (loss) / Total du revenu (de la perte) d'entreprise
001: 814447330RZ0001	010: 310,301 73	020:

Partner's identification number / Numéro d'identification de l'associé	Partner's share (%) of partnership / Part de l'associé (%) dans la société de personnes	Total capital gains (losses) / Total des gains (pertes) en capital	Capital cost allowance / Déduction pour amortissement
006: 849397336RC0001	005: 49.990000	030:	040:

Partner's name and address – Nom et adresse de l'associé

Last name (print) – Nom de famille (en lettres moulées) / First name – Prénom / Initials – Initiales

NextEra Energy NextBridge Holding, Inc.
390 Bay Street
Suite 1720
Toronto ON MSH2Y2

Box – Case	Code	Amount – Montant	Box – Case	Code	Amount – Montant
104		310,301 73	105		81,242,702 88
106		81,242,702 88	118		1,880,687 79

Box – Case	Code	Other information – Autres renseignements	Box – Case	Code	Amount – Montant	Box – Case	Code	Amount – Montant

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Canada Revenue Agency / Agence du revenu du Canada

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Statement of Partnership Income
État des revenus d'une société de personnes

Filer's name and address – Nom et adresse du déclarant

NextBridge Infrastructure LP
1720-390 Bay Street
Toronto ON M5H 2Y2

Tax shelter identification number (see **statement** on reverse side *) / Numéro d'inscription de l'abri fiscal (lisez l'**énoncé** au dos *)

Partner code / Code de l'associé	Country code / Code du pays	Recipient type / Genre de bénéficiaire
002: 0	003: CAN	004: 3

Partnership account number (15 characters) / Numéro de compte de la société de personnes (15 caractères)	Total limited partner's business income (loss) / Total du revenu (de la perte) d'entreprise du commanditaire	Total business income (loss) / Total du revenu (de la perte) d'entreprise
001: 814447330RZ0001	010: 155,181.90	020:

Partner's identification number / Numéro d'identification de l'associé	Partner's share (%) of partnership / Part de l'associé (%) dans la société de personnes	Total capital gains (losses) / Total des gains (pertes) en capital	Capital cost allowance / Déduction pour amortissement
006: 119653384RC0001	005: 25.000000	030:	040:

Partner's name and address – Nom et adresse de l'associé

Last name (print) – Nom de famille (en lettres moulées) / First name – Prénom / Initials – Initiales

Enbridge Inc.
425 - 1st Street S.W.
Calgary AB T2P3L8

Box Case	Code	Amount – Montant	Box Case	Code	Amount – Montant
104		155,181.90	105		42,721,020.85
106		42,721,020.85	118		940,532.00

Box – Case	Code	Other information – Autres renseignements	Box Case	Code	Amount – Montant	Box Case	Code	Amount – Montant

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Canada Revenue Agency / Agence du revenu du Canada

Fiscal period end / Exercice se terminant le: YYYY MM DD / AAAA MM JJ — 2019-12-31

T5013

Statement of Partnership Income / État des revenus d'une société de personnes

Filer's name and address – Nom et adresse du déclarant

NextBridge Infrastructure LP
1720-390 Bay Street
Toronto ON M5H 2Y2

Tax shelter identification number (see **statement** on reverse side *) / Numéro d'inscription de l'abri fiscal (lisez l'**énoncé** au dos *)

Partner code / Code de l'associé	Country code / Code du pays	Recipient type / Genre de bénéficiaire
002: 0	003: CAN	004: 3

Partnership account number (15 characters) / Numéro de compte de la société de personnes (15 caractères)	Total limited partner's business income (loss) / Total du revenu (de la perte) d'entreprise du commanditaire	Total business income (loss) / Total du revenu (de la perte) d'entreprise
001: 814447330RZ0001	010: 155,181.90	020:

Partner's identification number / Numéro d'identification de l'associé	Partner's share (%) of partnership / Part de l'associé (%) dans la société de personnes	Total capital gains (losses) / Total des gains (pertes) en capital	Capital cost allowance / Déduction pour amortissement
006: 119653384RC0001	005: 25.000000	030:	040:

Partner's name and address – Nom et adresse de l'associé

Last name (print) – Nom de famille (en lettres moulées) / First name – Prénom / Initials – Initiales

Enbridge Inc.
425 - 1st Street S.W.
Calgary AB T2P3L8

Box Case	Code	Amount – Montant	Box Case	Code	Amount – Montant
104		155,181.90	105		42,721,020.85
106		42,721,020.85	118		940,532.00

Box – Case	Code	Other information – Autres renseignements	Box Case	Code	Amount – Montant	Box Case	Code	Amount – Montant

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Canada Revenue Agency / Agence du revenu du Canada

Fiscal period end / Exercice se terminant le — YYYY MM DD / AAAA MM JJ: 2019-12-31

T5013

Statement of Partnership Income
État des revenus d'une société de personnes

Filer's name and address – Nom et adresse du déclarant

NextBridge Infrastructure LP
1720-390 Bay Street
Toronto ON M5H 2Y2

Tax shelter identification number (see **statement** on reverse side *) / Numéro d'inscription de l'abri fiscal (lisez l'**énoncé** au dos *)

Partner code / Code de l'associé	Country code / Code du pays	Recipient type / Genre de bénéficiaire
002: 0	003: CAN	004: 3

Partnership account number (15 characters) / Numéro de compte de la société de personnes (15 caractères)	Total limited partner's business income (loss) / Total du revenu (de la perte) d'entreprise du commanditaire	Total business income (loss) / Total du revenu (de la perte) d'entreprise
001: 814447330RZ0001	010: 155,181.90	020:

Partner's identification number / Numéro d'identification de l'associé	Partner's share (%) of partnership / Part de l'associé (%) dans la société de personnes	Total capital gains (losses) / Total des gains (pertes) en capital	Capital cost allowance / Déduction pour amortissement
006: 837050970RC0001	005: 25.000000	030:	040:

Partner's name and address – Nom et adresse de l'associé

Last name (print) – Nom de famille (en lettres moulées) / First name – Prénom / Initials – Initiales

▶ Borealis NB Holdings Inc.

Borealis Infrastructure Management Inc.
200 Bay Street, Suite 2100
Toronto ON M5J2J2

Box Case	Code	Amount – Montant	Box Case	Code	Amount – Montant
104		155,181.90	105		42,721,020.85
106		42,721,020.85	118		940,532.00

Box – Case	Code	Other information – Autres renseignements	Box Case	Code	Amount – Montant	Box Case	Code	Amount – Montant

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Canada Revenue Agency / Agence du revenu du Canada

Fiscal period end / Exercice se terminant le — YYYY MM DD / AAAA MM JJ: 2019-12-31

T5013

Statement of Partnership Income / État des revenus d'une société de personnes

Filer's name and address – Nom et adresse du déclarant

NextBridge Infrastructure LP
1720-390 Bay Street
Toronto ON M5H 2Y2

Tax shelter identification number (see **statement** on reverse side *) / Numéro d'inscription de l'abri fiscal (voir l'**énoncé** au dos *)

Partner code / Code de l'associé	Country code / Code du pays	Recipient type / Genre de bénéficiaire
002: 0	003: CAN	004: 3

Partnership account number (15 characters) / Numéro de compte de la société de personnes (15 caractères)	Total limited partner's business income (loss) / Total du revenu (de la perte) d'entreprise du commanditaire	Total business income (loss) / Total du revenu (de la perte) d'entreprise
001: 814447330RZ0001	010: 155,181.90	020:

Partner's identification number / Numéro d'identification de l'associé	Partner's share (%) of partnership / Part de l'associé (%) dans la société de personnes	Total capital gains (losses) / Total des gains (pertes) en capital	Capital cost allowance / Déduction pour amortissement
006: 837050970RC0001	005: 25.000000	030:	040:

Partner's name and address – Nom et adresse de l'associé

Last name (print) – Nom de famille (en lettres moulées) / First name – Prénom / Initials – Initiales

▶ Borealis NB Holdings Inc.

Borealis Infrastructure Management Inc.
200 Bay Street, Suite 2100
Toronto ON M5J2J2

Box	Case	Code	Amount – Montant	Box	Case	Code	Amount – Montant
	104		155,181.90		105		42,721,020.85
	106		42,721,020.85		118		940,532.00

Box – Case	Code	Other information – Autres renseignements	Box	Case	Code	Amount – Montant	Box	Case	Code	Amount – Montant

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Canada Revenue Agency / Agence du revenu du Canada

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Statement of Partnership Income
État des revenus d'une société de personnes

Fiscal period end / Exercice se terminant le — YYYY MM DD / AAAA MM JJ: 2019-12-31

Filer's name and address – Nom et adresse du déclarant

NextBridge Infrastructure LP
1720-390 Bay Street
Toronto ON M5H 2Y2

Tax shelter identification number (see **statement** on reverse side *) / Numéro d'inscription de l'abri fiscal (lisez l'**énoncé** au dos *)

Partner code / Code de l'associé	Country code / Code du pays	Recipient type / Genre de bénéficiaire
002: 2	003: CAN	004: 3

Partnership account number (15 characters) / Numéro de compte de la société de personnes (15 caractères)	Total limited partner's business income (loss) / Total du revenu (de la perte) d'entreprise du commanditaire	Total business income (loss) / Total du revenu (de la perte) d'entreprise
001: 814447330RZ0001	010:	020: 62 07

Partner's identification number / Numéro d'identification de l'associé	Partner's share (%) of partnership / Part de l'associé (%) dans la société de personnes	Total capital gains (losses) / Total des gains (pertes) en capital	Capital cost allowance / Déduction pour amortissement
006: 816624001RC0001	005: 0.010000	030:	040:

Partner's name and address – Nom et adresse de l'associé

Last name (print) – Nom de famille (en lettres moulées) / First name – Prénom / Initials – Initiales

Upper Canada Transmission Inc
390 Bay Street
Suite 1720
Toronto ON M5H 2Y2

Box – Case	Code	Other information – Autres renseignements

Box Case	Code	Amount – Montant	Box Case	Code	Amount – Montant
116		62 07	118		376 21

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Canada Revenue Agency / Agence du revenu du Canada

Fiscal period end / Exercice se terminant le — YYYY MM DD / AAAA MM JJ: 2019-12-31

T5013

Statement of Partnership Income / État des revenus d'une société de personnes

Filer's name and address – Nom et adresse du déclarant

NextBridge Infrastructure LP
1720-390 Bay Street
Toronto ON M5H 2Y2

Tax shelter identification number (see **statement** on reverse side *) / Numéro d'inscription de l'abri fiscal (voir l'**énoncé** au dos *)

Partner code / Code de l'associé: 002 — 0

Country code / Code du pays: 003 — CAN

Recipient type / Genre de bénéficiaire: 004 — 3

Partnership account number (15 characters) / Numéro de compte de la société de personnes (15 caractères): 001 — 814447330RZ0001

Total limited partner's business income (loss) / Total du revenu (de la perte) d'entreprise du commanditaire: 010 — 310,301 73

Total business income (loss) / Total du revenu (de la perte) d'entreprise: 020

Partner's identification number / Numéro d'identification de l'associé: 006 — 849397336RC0001

Partner's share (%) of partnership / Part de l'associé (%) dans la société de personnes: 005 — 49.990000

Total capital gains (losses) / Total des gains (pertes) en capital: 030

Capital cost allowance / Déduction pour amortissement: 040

Partner's name and address – Nom et adresse de l'associé

Last name (print) – Nom de famille (en lettres moulées) / First name – Prénom / Initials – Initiales

▶ NextEra Energy NextBridge Holding, Inc.

390 Bay Street
Suite 1720
Toranto ON MSH2Y2

Box – Case	Code	Amount – Montant	Box – Case	Code	Amount – Montant
104		310,301 73	105		81,242,702 88
106		81,242,702 88	118		1,880,687 79

Box – Case	Code	Other information – Autres renseignements	Box – Case	Code	Amount – Montant	Box – Case	Code	Amount – Montant

See the privacy notice on your return
Consultez l'avis de confidentialité dans votre déclaration

Canada Revenue Agency / Agence du revenu du Canada

T5013

Statement of Partnership Income
État des revenus d'une société de personnes

Fiscal period end / Exercice se terminant le — YYYY MM DD / AAAA MM JJ: 2019-12-31

Filer's name and address – Nom et adresse du déclarant

NextBridge Infrastructure LP
1720-390 Bay Street
Toronto ON M5H 2Y2

Tax shelter identification number (see **statement** on reverse side *) / Numéro d'inscription de l'abri fiscal (lisez l'**énoncé** au dos *)

Partner code / Code de l'associé	Country code / Code du pays	Recipient type / Genre de bénéficiaire
002: 0	003: CAN	004: 3

Partnership account number (15 characters) / Numéro de compte de la société de personnes (15 caractères)	Total limited partner's business income (loss) / Total du revenu (de la perte) d'entreprise du commanditaire	Total business income (loss) / Total du revenu (de la perte) d'entreprise
001: 814447330RZ0001	010: 155,181.90	020:

Partner's identification number / Numéro d'identification de l'associé	Partner's share (%) of partnership / Part de l'associé (%) dans la société de personnes	Total capital gains (losses) / Total des gains (pertes) en capital	Capital cost allowance / Déduction pour amortissement
006: 119653384RC0001	005: 25.000000	030:	040:

Partner's name and address – Nom et adresse de l'associé

Last name (print) – Nom de famille (en lettres moulées) / First name – Prénom / Initials – Initiales

Enbridge Inc.
425 - 1st Street S.W.
Calgary AB T2P3L8

Box / Case	Code	Amount – Montant	Box / Case	Code	Amount – Montant
104		155,181.90	105		42,721,020.85
106		42,721,020.85	118		940,532.00

Box – Case	Code	Other information – Autres renseignements	Box / Case	Code	Amount – Montant	Box / Case	Code	Amount – Montant

Canada Revenue Agency / Agence du revenu du Canada

Fiscal period end / Exercice se terminant le: YYYY MM DD / AAAA MM JJ — 2019-12-31

T5013

Statement of Partnership Income
État des revenus d'une société de personnes

Filer's name and address – Nom et adresse du déclarant

NextBridge Infrastructure LP
1720-390 Bay Street
Toronto ON M5H 2Y2

Tax shelter identification number (see **statement** on reverse side *) / Numéro d'inscription de l'abri fiscal (voir l'**énoncé** au dos *)

Partner code / Code de l'associé	Country code / Code du pays	Recipient type / Genre de bénéficiaire
002: 0	003: CAN	004: 3

Partnership account number (15 characters) / Numéro de compte de la société de personnes (15 caractères)	Total limited partner's business income (loss) / Total du revenu (de la perte) d'entreprise du commanditaire	Total business income (loss) / Total du revenu (de la perte) d'entreprise
001: 814447330RZ0001	010: 155,181.90	020:

Partner's identification number / Numéro d'identification de l'associé	Partner's share (%) of partnership / Part de l'associé (%) dans la société de personnes	Total capital gains (losses) / Total des gains (pertes) en capital	Capital cost allowance / Déduction pour amortissement
006: 837050970RC0001	005: 25.000000	030:	040:

Partner's name and address – Nom et adresse de l'associé

Last name (print) – Nom de famille (en lettres moulées) / First name – Prénom / Initials – Initiales

▶ Borealis NB Holdings Inc.

Borealis Infrastructure Management Inc.
200 Bay Street, Suite 2100
Toronto ON M5J2J2

Box – Case	Code	Amount – Montant	Box – Case	Code	Amount – Montant
104		155,181.90	105		42,721,020.85
106		42,721,020.85	118		940,532.00

Box – Case	Code	Other information – Autres renseignements	Box – Case	Code	Amount – Montant	Box – Case	Code	Amount – Montant

See the privacy notice on your return
Consultez l'avis de confidentialité dans votre déclaration

Canada Revenue Agency / Agence du revenu du Canada

Summary of Partnership Income
Sommaire des revenus d'une société de personnes

Protected B / Protégé B
when completed / une fois rempli

T5013 Summary / Sommaire

Fill out this summary and related slips using the instructions in guide T4068, *Guide for the Partnership Information Return (T5013 forms)*.

Remplissez ce sommaire et les feuillets connexes en suivant les instructions du guide T4068, *Guide pour la déclaration de renseignements des sociétés de personnes (formulaires T5013)*.

Do not use this area.
N'inscrivez rien ici.

For the fiscal period – Pour l'exercice

Start / Début: 2019-01-01 (Year / Month / Day – Année / Mois / Jour)

End / Fin: 2019-12-31 (Year / Month / Day – Année / Mois / Jour)

Partnership's account number
Numéro de compte de la société de personnes: 81444 7330 RZ0001

50 | 1616

Name of the partnership – Nom de la société de personnes: NextBridge Infrastructure LP

Postal or ZIP code / Code postal ou ZIP: M5H 2Y2

Are you a nominee or agent? (tick if yes and provide the following information)
Êtes-vous un mandataire ou un agent? (cochez si oui et fournir les renseignements qui suivent) ☐

Name of the nominee or agent – Nom du mandataire ou de l'agent:

Postal or ZIP code / Code postal ou ZIP:

Nominee or agent's account number
Numéro de compte du mandataire ou de l'agent:

Is the partnership a tax shelter? (tick if yes)
La société de personnes est-elle un abri fiscal? (cochez si oui) ☐

If yes, provide the tax shelter identification number
Si oui, fournir le numéro d'identification de l'abri fiscal:

Totals from T5013 slips – Totaux des feuillets T5013

Total number of T5013 information slips attached:
Nombre total de feuillets de renseignements T5013 joints : **009** 4

Total limited partner's business income (loss) – Total du revenu (de la perte) d'entreprise du commanditaire	010	620,665	53
Total business income (loss) – Total du revenu (de la perte) d'entreprise	020	62	07
Total capital gains (losses) – Total des gains (pertes) en capital	030		
Capital cost allowance – Déduction pour amortissement	040		

Complete the six generic boxes identified below taken from the T5013 slips – Remplissez les lignes ci-dessous pour les six cases génériques qui parviennent des feuillets T5013

Canadian and foreign net rental income (loss) – Revenu net (perte nette) de location canadien et étranger	110		
Professional income (loss) – Revenu (perte) de profession libérale	120		
Renounced Canadian exploration expenses – Frais renoncés d'exploration au Canada	190		
Renounced Canadian development expenses – Frais renoncés d'aménagement au Canada	191		
Expenses qualifying for an ITC – Frais admissibles aux fins du CII	194		
Total carrying charges – Total des frais financiers	210		

Person to contact about this return
Personne-ressource que nous pouvons contacter à propos de cette déclaration

076 Mahesan velayuthampillai

Area code / Indicatif régional | Telephone number / Numéro de téléphone | Extension / Numéro de poste

078 (561) 694-3173

Certification – Attestation

I certify that the information given in this return and related summary and slips is correct and complete.

J'atteste que les renseignements fournis dans cette déclaration de renseignements et sur tous les feuillets connexes sont exacts et complets.

Date	Signature of authorized person – Signature d'une personne autorisée	Position or office – Poste ou titre
2020-05-22		Treasurer

Prepared by – Préparé par	Date
Mahesan velayuthampillai	2020-05-22

Personal information, including the social insurance number, is collected under the *Income Tax Act* to administer tax, benefits, and related programs. It may also be used for any purpose related to the administration or enforcement of the Act such as audit, compliance and the payment of debts owed to the Crown. It may be shared or verified with other federal, provincial/territorial government institutions to the extent authorized by law. Failure to provide this information may result in interest payable, penalties or other actions. Under the *Privacy Act*, individuals have the right to access their personal information and request correction if there are errors or omissions. Refer to Info Source **www.cra-arc.gc.ca/gncy/tp/nfsrc/nfsrc-eng.html**, personal information bank(s) CRA PPU 224.

Les renseignements personnels sont recueillis selon la *Loi de l'impôt sur le revenu* afin d'administrer les programmes fiscaux, de prestations et autres. Ils peuvent également être utilisés pour toute fin liée à l'application ou à l'exécution de la *Loi* telle que la vérification, l'observation et le recouvrement des sommes dues à l'État. Les renseignements peuvent être transmis à une autre institution gouvernementale fédérale, provinciale ou territoriale, ou vérifiés auprès de celles-ci, dans la mesure où la loi l'autorise. Cependant, le défaut de fournir ces renseignements pourrait entraîner des intérêts à payer, des pénalités ou d'autres mesures. Les particuliers ont le droit, selon la *Loi sur la protection des renseignements personnels*, d'accéder à leurs renseignements personnels et de demander une modification, s'il y a des erreurs ou omissions. Consultez Info Source en allant à **www.arc.gc.ca/gncy/tp/nfsrc/nfsrc-fra.html** et le(s) Fichier(s) de renseignements personnels ARC PPU 224.

INCOME TAXES

1. NextBridge is a limited partnership formed under the Ontario *Limited Partnerships Act*. A partnership is generally not taxable under the *Income Tax Act*. A partnership is required to compute its taxable income, which is then allocated to its partners who are responsible for reporting income and payment of taxes thereon. The current limited partners are: (A) NextEra, a British Columbia unlimited liability company; (B) Enbridge, a Canadian corporation and (C) Borealis NB Holdings Inc., an Ontario corporation. NextEra, Enbridge, and OMERS hold 50%, 25% and 25% of NextBridge's issued and outstanding limited partnership units respectively. At commercial operation, Bamkushwada, LP will join the partnership, and its beneficiaries or shareholders are not subject to PILs or corporate income tax. At that time, NextEra, Enbridge, OMERS, and Bamkushwada, LP will hold 40%, 20%, 20% and 20% of NextBridge's issued and outstanding limited partnership units respectively. Therefore, the taxable income in NextBridge allocated to Bamkushwada, LP will not be subject to income tax. This ultimately leads to less total income tax paid, which is a saving for ratepayers and this has been reflected in the requested revenue requirement in this application. Aside from Bamkushwada LP, NextBridge does not have any other non-taxable entities, and, therefore, is not seeking in this Application the recovery of taxes attributable to non-taxable entities.

Table 1. Corporate Income Taxes ($ Millions)

Categories	Test Year
Regulatory Taxable Income	(44.21)
Income Tax Rate	26.50%
Corporate Income Tax Attributable to Taxable Partners *(Does not apply if less than zero)*	**(11.73)**

Categories	Test Year
Accounting Income	21.47
OCMT Rate	2.70%
Net Income Taxes (OCMT Attributable to Taxable Partners)	**0.58**

Regulatory Income Tax Expense

2. Regulatory Income Taxes for NextBridge are determined by applying the statutory tax rate to the portion of regulatory taxable income of the taxable corporate partners of NextBridge.

Income Tax Rate (Federal and Ontario)

3. A combined income tax rate of 26.5% has been used for the Test Year, as set out in Table 6 below, comprising a federal rate of 15% and a provincial rate of 11.5%. Any variance between actual taxes payable and forecasted taxes, because of tax policy and legislation changes or rate changes for income tax or capital cost allowance, will be captured in a deferral account for tax rate changes as per subsection 7.1 of the *Electricity Distribution Rate Handbook*, described further in Exhibit H.

Table 2. Combined Income Tax Rates

Category	IR Term					
	2022	**2023**	**2024**	**2025**	**2026**	**2027-2031**
Federal Tax Rate (%)	15.00	15.00	15.00	15.00	15.00	15.00
Provincial Rate (%)	11.50	11.50	11.50	11.50	11.50	11.50
Total Statutory Tax Rate (%)	**26.50**	**26.50**	**26.50**	**26.50**	**26.50**	**26.50**

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.

Reconciliation Between Regulatory Net Income Before Tax and Taxable Income

5. Reconciliation between the regulatory net income before tax ("**NIBT**") and taxable income for the Test Year calculated as part of NextBridge's detailed calculations of income tax found in Exhibit F, Tab 12, Schedule 1, Attachment 1. This schedule contains the income tax computation and also shows how the taxable income is computed by making adjustments to the regulatory NIBT for items such as depreciation and CCA. The calculation of CCA is provided in Exhibit F, Tab 13, Schedule 1, Attachment 1.

6. CCA is calculated on a declining balance and, as a result, the amount of CCA available to reduce taxable income decreases. The Accelerated Investments Incentive program included in the Bill C-97, *the Budget Implementation Act, 2019, No. 1* provides for a first-year increase of CCA deductions for eligible capital. NextBridge's assets are expected to be eligible for the accelerated CCA. Since the assets will be placed in-service on March 31, 2022, the first month of depreciation for book purposes will be April 2022, whereas a full year of CCA will be recognized for tax purposes in 2022. This has been reflected in the computation of the taxable income for the applicable years.

[13] OCMT has a 20-year carry forward period and it will expire unutilized after 20-year period

Overview of Process to Arrive at Taxable Income

7. The starting point for the computation of NextBridge's taxable income is the NIBT. The NIBT is prepared by using US GAAP, but taxable income is computed using the relevant tax legislation, interpretations, and assessing practices. Therefore, there may be adjustments made to NIBT to arrive at taxable income.

Supporting Attachments

8. The following attachments supporting the determination of the income tax expense are provided:

Attachment : Calculation of Utility Income 1 Taxes – Test Year

To be filed separately in Microsoft Excel format

Attachment : Calculation of Capital Cost Allowance – Test Year

NextBridge

Calculation of Capital Cost allowance (CCA)
Test Year 12 Months
($ Millions)

CCA Class	Opening UCC	Net Additions	UCC pre-1/2 yr	50% net additions	UCC for CCA	CCA Rate	CCA	Accelerated CCA Incentive	Closing UCC
14.1	-	35.1	35.1	(17.5)	17.5	0.1	0.9	1.8	32.5
47	-	739.8	739.8	(369.9)	369.9	0.1	29.6	59.2	651.1
UCC	-	774.9	774.9	(387.5)	387.5	0.1	30.5	60.9	683.5
						TOTAL CCA	**91.4**		

CAPITAL COST ALLOWANCE

NextBridge
Calculation of Capital Cost allowance (CCA)
Test Year 12 Months
($ Millions)

CCA Class	Opening UCC	Net Additions	UCC pre-1/2 yr	50% net additions	UCC for CCA	CCA Rate	CCA	Accelerated CCA Incentive	Closing UCC
14.1	-	35.09	35.09	(17.55)	17.55	0.05	0.88	1.75	32.46
47	-	739.85	739.85	(369.92)	369.92	0.08	29.59	59.19	651.07
UCC	-	774.94	774.94	(387.47)	387.47	0.13	30.47	60.94	683.53
						TOTAL CCA	**91.41**		

NON-RECOVERABLE AND DISALLOWED EXPENSES

1. This section of the Application is not applicable.

INTEGRITY CHECKS

1. NextBridge has performed the integrity checks listed in Section 2.8.11.2 of the Chapter 2 of the *Transmission Filing Requirements*.

Z-FACTOR CLAIMS

1. 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.

COST OF CAPITAL AND CAPITAL STRUCTURE

1. This Exhibit summarizes the method and cost of capital and capital structure used in this Application. The cost of capital as described in this Exhibit has been reflected in the revenue requirement for 2022, using the most recent OEB-approved cost of capital parameters for 2020 including ROE, deemed short-term debt rate and the deemed long-term debt rate.

Annual Review Process

2. 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. This planning process ultimately forms part of the 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's operational needs are assessed on an annual basis and are incorporated into its's investment planning process to establish a plan that addresses those operation needs while minimizing rate impacts. 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.

3. The cost of capital as described in this Exhibit has been reflected in the revenue requirement for the Test Year (April 1, 2022 to March 31, 2023). NextBridge's proposed 2022 cost of capital is presented in Tables 1 to 3 below:

Table 1. Summary of Cost of Capital for Test Year 2022 ($ Millions)

NextBridge
Summary of Cost of Capital
Utility Capital Structure
Calculation of Revenue Requirement
Test Year (April 1, 2022 to March 31, 2023)
($ Millions)

Line No.	Particulars	($ M)	%	Cost Rate (%)	Return ($ M)
		(a)	(b)	(c)	(d)
I	Long-term debt	431.4	56.0%	3.2%	13.8
2	Short-term debt	30.8	4.0%	2.8%	0.8
3	Deemed long-term debt	0.0	0.0%	0.0%	0.0
4	Total debt	462.3	60.0%	3.2%	14.7
5	Common equity	308.2	40.0%	8.5%	26.3
6	Total rate base	770.4	100.0%	5.3%	41.0

Table 2. NextBridge Cost of Capital

Test Year 12 Months				
Amount of Deemed			**Cost Rate**	**Return**
Return	**($ Millions)**	**%**	**(%)**	**($ Millions)**
Long-term debt	431.4	56%	3.21%	13.8
Short-term debt	30.8	4%	2.75%	0.8
Common equity	308.2	40%	8.52%	26.3
Total	**770.4**	**100%**	**5.32%**	**41.0**

Table 3. Return on Capital ($ Millions)

Categories	Test Year
Return on Debt	14.7
Return on Equity	26.3
Return on Capital	**41.0**

CAPITAL STRUCTURE

1. 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.

LONG-TERM DEBT

1. The OEB has determined that the deemed amount of long-term debt that should be factored into rate-setting be fixed at 56% of rate base, consistent with the OEB's report on the Cost of Capital for Ontario's Regulated Utilities, dated December 11, 2009 (EB-2009-0084). 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).

2. 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. 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.

3. NextBridge has agreements in place with five major Canadian banks to participate in providing financing to the NextBridge East-West Tie line project. NextBridge expects this level of participation will lead to competitive financing rates for customers.

4. NextBridge will also rely on its Canadian partners, who have extensive relationships with banking institutions, to achieve the lowest cost financing for customers. Table 1 below demonstrates only a small portion of the extensive ability of NextEra, Enbridge and OMERS to achieve attractive financing for projects. Additionally, NextEra has successfully negotiated over $50 billion (USD) of financings since the start of 2019.

Table 1. Cost Financing Partners

Partner	Project	Year Financed	Amount and Vehicle
NEE	Silver State Solar Power South, LLC	2015	$619 million limited-recourse construction and term loan facility and $75 million letter of credit facility
NEE	McCoy Solar Funding	2014	$425 million USD limited-recourse variable rate construction and term loan facility; $154 million USD variable rate cash bridge loan facility
NEE	Lone Star Transmission	2014	$360 million USD in aggregate principal amount of senior secured notes
NEE	Varna Wind, LP	2014	$170 million CAD under, a Canadian limited-recourse senior secured variable rate term loan agreement
ENB	Enbridge Pipeline (Southern Lights) L.L.C.	2014	$1,061 million USD private placement, senior unsecured notes
ENB	Enbridge Southern Lights LP	2014	$352 million CAD private placement, senior unsecured notes
OMERS	Teranet Holdings LP	2020	Canadian private placement of $550 million CAD senior secured bonds; U.S. private placement of $300 million CAD senior secured bonds
OMERS	Bruce Power	2020	$600 million CAD in principal amount of senior unsecured notes
OMERS	Mapleleaf Midstream Investments	2018	$700 million USD in aggregate principal amount of senior unsecured notes
OMERS	Leeward Renewable Energy	2018	$335 million USD term loan facility and a $10 million USD working capital facility

SHORT-TERM DEBT

1. The OEB has determined that the deemed amount of short-term debt that should be factored into rate-setting be fixed at 4% of rate base. The deemed short-term rate of 2.75% is being used by NextBridge which is the approved 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 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.

COMMON EQUITY

1. NextBridge's Application reflects the current ROE of 8.52% and is based on the cost of capital parameters released by the OEB on October 31, 2019 for 2020 applications. It is calculated according to the OEB's formulaic approach in Appendix B of the *Cost of Capital for Ontario's Regulated Utilities* report, dated December 11, 2009 (EB-2009-0084). NextBridge requests that the ROE be fixed at 8.52% for the 10 year IR Term to allow for rate certainty for customers. This is a benefit to customers since 8.52% is a historically low ROE and the proposed IR Term provides longer term certainty around maintaining this low ROE. Based off history, it is a high probability that ROEs will increase during these 10 years from the historic low ROE, and, therefore, 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.

DEFERRAL AND VARIANCE ACCOUNTS

Disposition of Deferral and Variance Accounts

1. 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, existing USofA account 1592

2. This account will be used to track any revenue requirement impact of legislative or regulatory changes to tax rates or rules that are not reflected in the revenue requirement used to establish 2022 UTRs.

3. This account will record differences that result from a change in, or a disclosure of, a new assessment or administrative policy that is published in the public tax administration or interpretation bulletins by relevant federal or provincial tax authorities.

4. This account will record any tax impacts resulting from, but not limited to, the timing of BLP's buy-in and any changes in tax-exemption status. To provide the best projection of tax payments for customers in the revenue requirement, this Application was calculated including the tax exempt status of BLP for the entire IR Term. This account will record any tax impacts resulting from any changes to the assumed tax-exemption status of BLP from this Application.

5. NextBridge proposes disposition of this account at the end of the IR Term through to the next rebasing application.

6. See draft accounting order in Attachment 1 of this Exhibit.

Revenue Differential Variance Account

7. 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).

8. To facilitate the OEB's review of costs and prudence on a timely basis and to allow time to ensure all project construction cost accounting is finalized and an audit has taken place, 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 the filed in 2023 for inclusion in 2024 UTR rates.

9. See draft accounting order in Attachment 2 in this Exhibit.

10. Construction Cost Variance Account

- This account will track any difference in revenue requirement resulting from: difference 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. NextBridge has explained its preference for the treatment of these costs to the OEB as part of the current stakeholder process to inform accounting guidance for COVID-19 impacts being included in deferral accounts. This submission can be found at Exhibit H, Tab 1, Schedule 1, Attachment 5. As explained in the submission, 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;

- 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 in construction costs but occur post in-service date because they were known and quantifiable amounts). NextBridge expects these costs to begin after the March 31, 2022 in-service date and continue for up to the end of the IR Term, as discussed in Exhibit C. The amount of environmental mitigation to be performed during this time period is highly dependent on monitoring activities and in some cases is weather or nature dependent. As an example, the transfer strategy and timing of caribou is dependent upon the results of pre-transfer monitoring. Monitoring will indicate where the caribou will originate from and the gender ratio available to relocate (See OBP Permit and Conditions at Exhibit C. Tab 2, Schedule 4, Attachment 3). 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. To demonstrate this savings, NextBridge provides the following example in Table 1 below as a comparison of including the first year's cost comparing the treatment in the revenue requirement now as an O&MA cost versus including these environmental costs in the construction cost variance account. As shown below in the totals over the five-year period, O&MA could be overstated by $2.4 million if these costs were included in O&MA as part of this Application. Since the costs reduce over time and are not quantifiable at this time, the appropriate way to account for the costs is in the CCVA.

Table 1. Example of Cost Treatment Alternatives for Post Construction Environmental Costs

	Dollars					
	ISD[14] + 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.

- To facilitate the OEB's review of costs and prudence on a timely basis and to allow time to ensure all project construction cost accounting is finalized and an audit has taken place, 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 the 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.

- See draft accounting order in Attachment 3 in this Exhibit.

[14] In-Service date ("**ISD**")

11. Debt Rate Variance Account (DRVA)

- 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.

- To facilitate the OEB's review of costs and prudence on a timely basis and to allow time to ensure all project construction cost accounting is finalized and an audit has taken place, 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. Alignment with disposition of the Construction Cost Variance Account allows a complete comparison of drivers associated with both accounts and ensures there is not an overlap between construction costs and potential debt rate changes.

- Draft accounting order in Attachment 4 in this Exhibit.

12. Z-Factor Treatment (Account 1572 – Extraordinary Event Costs")

- 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.

DRAFT ACCOUNTING ORDER – TAXES OR PAYMENTS IN LIEU OF TAXES VARIANCE ACCOUNT

1. NextBridge will use Uniform System of Account 1592 "PILs and Tax Variance for 2006 and Subsequent Years" and will record:

   - any revenue requirement impact of legislative or regulatory changes to tax rates or rules that are not reflected in the revenue requirement used to establish 2022 UTRs.
   - differences that result from a change in, or a disclosure of, a new assessment or administrative policy that is published in the public tax administration or interpretation bulletins by relevant federal or provincial tax authorities.
   - tax impacts resulting from changes in tax-exemptions status of partners of NextBridge.

2. NextBridge proposes disposition of this account at the end of the IR Term and in connection with the next rebasing application.

3. The following are the proposed accounting entries for this variance account:

USofA # Account Description

Dr/Cr: 1592 PILS and Tax Variance for 2006 and Subsequent Years

Cr/Dr: 4110 Transmission Services Revenue

- to record the revenue requirement impact of legislative or regulatory changes to tax rates or rules as compared to costs approved by the OEB.

USofA # Account Description

Dr/Cr: 1592 PILS and Tax Variances for 2006 and Subsequent Years

Cr/Dr: 6035 Other Interest Expense

-to record interest on the principal balance of the variance account.

DRAFT ACCOUNTING ORDER – REVENUE DIFFERENTIAL EXPECTED TO BE INCURRED PRIOR TO IN SERVICE DATE OF MARCH 31, 2022 VARIANCE ACCOUNT

1. 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).

2. To ensure all accounting is finalized and an audit has taken place, NextBridge proposes the disposition of this account in the second annual update following the in-service date.

3. The following are the proposed accounting entries for this variance account:

USofA# Account Description

Dr/Cr: 1508 Other Regulatory Assets – Sub account "Revenue Differential Variance Account"

Cr/Dr: 4110 Transmission Services Revenue

- to record the revenue differential

USofA# Account Description

Dr/Cr: 1508 Other Regulatory Assets – Sub account "Revenue Differential Variance Account"

Cr/Dr: 6035 Other Interest Expense

-to record interest on the principal balance of the variance account.

DRAFT ACCOUNTING ORDER – CONSTRUCTION COST VARIANCE ACCOUNT

1. 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).

2. To ensure all accounting is finalized, an audit has taken place and alignment with the disposition of the Debt Cost Variance Account, NextBridge proposes the disposition of this account in the second annual update following the in-service date.

3. The following are the proposed accounting entries for this variance account:

   USofA # Account Description

   Dr/Cr: 1508 Other Regulatory Assets – Sub-account: Construction Cost Revenue Requirement Variance

   Dr/Cr: 4110 Transmission Service Revenue

   - to record the revenue requirement differential

   USofA # Account Description

Dr/Cr: 1508 Other Regulatory Assets – Sub-account: Construction Cost Revenue Requirement Variance

Dr/Cr: 6035 Other Interest Expense

-to record interest on the principal balance of the variance account.

DRAFT ACCOUNTING ORDER – DEBT RATE VARIANCE ACCOUNT

1. 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.

2. To ensure all accounting is finalized, an audit has taken place and alignment with the disposition of the Construction Cost Variance Account, NextBridge proposes the disposition of this account in the second annual update following the in-service date.

3. The following are the proposed accounting entries for this variance account:

USofA # Account Description

Dr/Cr: 1508 Other Regulatory Assets – Sub-account: Debt Rate Variance

Dr/Cr: 4110 Transmission Service Revenue

- to record the revenue requirement differential

USofA # Account Description

Dr/Cr: 1508 Other Regulatory Assets – Sub-account: Debt Rate Variance,

Dr/Cr: 6035 Other Interest Expense

-to record interest on the principal balance of the variance account.

NEXTBRIDGE'S OEB SUBMISSION RE: COVID COST RECORDING

June 11, 2020

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

Dear Ms. Long:

Re: Consultation on the Deferral Account – Impacts Arising from the COVID-19 Emergency
Ontario Energy Board File Number: EB-2020-0133
NextBridge's Written Comments on Draft Issues List

As required by the Board's May 14, 2020 letter in the above-referenced Docket, Upper Canada Transmission, Inc. operating as NextBridge Infrastructure ("NextBridge"), an electricity transmitter, hereby submits comments on Board's Draft Issues List. Specifically, NextBridge requests that the OEB add an issue addressing whether incremental capital costs, and associated interest, related to COVID-19 for projects currently under construction should be tracked separately, and if so whether the tracking should occur in (1) a subaccount of Account 1509 – Impacts Arising from the COVID-19 Emergency or (2) a subaccount of the existing Uniform System of Accounts number 2055 "Construction Work in Progress – Electric" ("CWIP").

The construction of the 450-kilometer East-West Tie Line in Northwestern Ontario began in the fall of 2019 and has been impacted by the COVID-19 pandemic, as described in NextBridge's April 22, 2020 Quarterly Report submitted in EB-2017-0182. NextBridge is a new regulated transmitter with no active rates in place and has no existing assets; therefore, any incremental costs only reflect the actual cost of construction related to the asset.

In its February 11, 2019 decision in EB-2017-0182, the Board directed NextBridge to use CWIP Account 2055 to record construction costs incurred after July 31, 2017. NextBridge believes 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. Alternatively, in line with the Board's letter of March 25, 2020 outlining the establishment of deferral accounts to record impacts arising from the COVID-19 emergency, capital costs, and associated interest, these costs could be captured for projects currently under construction in a subaccount of Account 1509. However, NextBridge's interpretation of proper GAAP accounting treatment would be to classify these costs as a CWIP asset. Conversely, classifying the costs as a non-current asset (deferral account 1509) is not reflective of NextBridge's current construction phase.

While NextBridge's situation of not having existing rates is unique, there are undoubtably other transmitters or distributors that have construction-related impacts from COVID-19. Therefore, NextBridge requests that the Board add the following issues under subcategory C "Accounting Matters":

- What account should be used for distributors and transmitters currently constructing capital projects?

Please contact me with any questions.

Sincerely,

Jennifer Tidmarsh
Project Director, NextBridge

ACCOUNTING AND CONTROL PROCESSES

1. The accounts requested above will be updated monthly and NextBridge will calculate simple interest on opening balances in each account on a monthly basis at the OEB prescribed rate for deferral and variance accounts. Balances will be reported to the Board as part of the OEB's deferral and variance account reporting process.

COST ALLOCATION TO UNIFORM TRANSMISSION RATE POOLS

Cost Allocation

1. All assets associated with NextBridge are classified as Network assets, consistent with the cost allocation methodology approved by the OEB for HONI's most recently approved transmission rate application (EB-2016-0160). A listing of the NextBridge assets by functional category is provided below in Table 1. Accordingly, all of the rates revenue requirement associated with NextBridge's transmission assets will be allocated to the Network pool.

Table 1. NextBridge Assets by Functional Category

Circuit	Section	From	To	Functional Category
M37L	1	Lakehead TS	Marathon TS	Network
M38L	1	Lakehead TS	Marathon TS	Network
W35M	2	Marathon TS	Wawa TS	Network
W36M	2	Marathon TS	Wawa TS	Network

CHARGE DETERMINANTS

1. There are no customer delivery points supplied directly from the NextBridge assets, and as such the NextBridge Network charge determinant for the purpose of setting UTRs is zero.

RATE DESIGN FOR UNIFORM TRANSMISSION RATES

Bill Impact Information

1. The NextBridge customer bill impact is summarized below in Table 1 through Table 4. Bill impacts will be only slightly impacted due to the inclusion of the East-West Tie line as a new project that was not previously included in transmission rates.

Table 1. Estimated Transmission Cost as a Percentage of Total Electricity Market

Bill Component	¢/kWh	Source
Commodity	12.58	IESO Monthly Market Report December 2019
Wholesale Market Service Charges	0.39	IESO Monthly Market Report December 2019
Wholesale Transmission Charges	1.06	IESO Monthly Market Report December 2019
Distribution Service Charges	3.02	2019 Yearbook of Electricity Distributors
Total Cost	**17.05**	
Transmission as % of Total Cost for Dx-connected customers	*6.2%*	
Transmission as % of Total Cost for Tx-connected customers	*7.6%*	

Table 2. Average Bill Impacts on Transmission and Distribution-Connected Customers (Test Year)

Category	2022
Rates Revenue Requirement ($ Millions)	$55.7
% Increase in Rates Revenue Requirement over prior year	N/A
% Impact of load forecast change	N/A
NB Rates Revenue Requirement as a % of all transmitters	3.31%
Net Impact on Average Transmission Rates	3.31%
Transmission as a % of Tx-connected customer's Total Bill	7.6%
Estimated Average Bill impact	0.25%
Transmission as a % of Dx-connected customer's Total Bill	6.2%

Table 3. Average Bill Impacts on Transmission and Distribution-Connected Customers (IR Term)

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Rates Revenue Requirement ($M)	55.7	56.8	58.0	59.1	60.3	61.5	62.8	64.0	65.3	66.6
% Increase in Rates Revenue Requirement over prior year	N/A	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
% Impact of load forecast change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Net Impact on Transmission Revenue Requirement	3.31%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.08%	0.08%
Transmission as a % of Tx-connected customer's Total Bill	7.56%	7.56%	7.56%	7.56%	7.56%	7.56%	7.56%	7.56%	7.56%	7.56%
Estimated Bill impact TX Connected customers	0.25%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
Transmission as a % of Dx-connected customer's Total Bill	6.22%	6.22%	6.22%	6.22%	6.22%	6.22%	6.22%	6.22%	6.22%	6.22%
Estimated Bill impact DX connected customers	0.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Table 4. 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 < 50 kW) 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
Estimated 2022 Monthly RTSR	$12.62	$26.61
2022 increase in Monthly Bill	$0.35	$0.75
2022 increase as a % of total bill	*0.32%*	$0.00

SETTING THE UNIFORM TRANSMISSION RATES

1. Per the filing requirements, Section 2.12.2 is designated to HONI, and at the request of the OEB. This section is not applicable to NextBridge.