

Ontario Energy Board Commission de l'énergie de l'Ontario

DECISION AND ORDER

EB-2017-0182

UPPER CANADA TRANSMISSION INC. (ON BEHALF OF NEXTBRIDGE INFRASTRUCTURE)

Application for leave to construct an electricity transmission line between Thunder Bay and Wawa, Ontario

EB-2017-0194

HYDRO ONE NETWORKS INC.

Application to upgrade existing transmission station facilities in the Districts of Thunder Bay and Algoma, Ontario

EB-2017-0364

HYDRO ONE NETWORKS INC.

Application for leave to construct an electricity transmission line between Thunder Bay and Wawa, Ontario

BEFORE: Christine Long Presiding Member

> Allison Duff Member

Michael Janigan Member

December 20, 2018

TABLE OF CONTENTS

CH	APTE	R A:	INTRODUCTION AND SUMMARY	1
СН	APTE	R B:	BACKGROUND	3
1			ESIGNATION PROCESS AND DESIGNATION DECISION	
2			THE DESIGNATION DECISION	
3		LEAVE 1	O CONSTRUCT PROCEEDING	5
CH	APTE	R C:	DECISION ON SCOPE OF THE PROCEEDING	9
1		OEB'S J	URISDICTION IN SECTION 92 APPLICATIONS	9
2		FINDING	S ON THE DUTY TO CONSULT AND ENVIRONMENTAL MATTERS	11
СН	APTE	R D:	DECISION ON DEVELOPMENT COSTS	14
1		THE PRO	DCESS	14
2			S ON NEXTBRIDGE'S DEVELOPMENT COSTS	
-	2.1		nd Considerations	
	2.2		Test	
	2.3		Development Costs	
_	2.4		ns for Leave to Construct Applications	
3		HYDRO	ONE'S DEVELOPMENT COSTS	28
CH	APTE	R E:	DECISION ON STATIONS APPLICATION	30
1		STATION	N UPGRADES OVERVIEW	30
2		THE ISS	UES - STATIONS	31
	2.1	Interests of	of Consumers with Respect to Prices - Stations	31
	2.2		and Quality of Electricity Service - Stations	
	2.3		Date and Delays Associated with Station Facilities	
3	2.4		_and Agreement - Stations	
-				
CH	APTE	:K F:	DECISION ON THE TRANSMISSION LINE APPLICATIONS	38
1			IDGE-EWT APPLICATION	
	1.1		NextBridge-EWT	
	1.2		Date - NextBridge-EWT te Impact - NextBridge-EWT	
	1.3 1.4		pact Assessment (SIA) and Customer Impact Assessment (CIA) - NextBridge-EWT	
2	1.4	•	ONE-LSL APPLICATION	
-	2.1		Hydro One-LSL	
	2.2	-	Date - Hydro One-LSL	
	2.3		te Impact - Hydro One-LSL	
	2.4		pact Assessment (SIA) and Customer Impact Assessment (CIA) - Hydro One-LSL	
3			TO BE CONSIDERED	
4		RELIABI	LITY AND QUALITY OF ELECTRICITY SERVICE – TRANSMISSION LINE	42
	4.1		Reliability Implications of the In-Service Date	
-	4.2		Reliability Implications of Line Design and Operation	45
5			STS OF CONSUMERS WITH RESPECT TO PRICES – TRANSMISSION LINE	_
	-		ATIONS	
	5.1 5.1.1		ion Costs for the Line e's Construction Costs	
	0.1.1	Textonuy		40

5.1.2		s Construction Costs	
5.1.3		ns of Parties on Construction Costs	
5.2		Maintenance and Administration (OM&A) Costs	
5.3		System Costs Associated with In-Service Delays	
5.4		dditional Costs and In-Service Delays Associated with the EA Approvals	
5.5		Consultation and Participation	
6	FORMS C	F LAND AGREEMENT – TRANSMISSION LINE APPLICATIONS	56
7	FINDINGS	S – TRANSMISSION LINE APPLICATIONS	58
7.1	Findings or	Reliability and Quality of Service	58
7.2	Findings or	the In-Service Date	60
7.3	Findings or	the EA Approvals	61
7.4	Findings or	Indigenous Consultation and Participation	62
7.5		OM&A Costs	
7.6	Findings or	Construction Costs	64
CHAPTE	ER G:	CONCLUSION	71
CHAPTE	ER H:	ORDER	72
SCHEDU	JLE A		74
SCHEDU	JLE B		76
SCHEDU	JLE C		78
SCHEDU	JLE D		80
SCHEDU	JLE E		82

CHAPTER A: INTRODUCTION AND SUMMARY

This is a Decision and Order of the Ontario Energy Board (OEB) on two competing applications for leave to construct new transmission infrastructure in Northwest Ontario and on a related application for leave to upgrade three transformer stations (collectively, the Applications). The Applications are made pursuant to Section 92 of the *Ontario Energy Board Act, 1998* (the Act). The Applications propose new transmission facilities to meet the Ontario government identified need of maintaining long-term system reliability in Northwest Ontario.

In 2011, the Minister of Energy asked the OEB to undertake a process to select the most qualified and cost-effective transmission company to develop a new "East-West Tie" line¹ between Wawa and Thunder Bay (Designation Process).

In 2013, upon completion of the Designation Process, the OEB issued a Decision and Order designating Upper Canada Transmission Inc. operating as NextBridge Infrastructure LP (NextBridge) to undertake development work for the new transmission line.² In that Decision and Order, the OEB confirmed that the designation did not carry with it the exclusive right to build the new transmission line or to apply for leave to construct the new line.

The Applications that are the subject of this Decision and Order are:

- An application filed by NextBridge on July 31, 2017 for leave to construct a transmission line between Wawa and Thunder Bay, which it refers to as the East-West Tie Project³ (NextBridge-EWT Application).⁴ The NextBridge-EWT Application proposes an in-service date of December 2020.
- An application filed by Hydro One Networks Inc. (Hydro One) on July 31, 2017 for leave to upgrade the Wawa Transformer Station (TS), Marathon TS and Lakehead TS to connect the new transmission line to be constructed between Wawa and Thunder Bay (Hydro One-Station Upgrades Application).⁵

¹ For clarity, there is an existing Hydro One Networks Inc. transmission line between Wawa and Thunder Bay that is also known as the "East-West Tie".

² EB-2011-0140, East-West Tie Line Designation Phase 2 Decision and Order, August 7, 2013.

³ Referred to as NextBridge-EWT Project in this Decision and Order.

⁴ This application has been assigned OEB File No. EB-2017-0182.

⁵ This application has been assigned OEB File No. EB-2017-0194.

An application filed by Hydro One on February 15, 2018 for leave to construct a transmission line between the same two points as the NextBridge-EWT Application, which Hydro One refers to as the Lake Superior Link Project⁶ (Hydro One-LSL Application).⁷ The Hydro One-LSL Application proposes an inservice date of December 2021.

In this Decision and Order, the OEB finds that NextBridge is eligible to recover \$31.241 M in development costs from ratepayers.

The OEB approves the Hydro One-Station Upgrades Application, subject to granting leave to construct for the new transmission line between Wawa and Thunder Bay.

With respect to the transmission line applications, the OEB has decided to add a further step in this process. The OEB has the authority to determine the process which best enables it to carry out its statutory obligations.

The OEB is not prepared to grant leave to an applicant at this stage in the proceeding. The Designation Decision did not guarantee NextBridge the right to build the new transmission line and Hydro One has filed a competing application. The OEB was presented with two applications that differed in maturity of plan development, First Nations and Métis community support, routing choice, construction methods, contractor arrangements, stage of environmental approvals, operating protocol and expense, risk of overruns, in-service date, and overall estimate of costs.

The OEB finds that the risks associated with the two applications are disproportionately visited upon ratepayers. Hydro One has submitted a not-to-exceed (NTE) price with a cost escalation condition linked to environmental approvals. NextBridge has chosen not to submit a NTE price against the backdrop of its escalating construction costs. In order to compare the applications on a level-playing field and to mitigate ratepayer risk, the OEB will allow the NextBridge and Hydro One to file a NTE price based on OEB-stipulated conditions on January 31, 2019. The OEB foresees that the NTE price filing from each applicant will be the final step in this proceeding before the OEB grants leave to construct for the new transmission line between Wawa and Thunder Bay.

⁶ Referred to as Hydro One-LSL Project throughout this Decision and Order.

⁷ This application has been assigned OEB File No. EB-2017-0364.

CHAPTER B: BACKGROUND

1 OEB'S DESIGNATION PROCESS AND DESIGNATION DECISION

On March 29, 2011, the Minister of Energy expressed the government's interest in the OEB undertaking a competitive designation process to select a transmission company to develop a new electricity transmission line between Wawa and Thunder Bay, in order to maintain long-term electricity system reliability in Northwest Ontario.

The OEB undertook a Designation Process to select a transmitter to carry out development work for the new transmission line and, on August 7, 2013, designated NextBridge to undertake that development work with an approved development work budget of \$22.4 M (Designation Decision). The Designation Decision utilized the following evaluation criteria, equally weighted, to select the designated transmitter:

- Organization⁸
- First Nations and Métis participation⁹
- Technical capability
- Financial capacity
- Proposed design
- Schedule: development and construction phases
- Cost: development, construction, operation and maintenance phases
- Landowner, municipal, and community consultation
- First Nations and Métis consultation

The Designation Decision referred to the *Board Policy: Framework for Transmission Development Plan*¹⁰ (Transmission Policy Framework) and stated the following objectives:

• Allow transmitters to move ahead on development work in a timely manner

 ⁸ The applicants were required to provide, among other things, a project organizational plan, a chart illustrating the organizational structure, identification of the project management team with résumes for key management personnel, and an overview of the applicant's experience with similar projects.
 ⁹ There is a distinction between this criterion and that of First Nations and Métis consultation. The former arises from Ontario socio-economic policy and the latter is related to a constitutional obligation.
 ¹⁰ EB-2010-0059, Board Policy: Framework for Transmission Project Development Plans, August 26, 2010.

- Encourage new entrants to transmission in Ontario bringing additional resources for project development
- Support competition in transmission in Ontario to drive economic efficiency for the benefit of ratepayers¹¹

The Designation Decision stated that the development phase ends with the filing of an application for leave to construct the new transmission line between Wawa and Thunder Bay. The OEB also confirmed that designation did not carry with it the exclusive right to build the new line or an exclusive right to apply for leave to construct the new line.¹²

In addition to approving NextBridge's development work budget of \$22.4 M, the OEB established a deferral account to record the actual cost of development from the date of approval to the filing of a leave to construct application. The Designation Decision further indicated that costs in excess of those approved for recovery (i.e. \$22.4 M) would be subject to a prudence review and that approved costs may be denied if the designated transmitter failed to meet performance milestones or the OEB's reporting requirements.

2 AFTER THE DESIGNATION DECISION

On September 30, 2014, the former Ontario Power Authority (OPA), now the Independent Electricity System Operator (IESO), wrote to the OEB proposing a delay of the in-service date for the new transmission line between Wawa and Thunder Bay from 2018 to 2020. The OPA noted that the extension of the in-service date requirement would provide additional time for developing the new line between Wawa and Thunder Bay, with a focused aim of reducing its cost. The OPA also noted that the additional time was not expected to impact the overall benefits of the project or reliability as mining and other infrastructure developments in Northwest Ontario had been progressing at a slower than expected pace. The areas for cost reduction identified by the OPA included: pursuing a shorter line routing option; optimizing equipment and system design, including staging of station facilities; and having a less compressed schedule for the development and implementation of the project.¹³

 ¹¹ EB-2011-0140, East-West Tie Line Designation Phase 2 Decision and Order, August 7, 2013, p. 3.
 ¹² EB-2011-0140, East-West Tie Line Designation Phase 2 Decision and Order, August 7, 2013, p. 4.
 ¹³ EB-2011-0140, OPA Letter of Correspondence Regarding Development Schedule, September 30, 2014, p. 1.

As a result, the OEB asked NextBridge to work with the OPA on a revised schedule and for NextBridge to consider the effect on its development costs. NextBridge adjusted its timelines for the development of the new transmission line between Wawa and Thunder Bay.

NextBridge filed a revised development schedule and budget with the OEB on June 24, 2015 and requested that the OEB approve its extended development period costs in the same manner as the Designation Decision.

During the Designation Process, NextBridge and other parties had submitted proposals based on the assumption that a segment of the route for the new transmission line between Wawa and Thunder Bay would pass through Pukaskwa National Park. As part of its update to the OEB, NextBridge informed the OEB that Parks Canada had denied it access to Pukaskwa National Park, and so it would have to pursue a route that went around Pukaskwa National Park.¹⁴

The OEB denied NextBridge's request for approval of the extended budget given there had not been an examination of the prudence and reasonableness of the additional budget. The OEB found that the deferral account for the actual costs of development could continue to be used to record development costs incremental to the original approved budget for future review of the prudence and reasonableness of those costs.¹⁵

On March 2, 2016, the Lieutenant Governor in Council made Order-in-Council 326/2016 under Section 96.1 of the Act (Priority Project OIC) declaring that the expansion or reinforcement of the electricity transmission network in the area between Wawa and Thunder Bay is needed as a priority project.

3 LEAVE TO CONSTRUCT PROCEEDING

On July 31, 2017, NextBridge filed its NextBridge-EWT Application. On the same day, Hydro One filed its Hydro One-Station Upgrades Application. The NextBridge-EWT Application included development costs of \$40.2 M and a proposal that the OEB consider these costs in a subsequent proceeding. Specifically, pursuant to Section 78 of the Act, the NextBridge-EWT Application asked for an order transferring the final

¹⁴ EB-2017-0182, NextBridge-EWT Application, Exhibit B, Tab 9, Schedule 1, p. 7.

¹⁵ EB-2015-0216, Application for Approval of Schedule and Costs Related to the Development of the East-West Tie Transmission Line Decision and Order, November 19, 2015, p. 1.

balance of its development costs to a new deferral account for construction work in progress.

On October 12, 2017, the OEB issued a Notice of Hearing for the NextBridge-EWT Application and the Hydro One-Station Upgrades Application, noting that it would hear both together. The OEB's consideration of these two applications began with a written interrogatory process and a technical conference to clarify the evidentiary record.

Hydro One filed its Hydro One-LSL Application with the OEB on February 15, 2018.

On February 27, 2018, NextBridge filed a motion (NextBridge Motion) with the OEB requesting that the Hydro One-LSL Application be dismissed, in the alternative, not be processed because it was incomplete and/or did not comply with the OEB's filing requirements for an electricity transmission line leave to construct application (LTC Filing Requirements).¹⁶

On March 1, 2018, the OEB issued a Procedural Order establishing a schedule specifically for development cost matters. Although NextBridge had asked that the OEB decide on the prudence of its development costs as part of a future hearing prior to the in-service date for the NextBridge-EWT Project, the OEB determined it would conduct a detailed review in this proceeding.

The OEB heard oral submissions on the NextBridge Motion and issued a Decision dismissing the NextBridge Motion. The OEB determined that the Hydro One-LSL Application satisfied the LTC Filing Requirements and was not incomplete. The OEB also concluded that the Hydro One-LSL Application did not meet the criteria for dismissing an application without a hearing on the merits.

On August 9, 2018, the OEB issued a Notice of Hearing for the Hydro One-LSL Application.

On August 13, 2018 the OEB decided, pursuant to Section 21(5) of the Act, that the NextBridge-EWT Application, Hydro One-Station Upgrades Application, and Hydro One-LSL Application would be heard together as a combined hearing (Combined Hearing).¹⁷ The OEB also determined that, under Section 21(6.1) of the Act, all evidence filed up to

¹⁶ Ontario Energy Board *Filing Requirements for Electricity Transmission Applications*, Chapter 4: Applications under Section 92 of the *Ontario Energy Board Act*, July 31, 2014.

¹⁷ EB-2017-0182/EB-2017-0194/EB-2017-0364, Procedural Order No. 1 on Combined Hearing, August 13, 2018.

that point in the proceedings on the NextBridge-EWT Application, the Hydro One-Station Upgrades Application, and the Hydro One-LSL Application (including evidence filed in respect of the NextBridge Motion) would form part of the evidentiary record of the Combined Hearing.

The OEB accepted the following intervenors in the Combined Hearing:

- Anwaatin Inc. (Anwaatin)
- Association of Major Power Consumers in Ontario
- Bamkushwada Limited Partnership (BLP)¹⁸
- Batchewana First Nation of Ojibways (BFN)
- Biinjitiwaabik Zaaging Anishinaabek (BZA)
- Consumers Council of Canada (CCC)
- East Loon Lake Campers' Association
- Independent Electricity System Operator (IESO)
- Independent participants Dave Morellato and Scot Kyle
- Long Lake #58 First Nation (LLFN)
- Métis Nation of Ontario (MNO)¹⁹
- Michipicoten First Nation (MFN)
- Ministry of the Environment, Conservation and Parks (MECP)
- Power Workers' Union (PWU)
- School Energy Coalition (SEC)
- Township of Dorion
- Vulnerable Energy Consumers Coalition (VECC)

The OEB proceeded to hear the Applications.

On October 2, 2018, the Minister of Energy, Northern Development and Mines wrote a letter to the Chair of the OEB emphasizing that in order to avoid delays to the construction of the project, it is important that the OEB act expeditiously to issue a decision on the competing leave to construct applications. The government acknowledged the complex circumstances with respect to the competing proposals and the challenges it presents to the OEB, but emphasized that this matter should be

 ¹⁸ BLP is composed of the Five First Nations (Pays Plat First Nation, Fort William First Nation, Red Rock Indian Band, Pic Mobert First Nation and Biigtigong Nishnaabeg), and Michipicoten First Nation.
 ¹⁹ The MNO represents the Northern Lake Superior Métis and Historic Sault Ste. Marie and Environs Métis Communities.

decided promptly through an efficient and fair process.

On October 3, 2018, the Chair of the OEB responded to the Minister's letter, noting that the OEB understands the imperative of this energy solution for Northern Ontario residents and businesses and is proceeding in a timely manner to complete its review and make its final determination.

For details on the procedural steps for the Combined Hearing, as well as the NextBridge Motion and NextBridge's development costs, see Schedule D.

CHAPTER C: DECISION ON SCOPE OF THE PROCEEDING

1 OEB'S JURISDICTION IN SECTION 92 APPLICATIONS

Section 92 of the Act requires leave of the OEB for the construction, expansion or reinforcement of electricity transmission lines. In considering whether to grant leave, the OEB is restricted to the issues set out in Section 96(2) of the Act:

In an application under Section 92, the Board shall only consider the following when, under subsection (1), it considers whether the construction, expansion or reinforcement of the electricity transmission line or electricity distribution line, or the making of the interconnection, is in the public interest:

- 1. The interests of consumers with respect to prices and the reliability and quality of electricity service.
- 2. Where applicable and in a manner consistent with the policies of the Government of Ontario, the promotion of the use of renewable energy sources.

The promotion of the use of renewable energy sources is not a relevant consideration in the Applications.

As noted above, the Priority Project OIC declared that the expansion or reinforcement of the electricity transmission network in the area between Wawa and Thunder Bay is needed as a priority project. The OEB is therefore required to accept that the transmission line is needed when it considers the above issues.

The need for this project has been supported by the IESO and confirmed through regular updates to the IESO's needs assessments – the latest of which were completed in December 2017 and June 2018.

The IESO plans the electricity system in accordance with applicable planning standards issued by the North American Electric Reliability Corporation (NERC) and the Northeast Power Coordinating Council, Inc.'s (NPCC) Directory.²⁰ Further, as established by

²⁰ EB-2017-0182/EB-2017-0194/EB-2017-0364, IESO Interrogatory Response to NextBridge Interrogatory No. 9, Attachment 2 (NPCC Regional Reliability Reference Directory #1).

planning standards from the Ontario Resource and Transmission Criteria (ORTAC), the IESO also plans the electricity system to Ontario-specific standards.²¹

On August 4, 2017, the Minister of Energy wrote to the IESO requesting that it prepare an updated needs assessment for the new transmission line between Wawa and Thunder Bay, given that NextBridge had provided updated cost estimates in its NextBridge-EWT Application, which increased from \$409 M in the OEB's Designation Process to \$737 M.

The IESO provided the Minister of Energy with an updated needs assessment (Updated Needs Assessment) on December 1, 2017. In the Updated Needs Assessment, the IESO continued to recommend the construction of the transmission line to maintain a reliable and cost-effective supply of electricity to Northwest Ontario for the long-term over local generation options. Based on NextBridge's cost estimate of \$777 M (which includes \$40 M for development costs), the IESO found that the construction of the transmission line provided "approximately \$200 million in net cost savings compared to the least-cost local generation alternative".²² Further, the Updated Needs Assessment recommended an in-service date of 2020 for the line.

On July 26, 2018, at the request of the OEB, the IESO filed an addendum to its Updated Needs Assessment which continued to recommend that the transmission line be inservice by the end of 2020, after which other mitigating measures would have to be in place resulting in additional costs and increased risks to system reliability.²³ The IESO also indicated that if the transmission line is not in service by the end of 2022, the risks to system reliability and the associated cost uncertainties are unacceptable.²⁴

²¹ EB-2017-0182/EB-2017-0194/EB-2017-0364, IESO Interrogatory Response to NextBridge Interrogatory No. 9, p. 1.

²² IESO's Updated Assessment of the Need for the East-West Tie Expansion, submitted to the Ministry of Energy on December 1, 2017, p. 2, lines 9-10.

 ²³ 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, p. 1.
 ²⁴ For a breakdown of costs associated with delays to the in-service date, see Chapter F, Decision on Leave to Construct, Section 5.3 Additional System Costs Associated with In-Service Delays.

2 FINDINGS ON THE DUTY TO CONSULT AND ENVIRONMENTAL MATTERS

Section 96(2) of the Act sets out the issues to be considered in a leave to construct application. In a 2012 decision, the OEB explained how this section limits its review of Indigenous consultation and environmental issues:

...the Board has no jurisdiction to conduct Aboriginal consultation itself, nor to assess the adequacy of the Crown's consultation efforts in a section 92 application (except as they may arise within the limits of section 96(2)). Aboriginal consultation is a matter of Constitutional law. Although section 19 of the Act confers a general power to consider issues of law, section 96(2) of the Act places specific limitations on the extent of the Board's power to review. As the Supreme Court stated in Rio Tinto: "[t]he power to decide questions of law implies a power to decide constitutional issues that are properly before it, absent a clear demonstration that the legislature intended to exclude such jurisdiction from the tribunal's power." In enacting section 96(2) of the Act, the Legislature has clearly demonstrated its intention to exclude from the Board's purview any matters other than those directly associated with the interests of consumers with respect to price and the reliability and quality of electricity service, or the promotion of the Government's renewable energy policies. Other issues, including environmental impacts, have been expressly excluded from the Board's jurisdiction.²⁵

Leave to construct approval is one of a number of approvals or permits that are required in order to construct the new transmission line between Wawa and Thunder Bay. Approvals and permits are required from government ministries, including the MECP and the Ministry of Natural Resources and Forestry. The adequacy of Indigenous consultation is considered as part of the MECP's Environmental Assessment (EA) process.

Some intervenors argued that restricting the OEB's review to the issues set out in Section 96(2) is not consistent with more recent jurisprudence, including two Supreme

²⁵ EB-2012-0082, Hydro One Lambton-Longwood Leave to Construct Decision and Order, November 8, 2012, p. 12. [Emphasis in original]

Court of Canada decisions: *Hamlet of Clyde River v Petroleum Geo-Services Inc.*²⁶ (*Clyde River*) and *Chippewas of the Thames First Nation v Enbridge Pipelines Inc.*²⁷ (*Chippewas*). They argued that the OEB has the authority to determine whether the duty to consult has been discharged. The OEB does not agree.

The decisions in *Clyde River* and *Chippewas* do not change the established legal principle that the role of a particular tribunal in relation to consultation depends on the duties and powers the legislature has conferred on it.²⁸ The Supreme Court's findings in those cases turned on the National Energy Board's statutory powers, which are different than the OEB's powers in a Section 92 application.²⁹ In this proceeding, the OEB must follow the Legislature's intent and confine its review to the issues set out in Section 96(2) of the Act.

The MNO raised the Federal Court of Appeal's decision in *Gitxaala Nation v Canada*³⁰ where the court stated "...that statutory provisions that are capable of multiple meanings should be interpreted in a manner that preserves their constitutionality."³¹ In this case, Section 96 is not capable of multiple meanings. The statute is clear as to what the OEB is permitted to consider in a Section 92 application.

Certain intervenors also argued that the OEB accepted jurisdiction over the duty to consult or recognized that duty was part of its jurisdiction during the Designation Process. This is not the case. As part of the Designation Process, the OEB considered whether the proponents had the ability to carry out Indigenous consultation, which would be required for the development of this project.³²

²⁶ 2017 SCC 40.

²⁷ 2017 SCC 41.

²⁸ Rio Tinto Alcan Inc. v Carrier Sekani Tribal Council, 2010 SCC 43, para. 55 citing R. v Conway, 2010 SCC 22.

 ²⁹ For example, the National Energy Board considers environmental impacts as part of its process. The OEB does not consider environmental impacts relating to a proposed transmission line.
 ³⁰ 2016 FCA 187.

³¹ *Gitxaala Nation v* Canada, 2016 FCA 187, para. 161 citing *Eldridge v British Columbia (Attorney General)*, [1997] 3 S.C.R. 624, para 32; *R. v Clarke*, 2014 SCC 28, paras. 14-15.

³² EB-2011-0140, Designation: East-West Tie Line Phase 1 Decision and Order, July 12, 2012, p. 8.

The OEB remains of the view that its authority to consider Indigenous consultation and environmental matters is limited to the issues set out in Section 96(2) of the Act. Indigenous consultation and environmental matters are relevant to the issues of price, reliability and quality of electricity service where they can impact the costs of and schedule for a project. The OEB considers the potential impacts of Indigenous consultation and environmental matters on cost and schedule as part of its analysis in this Decision and Order.

CHAPTER D: DECISION ON DEVELOPMENT COSTS

1 THE PROCESS

The OEB established a schedule specifically for NextBridge's development costs totaling \$40.2 M.

Although NextBridge asked that the OEB decide on the prudence of its development costs as part of a future hearing prior to the in-service date for the NextBridge-EWT Project, the OEB determined it would conduct a detailed review in this proceeding.

2 FINDINGS ON NEXTBRIDGE'S DEVELOPMENT COSTS

2.1 Context and Considerations

NextBridge submitted that the OEB should assess the prudence of its \$40.2 M development costs in the context of the circumstances that it encountered during the extended development period. NextBridge submitted that the OEB should consider:

- The extended in-service date from 2018 to 2020
- The extended development period from 18 to 48 months
- The denied access to Pukaskwa National Park and other major route changes³³
- Unbudgeted costs at designation
- The Priority Project OIC declaring the new transmission line from Wawa to Thunder Bay as a priority project

Intervenors submitted that the OEB should consider many factors in assessing NextBridge's development costs, including:

- The competitive context of the Designation Decision
- The scope and assumptions at designation
- Unbudgeted costs at designation
- The duty to consult with First Nations and Métis
- Circumstances that could not have been reasonably considered at the time of the Designation Process
- The extended in-service date

³³ NextBridge identified three major re-routes: around Pukaskwa National Park, the Township of Dorion and Loon Lake.

- The major route changes
- The extended development period
- Carrying costs
- The sufficiency of evidence to assess prudence
- Precisely determined costs

Findings

The OEB finds it appropriate to consider the context of the Designation Decision, the expectation of economic efficiency in the development phase, and the events that occurred after the Designation Decision.

The context of the Designation Decision is critical to the OEB's review of development costs. In 2013, there was a Designation Process among the proponents and decisions were made based on a set of evaluation criteria, which included development costs. The Designation Decision approved NextBridge's proposed development budget of \$22.4 M. In this Decision and Order, in determining whether the development costs were reasonable, the OEB considered the approved budget and scope of work for the development period as defined in the Designation Decision, which included:

...negotiating access and land rights, acquiring permits, conducting environmental assessment activities, consulting with affected communities, preparing line design and engineering studies, conducting economic feasibility studies, and obtaining a system impact assessment. The development phase ends with the filing of an application for leave to construct the line.³⁴

The Designation Decision referred to the Transmission Policy Framework's expectation of economic efficiency during the development phase. The purpose of designating one transmitter to complete the development work for the new transmission line between Wawa and Thunder Bay was to advance electricity transmission projects in Northern Ontario – and to do so with economic efficiency for the benefit of ratepayers. Economic efficiency would be achieved by having one company complete the development work to avoid duplication of effort, such that ratepayers would pay once for development work.

³⁴ EB-2011-0140, East-West Tie Line Designation Phase 2 Decision and Order, August 7, 2013, p. 3.

The Designation Decision indicated that designation did not carry with it the exclusive right to build the line or an exclusive right to apply for leave to construct the line.³⁵

The OEB considered the events that occurred after the Designation Decision, specifically the change to the in-service date that had been recommended by the OPA and the fact that NextBridge was denied access by Parks Canada to cross through Pukaskwa National Park. The OEB also considered the development costs claimed by NextBridge as associated with the duty to consult with the identified First Nations and Métis communities, as well as costs that could not have been foreseen at designation and were not within NextBridge's control. The OEB notes that NextBridge's approved development budget included a contingency of \$1.5 M, which was less than 7% of the \$22.4 M budget.

2.2 Prudence Test

The Designation Decision indicated that development costs in excess of the approved budget would be subject to a prudence review.

NextBridge submitted that the Supreme Court of Canada provided guidance regarding the methodology for a prudence review of a regulated utility in both *Ontario (Energy Board) v Ontario Power Generation Inc. (OPG)* and *ATCO Gas and Pipelines v Alberta (Utilities Commission) (ATCO)*.

NextBridge submitted that the OEB must apply the no-hindsight prudence test as described by the Supreme Court of Canada for committed utility costs. NextBridge submitted that its development costs were committed and the assessment of prudence must be conducted in the context of the circumstances that NextBridge encountered during the extended development period.

SEC submitted that in *OPG*, the Supreme Court of Canada stated that the OEB did not have to apply any particular test in evaluation of the prudence of costs and that it had "broad latitude to determine the methodology it uses in assessing utility costs".³⁶

CCC submitted that it is not enough for NextBridge to show that costs incremental to its development budget were prudently incurred.

 ³⁵ EB-2011-0140, East-West Tie Line Designation Phase 2 Decision and Order, August 7, 2013, p. 4.
 ³⁶ Ontario Energy Board v Ontario Power Generation Inc., 2015 SCC 44, paras. 7, 105.

VECC submitted that NextBridge was entitled to recover the \$22.4 M without the burden of proving prudence as the costs were pre-approved. VECC also submitted that no recovery should be made until a leave to construct is granted.

Hydro One submitted that the decisions in *OPG* and *ATCO* are not useful in considering the prudence of allowing development costs in excess of the approved budget. NextBridge's claimed costs are not committed in the sense used in those cases.

In its reply submission, NextBridge took issue with CCC's, SEC's and Hydro One's submissions claiming these intervenors supported a higher or different standard of review than prudence. NextBridge maintained that its development costs were prudent and that the OEB should review costs based on whether decisions to incur costs were reasonable under the circumstances that were known or ought to have been known to NextBridge when the decisions were made.

Findings

The OEB finds that NextBridge's spending within the approved budget of \$22.4 M is not at issue in this Decision. In the Designation Decision, the OEB pre-approved this budgeted amount. No parties took issue with the fact that NextBridge should be entitled to recovery of this amount.

The OEB will apply a prudence test to assess the reasonableness of development costs of the \$17.8 M that exceeded the approved budget of \$22.4 M, consistent with the Designation Decision. In coming to its decision on development costs, the OEB has not used hindsight in its assessment of prudence.

The OEB will not approve costs that are not part of the development phase of the project in its application of the prudence test. Given the competitive nature of the Designation Process, cost overruns will only be recoverable if they reflect conditions and resultant costs that could not have been foreseeable at the time of the Designation Decision.

In *OPG*, the Supreme Court of Canada stated that the OEB has broad latitude to determine the methodology it uses in assessing utility costs.³⁷

³⁷ Ontario Energy Board v Ontario Power Generation Inc., 2015 SCC 44, para. 7

This Decision is being made following a Designation Process. Given the competitive process, the OEB finds that costs will not be allowed for activities or amounts that could have, and should have, been included in the approved development costs work budget.

2.3 Approved Development Costs

NextBridge submitted that its development costs of \$40.2 M be approved for recovery. NextBridge indicated that it complied with all reporting requirements related to tracking development costs. NextBridge also submitted that based on the evidence, it prudently incurred all development costs.

Table 1, below, provides a development cost summary based on Exhibit JD1.1 from the July 2018 hearing.

Cost Category	OEB- Approved Costs (in 2013 \$) (A)	Actual Extended Development Period Incremental Costs (in nominal \$) (B)	Total Extended Development Period Costs (in nominal \$) (A + B)
Engineering, Design and Procurement Activity	10,553,290	(289,826)	10,263,464
Permitting and Licensing	47,320	37,461	84,781
Environmental and Regulatory Approvals	3,592,680	4,225,000	7,817,680
Land Rights	1,991,000	3,809,532	5,800,532
First Nations and Métis Consultation	1,724,000	1,530,002	3,254,002
Other Consultation	496,000	1,091,015	1,587,015
Regulatory (legal support, rate case and LTC filings)	985,000	888,499	1,873,499
Interconnection Studies	179,000	(95,141)	83,859
Project Management	1,300,000	3,666,784	4,966,784
Contingency	1,529,710	(1,529,710)	0
Subtotals – Budgeted	22,398,000	13,333,616	35,731,616
First Nations and Métis Land Acquisition		16,862	16,862
First Nations and Métis Participation		3,415,388	3,415,388
Pic River Appeal Costs		230,163	230,163
Carrying Costs		733,013	733,013
Subtotals - Unbudgeted	0	4,395,425	4,395,425
TOTALS	22,398,000	17,729,041	40,127,041

Table 1 – Development Cost Summary by Cost Category

BLP supported the recovery of NextBridge's development costs. BLP submitted that participation agreements need to be finalized as much as possible before a leave to construct application receives final approval and well before the commencement of

construction.³⁸ BLP further submitted that the associated costs were essential to the development phase.

The MNO supported the approval and recovery of NextBridge's development costs. The MNO submitted that that both Indigenous consultation and economic participation discussions must take place, requiring a proponent to incur costs during the development phase as required by law and the duty to consult.³⁹

CCC submitted that the OEB approve recovery of \$31.2 M. CCC submitted the OEB should approve recovery of the costs for the major re-routes, the extended development period costs and carrying costs. Further, CCC proposed that the OEB should make permanent disallowances of \$5.7 M for all other cost drivers and \$3.7 M for unbudgeted First Nations and Métis participation, land acquisition and the Pic River appeal costs.⁴⁰ CCC submitted the phase shift costs of \$1.9 M should be approved only if NextBridge is successful in its leave to construct application.⁴¹

SEC submitted that the OEB approve recovery of \$33.2 M and possible recovery of \$3.4 M for First Nations and Métis economic participation costs.⁴² Specifically, SEC proposed the OEB approve the cost of the major re-routes, the project delay, escalation costs, First Nations and Métis land acquisition, and carrying costs. SEC submitted the OEB should not approve recovery of costs related to a phase shift in costs from construction to development, scope and budget variances, and the Pic River appeal costs.

VECC submitted that the \$40.2 M was reasonable and that NextBridge had demonstrated it made substantial efforts to reduce costs given the uncertainties.⁴³

⁴¹ Ibid.

³⁸ EB-2017-0182/EB-2017-0194/EB-2017-0364, BLP Submission on NextBridge Development Costs, September 19, 2018, p. 2.

³⁹ EB-2017-0182/EB-2017-0194/EB-2017-0364, MNO Submission on NextBridge Development Costs, September 19, 2018, p. 2.

⁴⁰ EB-2017-0182/EB-2017-0194/EB-2017-0364, CCC Submission on NextBridge Development Costs, September 19, 2018, p. 3.

⁴² EB-2017-0182/EB-2017-0194/EB-2017-0364, SEC Submission on NextBridge Development Costs, September 19, 2018, p. 5.

⁴³ EB-2017-0182/EB-2017-0194/EB-2017-0364, VECC Submission on NextBridge Development Costs, September 19, 2018, p. 2.

OEB staff submitted that the OEB should approve recovery of \$30.7 M.⁴⁴ OEB staff further submitted that while costs above \$30.7 M may represent reasonable activities, NextBridge had not established the requisite evidentiary record. OEB staff explained that utilities could not rely on a presumption that costs incurred are prudent without providing sufficient evidence for the undertaken activity and the quantum.

Hydro One submitted that while some extended development period costs should be eligible for recovery, there is insufficient evidence to determine if costs were prudently incurred.⁴⁵ Hydro One focused on costs for environmental and regulatory approvals, land rights, consultations and project management. Hydro One submitted that the OEB should not approve unbudgeted First Nations and Métis land acquisition and participation costs. Hydro One submitted that NextBridge must take responsibility for these costs, otherwise the designation process was unfair to the other participants.⁴⁶ Hydro One also submitted that land option costs were premature prior to a leave to construct being granted and that incremental costs for the EA process should have been anticipated by NextBridge and thus should not be recoverable.

BZA's submission did not address NextBridge's request of \$40.2 M specifically, yet stated that NextBridge's development cost spending had not achieved the results of satisfying the duty to consult. BZA submitted that the duty to consult remains a significant outstanding issue that must be resolved before the construction of the new transmission line between Wawa and Thunder Bay can begin.⁴⁷

In its reply submission, NextBridge addressed each disallowance proposed by SEC, CCC and OEB staff and the submissions of Hydro One. In particular, NextBridge submitted that OEB staff and Hydro One had inappropriately mixed two methodologies – costs on a workstream basis as directed by the OEB, and costs on an activity-basis as provided in response to an undertaking request. NextBridge also indicated that the MNO's and BZA's submissions provided reasons why both Indigenous consultation and economic participation discussion were essential.

⁴⁴ EB-2017-0182/EB-2017-0194/EB-2017-0364, OEB staff Submission on NextBridge Development Costs, September 19, 2018, p. 2.

⁴⁵ EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Submission on NextBridge Development Costs, September 19, 2018, p. 5.

⁴⁶ EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Submission on NextBridge Development Costs, September 19, 2018, p. 19.

⁴⁷ EB-2017-0182/EB-2017-0194/EB-2017-0364, BZA Submission on NextBridge Development Costs, September 19, 2018, p. 3.

Findings

In assessing the \$40.2 M in development costs, the OEB finds it appropriate to start with the approved \$22.4 M budget from the Designation Decision. The OEB finds that the Designation Decision pre-approved this budgeted amount, and that only the incremental development costs of \$17.8 M, exceeding the approved \$22.4 M, are at issue.

The OEB finds NextBridge is eligible to recover total development costs of \$31.241 M⁴⁸.

For analysis, the OEB groups NextBridge's allocation of the incremental development costs into four major cost categories:

- **Major Re-Routes:** Matters pertaining to costs associated with the alteration of the line in order to go around Pukaskwa National Park, the Township of Dorion and Loon Lake
- Extension of the In-Service Date to 2020: Matters pertaining to costs associated with the in-service date being moved from 2018 to 2020
- All Other Drivers: Matters pertaining to costs for, among other things, studies, engineering work, and operational costs
- **Unbudgeted at Designation:** Matters pertaining to costs that were not accounted for during the Designation Process

Table 2 provides a summary of the development costs approved for recovery based on Exhibits JD1.2 and JD1.6 from the July 2018 hearing. Table 2 also breaks out specific costs that are denied per findings below.

⁴⁸ \$31.241 M is the sum of \$22.4 M and \$8.841 M.

Major Cost Category	Proposed \$ million	Approved Yes/No	Approved \$ million
Designation Decision – approved	\$22.398	Yes	\$22.398
Major Reroutes	\$1.700	Yes	\$1.700
Extended in-service date			
 EA review participation⁴⁹ 	\$0.460	No	\$0
 Land optioning negotiations⁵⁰ 	\$1.439	No	\$0
Support functions ⁵¹	\$1.241	No	\$0
 EWT project office salaries and overheads⁵² 	\$1.467	Partial	\$0.733
 Supplemental socio-economic assessment⁵³ 	\$0.160	No	\$0
 Extended in-service date approved⁵⁴ 	\$2.833	Yes	\$2.833
All other drivers (activities 20 to 40)			
 Archaeology Stage 2 study⁵⁵ 	\$1.012	No	\$0
 Engineering review⁵⁶ 	\$0.095	No	\$0
 Support Functions⁵⁷ 	\$0.084	No	\$0
 All other drivers approved⁵⁸ 	\$2.843	Yes	\$2.843
Unbudgeted at designation			
Land acquisition	\$0.017	No	\$0
Economic participation	\$3.415	No	\$0
Pic River appeal	\$0.230	No	\$0
Carrying Costs ⁵⁹	0.733	Yes	\$0.733
Total	\$40.127		\$31.241

Table 2 – Approved Development Costs for Recovery

⁴⁹ EB-2017-0182/EB-2017-0194, NextBridge Undertaking Response JD1.2, #41, p. 39 and Attachment 1.

⁵⁰ EB-2017-0182/EB-2017-0194, NextBridge Undertaking Response JD1.2, #42, p. 40 and Attachment 1.

⁵¹ EB-2017-0182/EB-2017-0194, NextBridge Undertaking Response JD1.2, #10. p. 13 and Attachment 1.

⁵² EB-2017-0182/EB-2017-0194, NextBridge Undertaking Response JD1.2, #11, p. 14 and Attachment 1.

 ⁵³ EB-2017-0182/EB-2017-0194, NextBridge Undertaking Response JD1.2, #13, p. 15 and Attachment 1.
 ⁵⁴ Equals \$7.600 - \$0.460 - \$1.439 - \$1.241 - \$1.467 - \$0.160.

⁵⁵ EB-2017-0182/EB-2017-0194, NextBridge Undertaking Response JD1.2, #26, p. 26 and Attachment 1.

⁵⁶ EB-2017-0182/EB-2017-0194, NextBridge Undertaking Response JD1.2, #28, p. 28 and Attachment 1.

⁵⁷ EB-2017-0182/EB-2017-0194, NextBridge Undertaking Response JD1.2, #40, p. 39 and Attachment 1. ⁵⁸ Equals \$4.034 - \$1.012 - \$0.095 - \$0.084.

⁵⁹ EB-2017-0182/EB-2017-0194, NextBridge Undertaking Response JT1.1 Corrected, JT1.1, p. 2.

In 2015, NextBridge filed an incremental development period budget of \$20.3 M after the OPA (now the IESO) extended the in-service date from 2018 to 2020. In a November 2015 Extended Development Period Decision, the OEB did not approve the incremental budget, but rather, stated that any costs above the approved budget at designation, could be subject to a review at a future hearing.⁶⁰ As a result, the OEB does not find the incremental budget of \$20.3 M to be relevant to a prudency determination.

Major Re-Routes

The OEB approves the \$1.700 M cost associated with the three major re-routes. The OEB finds the re-routes around Pukaskwa National Park, the Township of Dorion and Loon Lake were beyond NextBridge's control and could not have been foreseen at designation. The OEB finds these costs to be reasonable.

Extended In-Service Date

NextBridge indicated the cost of the extended in-service date to 2020 was \$7.600 M.

The OEB does not approve the phase shift of \$0.460 M for EA review participation and \$1.439 M for land option negotiation costs that NextBridge budgeted as a construction cost at designation. It was NextBridge's decision to shift these costs to the extended development period; it was not a cost caused by the extended in-service date.

The OEB does not approve the \$1.241 M for support functions costs, which appear to be allocated corporate costs of NextBridge personnel, not costs caused by the extended in-service date. The OEB finds the evidence insufficient to conclude that NextBridge incurred these incremental costs because of the extended in-service date.

The OEB does not approve \$0.733 M in project office salaries and overheads as the OEB finds only some of the project office costs relate to incremental project staff. Some of the costs are overhead costs, which are allocated corporate costs for office leases, utilities and miscellaneous overheads, not caused by the extended in-service date, but are costs that the company would have incurred in any event. The OEB finds the evidence insufficient to conclude that NextBridge incurred all of these incremental costs

⁶⁰ EB-2015-0216, Application for Approval of Schedule and Costs Related to the Development of the East-West Tie Transmission Line Decision and Order, November 19, 2015, p. 1.

because of the extended in-service date and therefore approves 50% of the \$1.467 M cost.

The OEB does not approve the \$0.160 M in supplemental socio-economic assessment costs. The OEB agrees with OEB staff's submission that the requirements did not change during the development period, rather additional information was required by NextBridge to fill gaps that existed in the original data collected.

The OEB approves the remaining \$2.833 M development costs associated with the extended in-service date. The OEB finds these costs to be reasonable.

All Other Drivers

NextBridge indicated the cost of all other drivers (activities #20 to #40⁶¹) was \$4.034 M.

The OEB considered the activity-based framework evidence provided by NextBridge in JD1.2. The OEB acknowledges NextBridge's reply submission that some activities do not map directly to the workstreams approved by the OEB at designation. The OEB also acknowledges that the oral hearing undertaking responses were based on slightly different time periods and assumptions. The OEB finds the evidence in JD1.2 and JD1.6 informative and of assistance in rendering this Decision.

The OEB does not approve \$1.012 M for the archaeology stage 2 study (activity #26⁶²). The OEB agrees with OEB staff's submission that the archaeology stage 2 study was always contemplated and more costs could have been included in NextBridge's development budget at designation. The OEB finds that NextBridge's budget was insufficient for the archaeology work required.

The OEB does not approve \$0.095 M for the engineering review (activity #28⁶³). This cost was not in the approved budget, and could have been foreseen given NextBridge's tower design. NextBridge proposed a unique tower design. Any engineering studies/reviews should have been anticipated by NextBridge when it submitted its forecast development costs. It is not reasonable to think that an engineering review for a critical part of the infrastructure which makes up the transmission line would not have been contemplated.

 ⁶¹ EB-2017-0182/EB-2017-0194, NextBridge Undertaking Response JD1.2, Attachment 1.
 ⁶² EB-2017-0182/EB-2017-0194, NextBridge Undertaking Response JD1.2, Attachment 1.
 ⁶³ *Ibid.*

The OEB does not approve \$0.084 M for support functions (activity #40⁶⁴). These costs appear to be allocated corporate costs of NextBridge personnel, not costs caused by the extended in-service date. The OEB finds the evidence insufficient to conclude that NextBridge incurred these incremental costs because of the extended in-service date.

The OEB approves the remaining \$2.843 M of development costs associated with all other drivers. The OEB finds these costs to be reasonable and directly attributable to the extended in-service date.

Unbudgeted at Designation

NextBridge indicated that the costs unbudgeted at designation was \$4.395 M.

In principle, the OEB does not approve the unbudgeted costs because such approval would conflict with the objectives of the Designation Process that enables a price comparison based on specific dollar amounts.

The OEB does not approve the unbudgeted \$0.017 M in First Nations and Métis land acquisition negotiations. This cost was unbudgeted within the development phase at designation. As NextBridge incurred the costs with the objective of acquiring land, the OEB finds it is not an appropriate development cost. This cost should be classified as a construction cost associated with the NextBridge-EWT Application.

The OEB does not approve the \$3.415 M in First Nations and Métis economic participation. NextBridge included \$0 in its development budget during the Designation Process. In contrast, one unsuccessful proponent's economic participation budget was \$9.1 M. It was within NextBridge's control to estimate an amount or establish a sufficient contingency budget. In signing an exclusive contract, or preparing to sign an exclusive contract for the construction period, NextBridge was advancing work for its leave to construct application. The OEB finds that economic participation costs should be classified as construction costs. A contract exclusive to NextBridge, by its very nature, cannot be considered development work available to Hydro One or any other party. In addition, the OEB notes that economic participation was not identified as a development cost in the Designation Decision⁶⁵.

The OEB does not approve the \$0.230 M in Pic River appeal costs. The OEB regards the Pic River appeal as a legal risk which could have been reasonably foreseen by the

64 Ibid.

⁶⁵ EB-2011-0140, East-West Tie Line Designation Phase 2 Decision and Order, August 7, 2013, p. 3.

designated transmitter and should have been funded through a contingency included in the budget submitted and approved. In addition, the OEB finds the \$0.230 M excessive for an appeal that did not proceed to hearing.

The OEB finds it appropriate to allow for the carrying costs, which are usually allowed to be recovered by the OEB and included when deferral accounts are established. The OEB finds the proposed carrying costs unbudgeted at designation of \$0.733 M to be reasonable. The OEB will allow the \$0.733 M to be updated to include carrying costs from July 2017 until recovery is complete based on the \$31.241 M approved amount.

In summary, the OEB finds that NextBridge is eligible to recover \$31.241 M in development costs plus any additional carrying costs until recovery as it finds these costs to be reasonable given the context of the Designation Process, the expectation of economic efficiency, and the events that occurred after the Designation Decision. Any costs in excess of \$31.241 M that NextBridge seeks to recover should be included in its NTE price. Table 3 provides the costs eligible for consideration as construction costs.

Cost Category	Proposed \$ million
Extended In-Service Date	
EA Review Participation	\$0.460
Land Optioning Negotiations	\$1.439
Unbudgeted at Designation	
Land Acquisition Negotiations	\$0.017
Economic Participation	\$3.415
Total	\$5.331

Table 3 – Costs Eligible for Consideration as Construction Costs

2.4 Implications for Leave to Construct Applications

The OEB's Transmission Policy Framework provided the policy basis for the process that determined that NextBridge would be the designated transmitter for the development of the new transmission line between Wawa and Thunder Bay. In the Designation Decision, the OEB found NextBridge eligible to recover its approved development budget of \$22.4 M. However, in a subsequent decision, the OEB found

that NextBridge's development costs over that budget must undergo a prudence review before they can be approved.⁶⁶ This Decision provides that review.

As the Designation Decision notes, the development phase of the project ends with the filing of a leave to construct application. As a result, the OEB's Decision on the recovery of development costs is final. The OEB will address the mechanism by which cost recovery of approved development costs will occur in a subsequent rate order. The OEB finds it appropriate for NextBridge to record carrying costs on \$31.241 M until a rate order is issued.

The OEB further finds that in the event that Hydro One is ultimately awarded leave to construct the transmission line from Thunder Bay to Wawa, NextBridge's full recovery of the \$31.241 M is contingent on it transferring its EA work (subject to any third party confidentiality concerns such as Traditional Environmental Knowledge studies to Hydro One.⁶⁷ The Designation Decision selected NextBridge to do the development work in advance of a leave to construct application for a new transmission line between Thunder Bay and Wawa. This work is to be paid for by ratepayers and can be useful to Hydro One. In the OEB's view, NextBridge cannot expect to be paid for a work product that it withholds.

3 HYDRO ONE'S DEVELOPMENT COSTS

The Hydro One-LSL Application budgets \$17 M for development costs. The OEB notes that this amount includes costs that would not qualify as development costs under the Designation Process. The Designation Decision defined development costs as amounts incurred prior to filing the leave to construct application.⁶⁸ Hydro One's development costs include further amounts up to the OEB's decision on its leave to construct application.

⁶⁶ EB-2015-0216, Application for Approval of Schedule and Costs Related to the Development of the East-West Tie Transmission Line Decision and Order, November 19, 2015

⁶⁷ In the event that NextBridge were to refuse to transfer its EA work, NextBridge would not be entitled to recover amounts directly related to the EA and a pro-rata percentage of its general costs (such as project management).

⁶⁸ Similarly, the OEB's Transmission Policy Framework states that "...development costs begin when a transmitter is designated and end when a leave to construct application is submitted." EB-2010-0059, Board Policy: Framework for Transmission Project Development Plans, August 26, 2010, p. 15.

The current \$17 M amount is \$4.7 M higher than Hydro One's initial estimate in February 2018, when the Hydro One-LSL Application was filed. Hydro One explained that \$1.9 M of the increase is related to costs that were shifted from the construction budget to the development budget as a result of the expected change in OEB approval date (from October 2018 to January 2019). Further, it was explained that \$2.8 M of the increase was associated with additional costs of a Provincial Individual EA process, which is being pursued by Hydro One in parallel in the event a MECP declaration order is not granted. Hydro One has stated that it will not seek recovery of the \$17 M amount if it is not granted leave to construct approval.

The OEB's Transmission Policy Framework addresses the treatment of development costs incurred by an undesignated transmitter that brings a leave to construct application:

The other possibility is that another transmitter brings a leave to construct application for a different project that meets the same need in a better way. The Board cannot prevent any person from submitting an application for any matter under its jurisdiction. However, the undesignated transmitter would have undertaken development at its own expense which would not be recoverable from ratepayers.⁶⁹

If it is granted leave to construct the transmission line, based on the above framework, Hydro One should not expect to recover its development costs incurred prior to filing the Hydro One-LSL Application. Hydro One has further stated that if it is not the successful applicant, it would not seek recovery of its development costs.⁷⁰ It is the OEB's view that Hydro One's costs since the filing of the Hydro One-LSL Application on February 15, 2018 should be considered construction costs and included in the NTE price submitted.

⁶⁹ EB-2010-0059, Board Policy: Framework for Transmission Project Development Plans, August 26, 2010, p. 17. ⁷⁰ EB-2017-0182/EB-2017-0194/EB-2017-0364, Oral Hearing Transcript Volume 1, October 2, 2018 J

⁷⁰ EB-2017-0182/EB-2017-0194/EB-2017-0364, Oral Hearing Transcript Volume 1, October 2, 2018, p. 57.

CHAPTER E: DECISION ON STATIONS APPLICATION

1 STATION UPGRADES OVERVIEW

On July 31, 2017, Hydro One filed the Hydro One-Station Upgrades Application with the OEB, seeking leave to upgrade three existing stations associated with the new 230 kilovolt (kV) transmission line to be constructed between Wawa and Thunder Bay. Specifically, the Hydro One-Station Upgrades Application is needed to perform necessary station work at Wawa TS, Marathon TS and Lakehead TS in Northwest Ontario. For a map depicting the locations of the three stations, see Schedule A. The evidentiary record indicates that station work is required to connect the new transmission line between Wawa and Thunder Bay, and the station work is estimated by Hydro One to cost approximately \$157.3 M.⁷¹

During the proceeding, Hydro One revised the project schedule for the station work.

Hydro One seeks approval to perform the following upgrades⁷² at each of Wawa TS, Marathon TS and Lakehead TS⁷³:

- Extend the 230 kV buses and add new diameters between them
- Upgrade the existing 230 kV buses and diameters
- Add new circuit breakers and associated breaker-disconnect switches on the diameters
- Connect the new transmission line to the new diameter through line disconnect and ground switches
- Upgrade the disconnect/ground combination switches for the existing transmission lines
- Complete 230 kV protection, control and telecommunication upgrade and expansion, including the relay building

As part of the upgrades, Wawa TS will have its station footprint expanded by approximately 0.5 hectares while Marathon TS will have the station footprint expanded

 $^{^{71}}$ EB-2017-0194, Hydro One- Station Upgrades Application, Exhibit B, Tab 1, Schedule 1, pp. 1-5. 72 To increase the east-west transfer capability to 650 MW, when necessary, Marathon TS will install a new +200/-100 Mvar Static Var Compensator with its step-up transformer while sections of the 115 kV circuits A5A and T1M will be upgraded. Hydro One states that these upgrades will be completed in the future.

⁷³ EB-2017-0194, Hydro One- Station Upgrades Application, Exhibit B, Tab 2, Schedule 1, pp. 2-4.

by approximately five hectares. No changes to the Lakehead TS footprint are required. In addition to the upgrades listed above, Marathon TS will add two new 230 kV, 65 Mvar each, three-phase shunt reactors along with the switching breakers/switchers, disconnect switches and their associated facilities.⁷⁴ At Lakehead TS, a new 230 kV, 125 Mvar, three-phase shunt reactor with the switching breaker/switcher, disconnect switch and associated facilities will be added. In addition, a new 230 kV, 125 Mvar, three-phase shunt capacitor bank with the series reactor, switching breakers, disconnect switch and associated facilities will be added.⁷⁵

With respect to construction schedule, Hydro One stated that the Lakehead TS upgrades would be in service on May 29, 2021, the Marathon TS upgrades on June 14, 2021, and the Wawa TS upgrades on October 28, 2021.⁷⁶

2 THE ISSUES - STATIONS

2.1 Interests of Consumers with Respect to Prices - Stations

Hydro One estimates a total construction cost of \$157.3 M for the station facilities. This estimate includes facilities required to address an existing high voltage issue at Lakehead TS (\$10 M) and facilities required for the connection of the new transmission line between Wawa and Thunder Bay and to bring stations into compliance with ORTAC guidelines (\$147 M).

The IESO, in its pre-filed evidence filed as part of the Hydro One-Station Upgrades Application, stated that it has worked with Hydro One to evaluate the technical and economic feasibility of different alternatives for the required station facilities. The IESO further stated that alternatives were considered to postpone as much station work as possible to later stages, in order to defer/save costs and provide the required transfer capability incrementally and as needed to satisfy reliability needs. Further, the IESO stated that the two staging alternatives that were developed and compared based on the objectives were (i) the twinned alternative and (ii) the multi-circuit alternative, and that the multi-circuit alternative was the recommended staging for the station work due to its lower overall cost of \$157.3 M for phase 1 of the station work.

 ⁷⁴ EB-2017-0194, Hydro One- Station Upgrades Application, Exhibit B, Tab 2, Schedule 1, p. 3.
 ⁷⁵ EB-2017-0194, Hydro One- Station Upgrades Application, Exhibit B, Tab 2, Schedule 1, p. 4.
 ⁷⁶ EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Reply Submission, November 9, 2018, Attachment 1.

Based on Hydro One's projected cost of \$157.3 M for the station upgrades, over a 25year time horizon, the network pool rate will rise by 5¢ per kilowatt (kW) per month.⁷⁷ Hydro One states that there will be an increase of 1.37% in the network pool provincial uniform rate as a result of the station upgrades work and a typical residential customer's monthly bill will increase by about 0.05%.⁷⁸

2.2 Reliability and Quality of Electricity Service - Stations

Hydro One stated that the Hydro One-Station Upgrades Application enables the new transmission line between Wawa and Thunder Bay with sufficient transfer capability to meet the growing electricity demand in Northwest Ontario. Hydro One further stated that the station work is needed to meet the performance requirements of the TPL-001-4 standard of NERC, in particular, respecting double-circuit and breaker-failure contingencies and the ORTAC guidelines.⁷⁹

The IESO's System Impact Assessment (SIA) concluded that the Hydro One-Station Upgrades Application does not have a material adverse impact on the reliability of the integrated power system and that the project modifications are expected to be adequate for the targeted westward transfer level of 450 megawatt (MW) for the initial stage.

Hydro One's Customer Impact Assessment (CIA) concluded that short-circuit levels at customer transmission connection points will not increase significantly as a result of upgrades at Wawa TS, Marathon TS and Lakehead TS. Hydro One's CIA also concluded that the voltage assessments and switching studies show that voltage performance is acceptable, and the new reactive power sources and revised protection scheme will improve voltage performance in the area. The proposed transmission facilities have no material adverse reliability impact on existing customers in the area, and will rather work to improve reliability in Northwest Ontario.

 ⁷⁷ EB-2017-0194, Hydro One- Station Upgrades Application, Exhibit B, Tab 9, Schedule 1, p. 2.
 ⁷⁸ EB-2017-0194, Hydro One- Station Upgrades Application, Exhibit B, Tab 9, Schedule 1, pp. 2-3.
 ⁷⁹ EB-2017-0194, Hydro One- Station Upgrades Application, Exhibit B, Tab 1, Schedule 1, pp. 2-3.

2.3 In-Service Date and Delays Associated with Station Facilities

Hydro One stated in its reply submission that the Lakehead TS upgrades would be inservice on May 29, 2021, the Marathon TS upgrades would be in-service on June 14, 2021, and the Wawa TS upgrades on October 28, 2021.⁸⁰

During the course of the proceeding, it was revealed that the EA approvals and related permits for Wawa TS and Marathon TS⁸¹ are critical path items in the schedule for the station upgrades work.⁸²

Hydro One, in its Argument-in-Chief, stated that the MECP has taken the position that, because the work at Marathon TS is connected to the Provincial Individual EA for the new transmission line between Wawa and Thunder Bay, the MECP cannot move forward with Class EA permits and approvals for Marathon TS before a Provincial Individual EA for the transmission line is completed.⁸³

On October 29, 2018, Hydro One filed a letter on the record advising that the MECP had informed Hydro One on October 26, 2018 that it was rejecting Hydro One's EA screening for Wawa TS. Hydro One had originally filed the EA screening for Wawa TS on December 19, 2017. Hydro One stated that its EA screening had concluded that the Wawa TS expansion did not trigger a full Class EA, based on the screening criteria under the *Class EA for Minor Transmission Facilities*, dated November 16, 2016. Hydro One stated that it was taking the position that a full Class EA is required, rather than an EA screening, on the basis that it considered Wawa TS a "precondition to the implementation of another larger and more environmentally significant project"⁸⁴ (i.e., the new transmission line between Wawa and Thunder Bay).

On October 31, 2018, the MECP filed a letter explaining its decision with respect to the EA process for Wawa TS. The MECP stated that on July 25, 2018, it received a request from Michipicoten First Nation (MFN) asking, among other things, that Hydro One be

⁸⁰ EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Reply Submission, November 9, 2018, Attachment 1.

⁸¹ According to the Reply Submission of Hydro One dated November 9, 2018, Wawa TS upgrades ready for in-service date is October 28, 2018; Marathon TS upgrades ready for in-service date is June 14, 2021, Lakehead TS upgrades ready for in-service date is May 29, 2019 (this station has no EA requirements).
⁸² Lakehead TS does not require an environmental assessment.

⁸³ EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Argument-in-Chief, October 22, 2018, p. 31, para. 123.

⁸⁴ EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Letter of Correspondence, October 29, 2018, p. 1.
required to complete a Class EA for Wawa TS. The MECP stated that discussion between Hydro One and MFN continued over the summer and early fall of 2018. The MECP further outlined that in September 2018, it requested project documentation from Hydro One to assess whether Hydro One met the requirements of a Class EA, including the screening document. The MECP noted that upon reviewing Hydro One's documentation, it determined that the requirements of the *Class EA for Minor Transmission Facilities* were not met by Hydro One and that the screening option was not the appropriate level of assessment.

On November 1, 2018, the OEB sent a letter to the MECP requesting clarification on the MECP's explanation and sought response to three questions related to timing of approval for the Wawa TS Class EA; the impact of the Wawa TS Class EA approval on NextBridge's EA approval for the new transmission line between Wawa and Thunder Bay; and the impact of the Wawa TS Class EA approval on the timing of any permits for which the MECP is responsible. On November 6, 2018, the MECP filed its letter responding to the OEB's clarification questions as follows:⁸⁵

- It is the MECP's understanding that Hydro One has done much of the outstanding work, but has not documented the required Environmental Study Report, and that this would take less than six months to complete. As this is a proponent-driven process, Hydro One is ultimately responsible for determining when it will commence the additional work.
- The completion of the Wawa TS Class EA is not a pre-condition for the approval of NextBridge's EA for the transmission line.
- Any subsequent permits or approvals required for construction of Wawa TS expansion can only be issued after the line's EA approval, however, the timing for the Wawa TS Class EA does not impact the timing for permits or approvals required to construct the transmission line.

As a result of the expected timelines for station-related EA approvals, Hydro One's station upgrades work is now expected to be completed in October 2021 and therefore, the earliest in-service date for the new transmission line between Wawa and Thunder Bay would be October 2021, regardless of which applicant is granted leave to construct approval.

⁸⁵ EB-2017-0182/EB-2017-0194/EB-2017-0364, The MECP Response Letter, November 6, 2018, pp. 1-2.

Hydro One and PWU noted that in cross-examination and Argument-in-Chief, NextBridge had suggested that Hydro One's station upgrades work schedule is longer than what is needed. PWU submitted that the length of Hydro One's schedule has not changed from its original application over a year ago which was designed to meet a December 2020 in-service date. To meet this date, construction would have had to start by July 2018.

Hydro One and PWU further submitted that the delay to the in-service date is simply a function of the EA delay stemming from the MECP's decision and that Hydro One's proposed September 2021 in-service date for the station upgrades is reasonable.

OEB staff submitted that Hydro One should continue to look at ways to expedite the station upgrades, after the Class EA approval for the station work is granted, wherever possible.

2.4 Forms of Land Agreement - Stations

Section 97 of the Act states:

In an application under section 90, 91 or 92, leave to construct shall not be granted until the applicant satisfies the Board that it has offered or will offer to each owner of land affected by the approved route or location an agreement in a form approved by the Board.

Hydro One has indicated in its Hydro One-Station Upgrades Application that the station facilities expansion at Marathon TS and Wawa TS require a fee simple purchase of additional lands adjacent to the current Hydro One properties to accommodate the necessary station upgrades. Hydro One stated that it will not need to acquire additional property rights at Lakehead TS to complete the station upgrades. Hydro One further stated that temporary construction rights may be required at various locations of the station upgrades work.⁸⁶

Parties did not take issue with Hydro One's form of land agreement as filed in the Hydro One-Station Upgrades Application.

⁸⁶ EB-2017-0194, Hydro One-Station Upgrades Application, Exhibit E, Tab 1, Schedule 1, pp. 1-2.

In summary, NextBridge, Hydro One, OEB staff, CCC, SEC, VECC and PWU submitted that the station upgrades work is a necessary component of the new transmission line between Wawa and Thunder Bay, and should be approved.

3 FINDINGS - STATIONS

The OEB finds that the station upgrades at Wawa TS, Marathon TS and Lakehead TS proposed in the Hydro One-Station Upgrades Application are needed in order to support the new transmission line between Wawa and Thunder Bay. The OEB also finds that postponing as much station work as possible to later stages in order to defer or save costs and provide the required transfer capability incrementally and as needed to satisfy reliability needs is appropriate. It is expected that when the need for the full 650 MW of capacity is required, the IESO and Hydro One will work together to seek OEB's approval at that time.

During the course of the proceeding, parties did not raise issues with the proposed project cost of approximately \$157.3 M. Hydro One provided information on a previous comparable project – a station reconfiguration at Orangeville TS – which was shown to have similar costs once differences in scope and timing were taken into account.

The project meets reliability and quality of electricity service requirements. The IESO concluded in its SIA that the Hydro One-Station Upgrades Application does not have a material adverse impact on the reliability of the integrated power system. Further, the CIA determined that the voltage assessments are acceptable and that the project has no material adverse impact on existing customers in the area, and will rather work to improve reliability in Northwest Ontario.

Although the scheduling for the stations upgrades is impacted by the necessary approvals, permits, licences, certificates and rights being attained, the OEB finds that Hydro One should continue to explore ways to expedite the station work, especially after the Class EA approval for the station work is granted by the MECP.

The OEB approves the Hydro One-Station Upgrades Application, subject to granting leave to construct for the new transmission line between Wawa and Thunder Bay and other conditions set out in the Order provisions below.

The OEB grants to Hydro One an approval under Section 97 of the Act. The OEB finds that the forms of land purchase agreements and temporary land use or access

agreements that Hydro One has offered or will offer to the landowners needed for construction of the stations appear to be in accordance with the OEB's *Filing Requirements for Electricity Transmission Applications*. The OEB notes that no party raised any issue or concern regarding the forms of land related agreements that Hydro One filed in support of its application for Section 97 approval.

CHAPTER F: DECISION ON THE TRANSMISSION LINE APPLICATIONS

1 NEXTBRIDGE-EWT APPLICATION

1.1 Routing - NextBridge-EWT

The NextBridge-EWT Application proposes to construct a 450 km long transmission line that will run for approximately 235 km from Lakehead TS to Marathon TS. Continuing for approximately 215 km from Marathon TS, the transmission line will go around Pukaskwa National Park and establish a connection at Wawa TS. For a map depicting the line route proposed in the NextBridge-EWT Application, see Schedule B.

The proposed route in the NextBridge-EWT Application will require a new right of way (ROW), which will be largely adjacent to an existing transmission line owned by Hydro One. In addition, the line will also have segments running within easements NextBridge would acquire from private landowners and the Crown. The NextBridge-EWT Application proposes to use lattice towers for the entire length of the new transmission line.⁸⁷ NextBridge's tower design consists of guyed-Y lattice and self-supporting lattice tower structures.⁸⁸

1.2 In-Service Date - NextBridge-EWT

NextBridge forecasts a construction schedule of 18 months for an in-service date of December 2020.⁸⁹

1.3 Overall Rate Impact - NextBridge-EWT

NextBridge argues that the impact of NextBridge's proposal on prices paid by ratepayers is "modest" and that a typical Ontario residential customer will pay approximately 35¢ more each month if the NextBridge-EWT Application is approved and its project is built. NextBridge further argues that the 35¢ monthly increase "is modestly overstated" as NextBridge's operations, maintenance and administration

⁸⁷ EB-2017-0182, NextBridge-EWT Application, Exhibit C, Tab 2, Schedule 1, pp. 1-2.

⁸⁸ EB-2017-0182, NextBridge-EWT Application, Exhibit C, Tab 2, Schedule 1, p. 2, line 23 and Exhibit E, Tab 1, Schedule 1, p. 3, line 1.

⁸⁹ EB-2017-0182/EB-2017-0194/EB-2017-0364, NextBridge Additional Interrogatory Response to OEB Staff No. 49, Exhibit I, Attachment, p. 3.

(OM&A) cost estimates were reduced by almost \$1 M during the course of the proceeding, but the rate impact calculations that were filed as part of NextBridge's July 31, 2017 filing were not updated accordingly.

1.4 System Impact Assessment (SIA) and Customer Impact Assessment (CIA) - NextBridge-EWT

The SIA prepared by the IESO for the NextBridge-EWT Application determined that the NextBridge-EWT Project does not have a material adverse impact on the reliability of the integrated power system provided it complies with the SIA requirements. Further, the SIA for the NextBridge-EWT Project contains the usual requirements applicable to transmitters.

The CIA on the NextBridge-EWT Project determined that short-circuit levels at customer transmission connection points will not increase significantly as a result of NextBridge's proposed project design. Further, voltage assessments and switching studies illustrate that voltage performance is acceptable, while the new reactive power sources and revised protection scheme will improve voltage performance in the area. In addition, the proposed transmission facilities are noted to have no material adverse reliability impact on existing customers in the area, and will rather work to improve reliability in Northwest Ontario.

The OEB's findings are in Section 7 of this Chapter.

2 HYDRO ONE-LSL APPLICATION

2.1 Routing - Hydro One-LSL

The Hydro One-LSL Application proposes to construct a 403 km long transmission line that will run for approximately 235 km from Lakehead TS to Marathon TS. Continuing for approximately 168 km from Marathon TS, the transmission line will go through Pukaskwa National Park to establish a connection at Wawa TS. Hydro One's transmission line is shorter than the line proposed in the NextBridge-EWT Application primarily due to the 35 km segment of line running through Pukaskwa National Park.⁹⁰

⁹⁰ NextBridge did not receive approval by Parks Canada to cross through Pukaskwa National Park and therefore has to take a longer route, which passes around Pukaskwa National Park.

For a map depicting the line route proposed in the Hydro One-LSL Application, see Schedule C.

The proposed segment of transmission line that will run through Pukaskwa National Park will accommodate four circuits (two existing and two new) on one set of new towers (i.e., quad-circuit towers) in the existing corridor. This design will not require additional widening of the corridor through Pukaskwa National Park. The other line segments of the proposed route will require a new ROW, which, much like those in the NextBridge-EWT Project, will be largely adjacent to the existing line owned by Hydro One. These transmission lines will also require Hydro One to attain easements from private landowners and the Crown.⁹¹ The proposed design of the towers in the Hydro One-LSL Project is a mixture of guyed masts, guyed lattice towers and self-supporting lattice structures.⁹²

2.2 In-Service Date - Hydro One-LSL

Hydro One stated that its forecast to complete the construction of the Hydro One-LSL Project is 24 months⁹³ with an in-service of December 2021.⁹⁴

2.3 Overall Rate Impact - Hydro One-LSL

Hydro One submitted that the Hydro One-LSL Project will result in an increase of 20¢ per kW per month to the network pool, utilizing 2018 rates, over a 25-year time horizon. Hydro One further stated that a typical residential customer's monthly bill will increase by about 0.21%, while the network pool provincial uniform rates will increase by 5.74%, if the Hydro One-LSL Application is approved and constructed.⁹⁵

⁹¹ EB-2017-0364, Hydro One-LSL Application, Exhibit C, Tab 1, Schedule 1, pp. 1-8.

⁹² EB-2017-0364, Hydro One- LSL Application, Exhibit C, Tab 2, Schedule 1, p. 2.

⁹³ EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Reply Submission, November 9, 2018, Attachment 1.

⁹⁴ EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Reply Submission, November 9, 2018, Attachment 1.

⁹⁵ EB-2017-0364, Hydro One- LSL Application, Exhibit B, Tab 9, Schedule 1, p. 4.

2.4 System Impact Assessment (SIA) and Customer Impact Assessment (CIA) - Hydro One-LSL

The Hydro One-LSL Application's SIA contains the same requirements as the NextBridge-EWT Application's SIA, as well as two additional requirements⁹⁶:

- That an acceptable restoration plan be submitted to the IESO that documents restoration options for the corridor through Pukaskwa National Park and describes how the circuits will be restored following contingencies
- 2) At least 24 months before the commencement of project related outages with an impact on the system, an outage plan, acceptable to the IESO, is to be submitted for the installation of the 35 km section of the project between Wawa TS and Marathon TS where the existing double circuit towers will be replaced with quad-circuit towers

In its SIA findings, the IESO did note that extreme events, such as the failure of a quadcircuit tower, could result in separation between the Northwest transmission zone and the rest of the IESO-controlled grid. Further, the IESO noted that the 35 km section between Wawa TS and Marathon TS – where existing double circuit towers will be replaced by quad-circuit towers – will require outages in order to install.⁹⁷

However, the IESO concluded in its SIA that the project outlined in the Hydro One-LSL Application will have no material adverse impact on the reliability of the integrated power system.⁹⁸

The CIA concluded that for the Hydro One-LSL Project, the short-circuit levels at customer transmission connection points will not increase significantly as a result of the project and the voltage assessments and switching studies show that voltage performance is acceptable. The CIA also concluded that the new reactive power sources and revised protection scheme will improve voltage performance in the area. Further, the proposed transmission facilities have no material adverse reliability impact

⁹⁶ These two additional requirements are included due to the IESO's limited experience with quad-circuit towers in the Northwest.

⁹⁷ EB-2017-0364, Hydro One- LSL Application Additional Evidence, March 29, 2018, Exhibit F, Tab 1, Schedule 1, p. 2.

⁹⁸ EB-2017-0364, Hydro One- LSL Application Additional Evidence, March 29, 2018, Exhibit F, Tab 1, Schedule 1, pp. 1-2.

on existing customers in the area, and will rather work to improve reliability in Northwest Ontario.

The OEB's findings are in Section 7 of this Chapter.

3 ISSUES TO BE CONSIDERED

In considering whether to grant leave, the OEB is restricted to the issues set out in Section 96(2) of the Act: (i) reliability and quality of electricity service; (ii) prices and (iii) the promotion of the use of renewable energy sources. The promotion of the use of renewable energy sources is not relevant in the Applications. Below, the OEB considers the remaining two issues. The OEB concludes that both projects are acceptable from a reliability and quality of electricity service perspective. As a result, prices will determine which Applicant is granted leave to construct the new transmission line.

4 RELIABILITY AND QUALITY OF ELECTRICITY SERVICE – TRANSMISSION LINE

4.1 Potential Reliability Implications of the In-Service Date

During the proceeding, at the request of the OEB, the IESO filed an addendum to the Updated Needs Assessment in which the IESO noted that in 2020, the capacity need forecasted to emerge is expected to exceed the allowable level of load rejection as prescribed in ORTAC. Further, in the addendum filed, the IESO continued to recommend an in-service date of 2020 for the new transmission line between Wawa and Thunder Bay. The IESO maintained this position in its submission, where it stated that if the in-service date of 2020 were to be delayed, interim measures⁹⁹ would need to be taken and would result in additional risk to reliability. The IESO also submitted that increased risks to system reliability as a result of the proposed transmission line not being in service by the end of 2022 are unacceptable as there is the possibility that the IESO may be unable to attain the needed capacity.¹⁰⁰

⁹⁹ Interim measures include: demand response, firm exports from Manitoba, and contract extensions with existing resources.

¹⁰⁰ EB-2017-0182/EB-2017-0194/EB-2017-0364, IESO Submission, October 31, 2018, pp. 4-5.

Concerns with reliability and quality of electricity service as a result of delays in the inservice date were also raised by Anwaatin in its submission. Specifically, Anwaatin highlighted a number of poor reliability impacts on Indigenous communities:

- Loss of refrigerated foods
- Loss of significant quantities of frozen meat, fish, and game birds, representing months of protected hunting and harvested food upon which [First Nations and Métis] families depend for their livelihoods
- Lost hunting and harvesting as a result of the necessity of dealing with reliability impacts such as outages, and the need to find ways to replace lost meat, fish, and game birds with new protein sources through additional hunting and harvesting
- Loss of significant quantities of frozen blueberries used for sustenance as well as for cash sales to supplement family incomes
- Loss of refrigerated insulin needed for diabetes treatment for many Indigenous people

NextBridge has argued that the NextBridge-EWT Project meets the criterion of reliability as it has targeted to achieve an in-service date of December 2020¹⁰¹ and therefore avoids the reliability risks identified by the IESO.¹⁰²

Hydro One's proposed in-service date is the end of 2021.¹⁰³ Hydro One submitted that the delay to the in-service for Wawa TS, Marathon TS and Lakehead TS is due to the MECP requiring a Class EA for Wawa TS and the inability to issue permits and approvals until after to stations' EAs are complete. As a result, the earliest in-service date for station work is October 2021, making the earliest in-service date for the transmission line October 2021.¹⁰⁴

The EA approvals, with the exception of the segment of the Hydro One-LSL Project passing through Pukaskwa National Park, fall within the authority of the MECP under the Ontario *Environmental Assessment Act*. The MECP provided evidence on the environmental requirements, timing and inter-dependencies of approvals for the NextBridge-EWT Project EA, the Hydro One-LSL Project EA and the Hydro One-Station Upgrades Project EA. A decision on the NextBridge-EWT Project EA is expected by

¹⁰¹ NextBridge stated that meeting the December 2020 in-service date would be contingent upon NextBridge being granted leave to construct by the end of 2018.

 ¹⁰² EB-2017-0182/EB-2017-0194/EB-2017-0364, NextBridge Reply Submission, November 9, 2018, p. 3.
 ¹⁰³ EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Reply Submission, November 9, 2018, p. 22.
 ¹⁰⁴ EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Reply Submission, November 9, 2018, p. 19.

February or March 2019. Hydro One expects that the Hydro One-LSL Project Provincial Individual EA¹⁰⁵ will be approved by December 2019.¹⁰⁶

The EA approvals and related permits for Wawa TS and Marathon TS have been identified as critical paths in the schedule for in-service dates of the proposed lines.¹⁰⁷ Due to the new timelines for EA approvals for Wawa TS and Marathon TS as described in Section 2.3 of Chapter E, and given that the new transmission line between Wawa and Thunder Bay cannot be used and useful without the associated stations being upgraded and in service, the in-service dates for both the NextBridge-EWT Project and the Hydro One-LSL Project are linked to the completion of the station work. Further, due to delays in the in-service dates, there may be associated implications with respect to reliability and quality of electricity service.

Several parities identified the associated impact on reliability and quality of electricity service with an in-service date beyond 2020. Parties also indicated that the in-service date for the transmission line may be determined by the in-service date of the stations upgrade, which would affect both applications equally.

OEB staff submitted that the expected EA approval date for the stations upgrades makes a 2020 in-service date no longer realistic.

In its submission, CCC highlighted that the 2021 in-service date may not be achievable for Hydro One due to the outstanding Indigenous consultation required to be completed and its reliance on NextBridge's EA. Further, CCC questioned whether the possibility that the Hydro One-LSL Project will not be in service in time to meet the IESO deadline of 2022 is a risk that the OEB should consider on behalf of ratepayers when contemplating approving the Hydro One-LSL Application.

VECC submitted that NextBridge remains the applicant most likely to complete the new transmission line between Wawa and Thunder Bay in a timely manner, or in the least amount of time.

¹⁰⁵ In addition to the Provincial Individual EA approval, the Hydro One-LSL Project is also subject to Parks Canada EA requirements and a Federal Detailed Impact Assessment for the route segment through Pukaskwa National Park.

¹⁰⁶ Further discussion of the timelines for EA approval of the NextBridge-EWT Project and the Hydro One-LSL Project can be found in Section 5.4 Potential Additional Costs and In-Service Delays Associated with the EA Approvals.

¹⁰⁷ Lakehead TS upgrade does not require an EA approval. Further discussion of the timelines for EA approval of Wawa TS upgrade and Marathon TS upgrade can be found in Chapter E.

4.2 Potential Reliability Implications of Line Design and Operation

As described above, the IESO completed SIAs for both the NextBridge-EWT Application and the Hydro One-LSL Application. After conducting the assessments for each application, the IESO determined that "neither the [NextBridge-EWT Application] nor the [Hydro One-LSL Application] have a material adverse impact on the reliability of the integrated power system provided they comply with the requirements set out in their SIAs".¹⁰⁸ OEB staff submitted that it did not take issue with the IESO's SIA reports for both the NextBridge-EWT Application and the Hydro One-LSL Application.

Throughout the evidence, both NextBridge and Hydro One attested to the design of their proposed transmission lines. NextBridge stated that the "engineering design has been completed to a level of greater than 90%"¹⁰⁹ and that NextBridge's proposed design meets all of the OEB's minimum technical requirements.¹¹⁰ The design is "based on a family of ten towers that are fully designed, independently verified, load tested and ready for fabrication".¹¹¹ Hydro One states that its proposed transmission line is "a reliable and technically sound one, complying with all applicable regulatory standards".¹¹²

Parties raised the issue of whether the NextBridge-EWT Project overall was inherently more reliable than the Hydro One-LSL Project. NextBridge's design includes two separate lines, as opposed to Hydro One's design, which has four circuits on one tower through Pukaskwa National Park. Reliability was a concern if Hydro One's single line were to fail due to weather-related events. NextBridge also questioned Hydro One's technical design and ability to meet the minimum standards for galloping.¹¹³

In addition to the design of the proposed transmission lines, several parties submitted that while it was clear that Hydro One could maintain the transmission line given its established operations in the province, NextBridge would rely on two full-time

 ¹⁰⁸ EB-2017-0182/EB-2017-0194/EB-2017-0364, IESO Submission, October 31, 2018, p. 5.
 ¹⁰⁹ EB-2017-0182/EB-2017-0194/EB-2017-0364, NextBridge Argument-in-Chief, October 22, 2018, p. 2, para. 4.

¹¹⁰ OEB Minimum Technical Requirements for the Reference Option of the E-W Tie Line, dated November 9, 2011.

 ¹¹¹ EB-2017-0182/EB-2017-0194/EB-2017-0364, NextBridge Argument-in-Chief, October 22, 2018, p. 3.
 ¹¹² EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Argument-in-Chief, October 22, 2018, p. 18.
 ¹¹³ Galloping is the high-amplitude, low-frequency oscillation of overhead power lines due to wind and/or

freezing rain.

employees and contracting services to maintain its line which may be less than optimal from a reliability perspective.

The OEB's findings are in Section 7 of this Chapter.

5 INTERESTS OF CONSUMERS WITH RESPECT TO PRICES – TRANSMISSION LINE APPLICATIONS

In adjudicating Section 92 applications, the OEB examines costs in order to consider the interests of consumers with respect to prices. Generally, OEB approved construction costs are recovered through rates charged to customers – the prices charged to customers.

5.1 Construction Costs for the Line

5.1.1 NextBridge's Construction Costs

NextBridge indicated that its forecast construction costs are \$737 M plus or minus 10% (i.e. \$810.7 M at the upper end and \$663.3 M at the lower end of the cost range). The \$737 M does not include NextBridge's development costs of \$40.2 M for which NextBridge sought full recovery, as discussed in Chapter D. NextBridge has signed an Engineering, Procurement and Construction (EPC) contract with Valard Construction LP (Valard).

When asked through interrogatories and cross-examination, NextBridge declined to provide a NTE price. In its Argument-in-Chief, NextBridge stated that its construction cost estimate is "a mature AACE International (formerly the Association for the Advancement of Cost Engineering) Class 2 estimate within a narrow accuracy band of plus or minus 10%" and that "NextBridge's estimate is on the cusp of becoming an AACE Class 1 estimate, which will occur upon approval of NextBridge's EA".¹¹⁴

NextBridge indicated that by September 2018, \$34.4 M of its \$737 M budget had been spent, including \$5.4 M on environmental and regulatory approvals with an additional \$4.5 M to be spent by the end of December 2018.¹¹⁵ NextBridge also indicated that it

¹¹⁴ EB-2017-0182/EB-2017-0194/EB-2017-0364, NextBridge Argument-in-Chief, October 22, 2018, pp. 2-3.

¹¹⁵ EB-2017-0182/EB-2017-0194/EB-2017-0364, NextBridge Chart Exhibit K7.1, October 12, 2018.

will seek recovery of this combined \$38.9 M amount, should it not receive leave to construct the new transmission line between Wawa and Thunder Bay.¹¹⁶

5.1.2 Hydro One's Construction Costs

Hydro One's construction cost estimate is \$625 M. Hydro One described its EPC contract with SNC-Lavalin Group Inc. (SNC-Lavalin) as "ready-to-execute fixed price and schedule bound"¹¹⁷ and stated that the EPC contract is executable contingent only upon the OEB granting leave to construct to Hydro One. Hydro One stated that if it is selected to build the line, it will also seek to recover \$17 M of development costs incurred prior to an OEB leave to construct decision, resulting in a total cost of \$642M.¹¹⁸

Hydro One submitted that its construction costs of \$642 M, has an upper bound of 6%, which would result in a maximum expected cost of \$681 M.¹¹⁹

In its reply submission, Hydro One indicated that its Board of Directors approved a NTE price of \$683 M as a maximum cap for the purpose of constructing the line proposed in the Hydro One-LSL Application, subject to the following conditions:¹²⁰

- The OEB orders that all NextBridge EA documentation be transferred to Hydro One, subject to any documentation that may be confidential, such as Traditional Environmental Knowledge studies
- (ii) The NTE price excludes coverage for a genuine *force majeure* event, such as an earthquake
- Significant costs associated with unforeseeable government intervention or direction would be subject to a prudence review for potential recovery of additional costs

¹¹⁶ EB-2017-0182/EB-2017-0194/EB-2017-0364, Oral Hearing Transcript Volume 6, October 11, 2018, pp. 194-195.

¹¹⁷ EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Argument-in-Chief, October 22, 2018, p. 9, para. 35.

¹¹⁸ Based on updated information provided in response to OEB staff Interrogatory No. 11 at Exhibit I, Schedule 11, p. 6, September 24, 2018.

¹¹⁹ EB-2017-0182/EB-2017-0194/EB-2017-0362, Hydro One Argument-in-Chief, October 22, 2018, p. 11, para. 40.

¹²⁰ EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Reply Submission, November 9, 2018, pp. 10-11, para. 47.

(iv) The EA approvals (both the Provincial Individual EA and Parks Canada EA for the 35 km segment through Pukaskwa National Park) are received by August 15, 2019. Hydro One further stated that in the event EA approval is not received by August 15, 2019, Hydro One would expect to be allowed to recover up to an additional \$14.761 M above its \$683 M NTE price.

5.1.3 Submissions of Parties on Construction Costs

Anwaatin submitted that the IESO's analysis did not factor in all costs, including the disproportionate impact of a delay on Indigenous communities. Anwaatin suggested the OEB impose time-related milestones and conditions to ensure the transmission line is promptly completed.

OEB staff proposed Standard Conditions of Approval that it believes should be placed on the entity granted leave to construct the new transmission line between Wawa and Thunder Bay. In addition, OEB staff proposed specific conditions for NextBridge and Hydro One.

CCC submitted that the OEB can only approve the NextBridge-EWT Application on the condition that NextBridge accept a cap on the recoverable costs, a condition NextBridge could reject, thereby nullifying the leave to construct. CCC also stated that if the OEB were to extend leave to construct approval to Hydro One on the basis of a NTE price, the OEB should specify that the NTE price would be enforced on a category by category basis.

SEC submitted that a fundamental issue the OEB will need to consider is the difference in costs between the two projects and that these cost differences can be categorized into three broad categories:

- Project Costs, i.e. costs to build the NextBridge-EWT Project and the Hydro One-LSL Project, as well as on-going costs such as annual OM&A expenses
- System Costs, i.e. costs identified by the IESO that it will incur to manage the capacity shortfall if the in-service date is beyond 2020
- NextBridge's Sunk and Wind-up Costs, i.e. sunk costs incurred since the filing of its leave to construct application, and any wind-up costs recoverable from ratepayers if Hydro One is granted leave to construct

In its submission, SEC argued that NextBridge had no assurance in writing from Valard and no internal document referencing the assurance that cost would not change with a

revised project schedule. Further, SEC noted that there was no Valard witness and no witness was able to verify this assurance.

SEC submitted that for comparison purposes, the OEB should use a worst-case scenario approach, and assume that \$38.9 M of NextBridge's sunk and wind-up costs are recoverable from ratepayers, even if NextBridge is not granted leave to construct. SEC submitted that an in-service delay of one year had almost no impact on Hydro One's discounted cash flow analysis of the first 25 years of the asset life. SEC suggested the OEB cap the recovery of project costs as a condition of approval to ensure customers are protected.

The PWU submitted that NextBridge did not provide any assurances in writing that a significant change in schedule would not impact milestones and costs, which defies both "ordinary corporate norms and common sense". In contrast, the PWU submitted that the Hydro One-LSL Project costs are approximately 15% lower than the NextBridge-EWT Project costs and 85% of the Hydro One-LSL Project costs are tied to a ready-to-execute fixed-price contract with SNC-Lavalin.

VECC was concerned that ratepayers may be burdened with \$40.2 M of development costs and all other "wind up" costs if NextBridge is not granted leave to construct. VECC submitted that the OEB should award NextBridge a conditional leave to construct on a NTE budget of \$750 M. If NextBridge chooses not to proceed after a period of consideration (e.g. 15 to 30 days), then Hydro One should be granted leave to construct on the expectation of its current cost estimates of \$625 M (through Pukaskwa National Park) and/or \$666 M (around Pukaskwa National Park). VECC also submitted that the OEB should impose cost consequences associated with an in-service delay.

MFN submitted that Hydro One has not factored in the \$1.34 M per km cost of bypassing the 28.5 hectares of "new land" that Hydro One will require on MFN's Reserve for the construction of the Hydro One-LSL Project. MFN further submitted that the bypass has never been studied and the resultant costs and delays are not known.

BFN submitted that it defers to the OEB as to which estimate is more reliable, which includes more or less certainty and which will bring the new transmission facility online sooner at reasonable cost. BFN further submitted that Indigenous consultation and accommodation are essential factors in price.

5.2 Operations, Maintenance and Administration (OM&A) Costs

NextBridge forecast its OM&A costs to be \$3.92 M per year.¹²¹ Hydro One forecast its OM&A costs at \$1.5 M per year.

Hydro One took the position that the OM&A cost estimates presented by each party are something that should be taken into account. NextBridge questioned if the OEB must consider OM&A costs in a leave to construct under Sections 92 and 96 of the Act. NextBridge stated that these costs would be in scope in the subsequent revenue requirement proceeding for the successful transmitter.

VECC argued that the OM&A cost differential between NextBridge and Hydro One's forecasts would have a modest impact on ratepayers when considered in the context of transmission rates.

OEB staff submitted that the lack of certainty around OM&A costs is evident from the designation proceeding as current OM&A forecasts are more than double those estimated by NextBridge and EWT LP¹²² at that time. OEB staff further submitted that the OM&A costs will be subject to a detailed prudence review in the subsequent rates proceeding, if applicable.

SEC further submitted that measuring the impact of the OM&A differential over the life of the new transmission line between Wawa and Thunder Bay is very hard as the costs will undoubtedly change over decades. However, SEC stated Hydro One has a cost advantage that the OEB should consider.

5.3 Additional System Costs Associated with In-Service Delays

In the addendum to its Updated Needs Assessment, the IESO maintained that the new transmission line between Wawa and Thunder Bay is a long-term solution to ensure a reliable and cost-effective supply of electricity to Northwest Ontario. Also, the IESO quantified the additional costs associated with a delay to the 2020 in-service date, as per Table 4 below. The IESO submitted that the annual costs associated with a delay to the 2020 in-service date ranges from \$7 M to \$55 M, depending on the interim measure(s) implemented.

¹²¹ NextBridge's initial evidence had stated that OM&A costs were forecast to be \$7.4 M, and later \$4.7 M, before proposing an OM&A cost of \$3.92 M per year.

¹²² A partnership of Hydro One, Great Lakes Power Transmission EWT LP, and BLP at the time of designation.

In the addendum to its Updated Needs Assessment, the IESO maintained that the new transmission line between Wawa and Thunder Bay is a long-term solution to ensure a reliable and cost-effective supply of electricity to Northwest Ontario. Also, the IESO quantified the additional costs associated with a delay to the 2020 in-service date, as per Table 4 below. The IESO submitted that the annual costs associated with a delay to the 2020 in-service date ranges from \$7 M to \$55 M, depending on the interim measure(s) implemented.

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

Table 4 – The IESO's Projected Cost of the Incremental Capacity Requirements for 2020-2024¹²³

The IESO further submitted that

Beyond 2022, the number of interim measures that would need to be employed and the risks associated with acquiring multiple interim measures increase the overall reliability risk to the Northwest and increase the associated cost uncertainties. The increased risk to reliability of delaying the [new transmission line between Wawa and Thunder Bay] beyond 2022 is unacceptable. For this reason, as well as the heightened cost uncertainty, the IESO strongly

¹²³ EB-2017-0182/EB-2017-0194/EB-2017-0364, IESO Submission, October 31, 2018, p. 4.

recommends not delaying the in-service date of the [new transmission line between Wawa and Thunder Bay] beyond 2022.¹²⁴

5.4 Potential Additional Costs and In-Service Delays Associated with the EA Approvals

One of the main risks of delay for both the NextBridge-EWT Project and the Hydro One-LSL Project is a delay in acquiring EA approvals to commence construction to meet the projected in-service date.

NextBridge is further along in its EA approval process and submitted that it expects to receive EA approval from the MECP by February or March of 2019. Various parties submitted that NextBridge should be expected to secure EA approval even if not granted leave to construct by the OEB.

There is more uncertainty, however, around EA approvals for the Hydro One-LSL Project. In addition to the Provincial Individual EA approval, the Hydro One-LSL Project is also subject to Parks Canada EA requirements and a Federal Detailed Impact Assessment for the route segment through Pukaskwa National Park (Federal EA).

Regarding the Provincial Individual EA approval, Hydro One is pursuing the following two paths:¹²⁵

- Exemption from the Provincial Individual EA approval under the Ontario *Environmental Assessment Act* for Transmission Line Projects for the Hydro One-LSL Application. Hydro One discussed with the MECP the option of getting an exemption from the EA by way of applying for a declaration order with the MECP. Hydro One has considered this option but has not applied to take this path yet.¹²⁶
- Full Provincial Individual EA approval under the Ontario Environmental Assessment Act for Transmission Line Projects for the Hydro One-LSL Application. Hydro One has commenced the process of a Provincial Individual EA approval in parallel. Hydro One's Provincial Individual EA relies on the

 ¹²⁴ EB-2017-0182/EB-2017-0194/EB-2017-0364, IESO Submission, October 31, 2018, p. 6.
 ¹²⁵ EB-2017-0364, Hydro One- LSL Application, Exhibit I, Tab 1, Schedule 15, pp. 1-2 and Hydro One Response to OEB staff Interrogatory No. 14, September 24, 2018.

¹²⁶ EB-2017-0182/EB-2017-0194/EB-2017-0364, Oral Hearing Transcript Volume 7, October 12, 2018, p. 116.

availability of public information in the NextBridge-EWT Application EA. According to the MECP's witnesses in the October 2018 combined oral hearing, Hydro One can access and use the information in the NextBridge-EWT Application EA either if it is on the public record or by means of a request under the *Freedom of Information and Protection of Privacy Act*. The MECP witnesses also stated that Hydro One can use the NextBridge-EWT Application EA for the purpose of EA approvals for the Hydro One-LSL Application only once the NextBridge-EWT Application EA is complete and approved by the MECP.¹²⁷

Hydro One expects to receive approval for its Provincial Individual EA (i.e., for the transmission line route segments outside of Pukaskwa National Park) by October 2019 if the declaration order process is pursued, and by December 2019 if Hydro One's Provincial Individual EA path is followed.

Hydro One maintains that it can use the NextBridge-EWT Application EA information as the MECP informed Hydro One that the EA is granted to the project and not to the applicant.¹²⁸ Hydro One also indicated that it could take up to two years and \$20 M in study costs alone to complete a Provincial Individual EA in the event that it cannot use NextBridge's EA information. Hydro One stated during the combined oral hearing that the aforementioned scenario of not being able to rely on the NextBridge-EWT Application EA is "highly unlikely".¹²⁹

Hydro One is optimistic that it will receive approval from Parks Canada on the Federal EA for the 35 km line segment going through Pukaskwa National Park. Hydro One stated that the EA process with Parks Canada is ongoing. On October 5, 2018, Hydro One received comments from Parks Canada on the Terms of Reference for its Federal EA and characterized the comments as minor.¹³⁰ Hydro One expects to receive Federal EA approval for the segment through Pukaskwa National Park immediately after the Provincial approval in October 2019, assuming Hydro One is able to use NextBridge's EA.

¹²⁷ EB-2017-0182/EB-2017-0194/EB-2017-0364, Oral Hearing Transcript Volume 7, October 12, 2018, pp. 107-110.

¹²⁸ EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Argument-in-Chief, October 22, 2018, p. 27, para. 105.

¹²⁹ EB-2017-0182/EB-2017-0194/EB-2017-0364, Oral Hearing Transcript Volume 4, October 9, 2018, p. 38.

¹³⁰ EB-2017-0182/EB-2017-0364, Oral Hearing Transcript Volume 4, October 9, 2018, p. 37.

In the event that Hydro One is denied approval to pursue the route through Pukaskwa National Park, Hydro One would follow NextBridge's route around Pukaskwa National Park. This re-routing would increase Hydro One's construction costs by approximately \$40.8 M, to \$665.83 M, from the \$625 M cost estimate for the route through Pukaskwa National Park.¹³¹

Concerns were raised by several Indigenous intervenors about the potential transfer of Traditional Environmental Knowledge studies, which are included in EAs and were completed as part of the NextBridge EA, to Hydro One. For instance, BFN submitted that it remains unclear to what extent Hydro One can rely upon NextBridge's EA and that any reliance by Hydro One on information received by NextBridge from Indigenous consultation or assessments must be tempered by acknowledgement that this information is proprietary to the First Nations and Métis concerned, not property of NextBridge and not public information. BFN further submitted that the OEB has not had the benefit of direct evidence from Parks Canada regarding the proposed corridor through Pukaskwa National Park.

5.5 Indigenous Consultation and Participation

The Ministry of Energy¹³² identified 14 First Nations and 4 Métis communities to be consulted on the proposed transmission line project. It has delegated procedural aspects of the duty to consult to NextBridge and Hydro One in relation to their respective proposed projects.

Many of these communities participated in this proceeding. A number filed evidence that has been considered by the OEB in making this Decision and Order.¹³³ The evidence of Indigenous intervenors (i) describes locations of the First Nations or Métis communities and rights exercised by their members, (ii) identifies outstanding claims for Indigenous title, and (iii) discusses the status of consultation and negotiations with both NextBridge and Hydro One. The evidence filed by Indigenous intervenors also outlines the time, human capital and financial resources that have been invested to prepare for contracts and employment for construction of NextBridge's proposed project including training

¹³¹ EB-2017-0182/EB-2017-0194/EB-2017-0364, OEB Staff Summary of the Evidence on Costs, Exhibit K4.2, October 9, 2018.

¹³² Now the Ministry of Energy, Northern Development and Mines.

¹³³ This includes evidence filed as part of the earlier Motion by BZA, the MNO, BLP, and BFN and as part of the combined proceeding by LLFN.

approximately 300 local people (over 90% of which are Indigenous people) for work during the construction of the line.

Since the Designation Decision, NextBridge has undertaken extensive consultations with Indigenous communities. A number of the Indigenous communities are satisfied with NextBridge's consultation efforts to date, while other communities continue to have outstanding issues. These issues include the fact that NextBridge negotiated equity participation agreements with only some of the 18 communities. NextBridge and BLP have entered into an economic partnership agreement that provides BLP with a 20% equity interest in NextBridge's proposed project. NextBridge and the MNO also have an economic participation agreement that provides the MNO with an undisclosed amount of equity participation. Copies of these economic partnership agreements were not filed in evidence. Other Indigenous intervenors have expressed a desire to negotiate equity participation agreements with NextBridge. NextBridge has not committed to offering equity participation to Indigenous communities that are not part of BLP or the MNO.

Hydro One began its consultation with Indigenous communities in 2018. At the time of the Combined Hearing in October 2018, Hydro One stated that it had met with the 18 Indigenous communities identified by the Ministry of Energy and four additional communities that expressed an interest in the project. All Indigenous communities have been offered capacity funding agreements in relation to Hydro One's proposed project and five capacity funding agreements have been concluded. Hydro One's consultations are ongoing.

Hydro One acknowledges that accommodation is a very important aspect of consultation and its approach to accommodation is a package of benefits including, but not limited to, capacity funding, contracting and employment opportunities.¹³⁴ In addition, Hydro One states that it is committed to offering 34% equity ownership in its proposed project to BLP.¹³⁵ Hydro One has not committed to offering equity participation to Indigenous communities other than BLP. Hydro One stated that it does not intend to offer equity participation to the MNO but is committed to discussing other benefits, including economic options, as part of the consultation process.¹³⁶

¹³⁴ EB-2017-0182/EB-2017-0194/EB-2017-0364, Oral Hearing Transcript Volume 1, October 2, 2018, pp. 40-41.

¹³⁵ EB-2017-0182/EB-2017-0194/EB-2017-0364, Oral Hearing Transcript Volume 3, October 4, 2018, p. 6.

¹³⁶ EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Evidence, Exhibit I, Tab 1, Schedule 15, p.
4.

In addition to issues surrounding economic participation, both projects still require further negotiations for land, including permits to cross two First Nations' reserves: MFN and Pays Plat First Nation. MFN objects to Hydro One's project crossing its reserve and says that it will not consider the project crossing its reserve until Hydro One addresses an unresolved dispute with respect to the existing Hydro One transmission line going through the MFN reserve.

Some Indigenous intervenors, including BLP and the MNO, support the NextBridge-EWT Application. Other Indigenous intervenors do not support a particular applicant. The submissions of Indigenous intervenors address the relevance of the Crown's duty to consult in this proceeding (which is discussed earlier in this Decision and Order).¹³⁷ Some Indigenous intervenors raise concerns about the time and funds that have been set aside by Hydro One to complete Indigenous consultations for its proposed project. Submissions from Indigenous communities also propose conditions to be attached to an order granting leave to construct. These conditions relate to (i) project timing/schedule, (ii) the duty to consult, and (iii) economic participation. The OEB speaks to the proposed conditions as part of its findings below.

The OEB's findings are in Section 7 of this Chapter.

6 FORMS OF LAND AGREEMENT – TRANSMISSION LINE APPLICATIONS

Section 97 of the Act states:

In an application under Section 90, 91 or 92, leave to construct shall not be granted until the applicant satisfies the Board that it has offered or will offer to each owner of land affected by the approved route or location an agreement in a form approved by the Board

Hydro One has indicated in its Hydro One-LSL Application that the proposed route is along a corridor in which Hydro One has existing rights. This enables Hydro One to use existing permanent land rights. In segments of the line where overlap of the existing ROW is feasible, approximately 37 metres (m) of additional width of land would be required. For segments of line in which overlap is not feasible, Hydro One has noted

¹³⁷ See Chapter C.

that it will require approximately 46 m of additional land width. In respect of municipallyowned, provincially-owned and privately-owned properties, Hydro One will require new land rights. The Hydro One-LSL Application indicated that permanent rights from individual or corporate landowners total nearly 290 hectares or 2.9 km² of land along approximately 19% of the proposed route.¹³⁸ Hydro One has assumed complete voluntary settlement with affected landowners, however, in the instance that settlement is unable to be reached with affected landowners, Hydro One stated that expropriation may be required. Hydro One has estimated expropriation to take approximately 14 months to complete.¹³⁹ Hydro One indicated that its easement agreements are in the same form as have been previously approved by the OEB in recent leave to construct applications.¹⁴⁰

NextBridge has indicated that it will require approximately 5.51 km² of permanent easement from 69 landowners in respect of 153 parcels of land. The typical width of NextBridge's ROW for the proposed transmission line is 64 m. In response to OEB staff interrogatories, NextBridge indicated that the forms of agreement filed by NextBridge have not been previously approved by the OEB. However, NextBridge did identify that clauses detailed in Appendix A to the OEB's *Filing Requirements for Electricity Transmission Applications* (Chapter 4) have been incorporated in the forms of agreement submitted for approval in its evidence.¹⁴¹ NextBridge highlighted, in response to OEB staff interrogatories, that it had secured Option Agreements with 74% of private landowners. In the instance that NextBridge would be unable to attain settlement agreements, it would pursue expropriation. NextBridge estimated that expropriation initiatives would aim to be completed by the first quarter of 2020.¹⁴²

OEB staff submitted that the forms of permanent easement agreements that will be offered, or have been offered, to affected landowners by both Hydro One and NextBridge adhere to the minimum requirements in the OEB's filing requirements.¹⁴³ All

¹³⁸ EB-2017-0364, Hydro One-LSL Application, Exhibit E, Tab 1, Schedule 1, p. 5.

¹³⁹ EB-2017-0182/EB-2017-0194/EB-2017-0364, Oral Hearing Transcript Volume 1, October 2, 2018, p. 137.

¹⁴⁰ EB-2017-0364, Hydro One-LSL Application, Exhibit B, Tab 1, Schedule 1, p. 9, lines 25-26.

¹⁴¹ EB-2017-0182, NextBridge Interrogatory Response to OEB staff Interrogatory No. 35, January 25, 2018.

¹⁴² EB-2017-0182, NextBridge Interrogatory Response to OEB staff Interrogatory No. 35, January 25, 2018.

¹⁴³ OEB's *Filing Requirements for Electricity Transmission Applications* (Chapter 4), Appendix A: Draft Form of Lease or Easement Agreement, pp. 28-30, July 31, 2014.

remaining parties did not take issue with forms of land agreements as filed in the NextBridge-EWT Application and the Hydro One-LSL Application, respectively.

7 FINDINGS – TRANSMISSION LINE APPLICATIONS

7.1 Findings on Reliability and Quality of Service

The IESO is the province's electricity system planner and reliability coordinator, and its mandate includes:¹⁴⁴

- Directing the operation and maintaining the reliability of the IESO-controlled grid
- Establishing and enforcing criteria and standards related to the reliability of the integrated power system
- Ensuring an adequate, reliable and secure electricity supply and resources in Ontario

Given the IESO's mandate, the OEB places significant weight on the IESO evidence regarding the ability of the applicants to meet the IESO's reliability and quality of service requirements. The IESO witnesses testified that

...in the SIA for the Lake Superior Link we had different requirements than for the – in the SIA for NextBridge...So in our opinion, by having those conditions we now feel comfortable that we have brought everything on a level playing field from the perspective of reliability and that we can operate both solutions reliably.¹⁴⁵

The IESO's submission also stated that

... so long as the associated requirements in the SIAs for each of the NextBridge-EWT Application and the Hydro One-LSL Application are met, there will not be an adverse impact on the reliability of the IESO-controlled grid.¹⁴⁶

¹⁴⁴ IESO Objects – Section 6 of *Electricity Act, 1998.*

¹⁴⁵ EB-2017-0182/EB-2017-0194/EB-2017-0364, Oral Hearing Transcript Volume 4, October 9, 2018, p. 112, lines 16-26.

¹⁴⁶ EB-2017-0182/EB-2017-0194/EB-2017-0364, IESO Submission, October 31, 2018, p. 6.

Both of the proposed projects received final SIA approval from the IESO and both projects also received CIA approval from Hydro One. The OEB concludes that there will be no adverse impact on the electricity system or customers from either project.

The OEB notes that the IESO did not distinguish between Hydro One's proposed routing through Pukaskwa National Park, which utilizes quad-circuit towers, versus the alternative route of going around Pukaskwa National Park from a reliability or quality of service perspective. Further, there was no compelling evidence filed during the proceeding to substantiate that a higher quality of service would be provided by either project.

The OEB has thus considered the evidence provided by the IESO throughout the proceeding to conclude that both the NextBridge-EWT Project and the Hydro One-LSL Project are acceptable from a reliability and quality of service perspective and that there are no substantial differences between the two projects with respect to these two criteria.

As part of this proceeding, NextBridge raised concerns that the Hydro One-LSL Project did not meet the OEB's minimum technical requirements with respect to galloping.¹⁴⁷ It is important to note that the technical requirements at issue were prepared as part of Designation Process to provide some parameters upon which to consider the competing proposals and were not an instruction manual for the design of the transmission line.¹⁴⁸ During the oral hearing, Hydro One's witnesses addressed this issue stating that there are different ways to address a galloping condition and that Hydro One's towers have been designed to address single loop galloping.¹⁴⁹ Hydro One further indicated that where necessary, various control measures would be employed to address galloping concerns.¹⁵⁰ The OEB accepts the evidence of Hydro One that it intends to address galloping through other measures including structural tower design and deployment of interphase spacers. The successful applicant will be required to provide a formal sign-off and approval from a Professional Engineer in Ontario ensuring compliance of its project's technical specifications and design with the OEB's minimum technical

¹⁴⁷ EB-2017-0182/EB-2017-0194/EB-2017-0364, Oral Hearing Transcript Volume 7, October 12, 2018, pp. 43, 45, 86.

¹⁴⁸ Ontario Energy Board Minimum Technical Requirements for the Reference Option of the E-W Tie Line, November 9, 2011, p. 1.

¹⁴⁹ EB-2017-0182/EB-2017-0194/EB-2017-0364, Oral Hearing Transcript Volume 4, October 9, 2018, pp. 87-88.

¹⁵⁰ EB-2017-0182/EB-2017-0194/EB-2017-0364, Oral Hearing Transcript Volume 4, October 9, 2018, p. 88.

requirements/standards outlined in the Designation Process. This will ensure that any concerns about galloping or other technical aspects of either project are properly addressed.

7.2 Findings on the In-Service Date

NextBridge maintained throughout the proceeding that the NextBridge-EWT Project can meet an in-service date of 2020. Hydro One proposed an in-service date of the end of 2021 for the Hydro One-LSL Project.

It is clear from the record that the Hydro One-Station Upgrades Project needs to be completed in order to allow the new transmission line between Wawa and Thunder Bay to be energized and operational. Evidence from the MECP shows that additional EA work is required to be completed before Hydro One can receive EA approval for its stations upgrades work. Hydro One has stated that when the timeline for completing the stations work is considered, a 2020 in-service date is no longer possible: the expected in-service date for the stations upgrades is now October 2021.¹⁵¹

As a result of the delayed in-service date for the Stations Upgrades Project, the OEB finds that NextBridge's planned in-service date of 2020 is no longer a relevant factor for the OEB's consideration. While there may still be a difference of a few months in 2021 for either applicant's operational in service date, the OEB finds that this short time difference would have limited impact on the price and reliability of the new transmission line between Wawa and Thunder Bay.

Both projects are capable of being in service by the end of 2021. The OEB is proposing certain conditions to ensure that whichever project is granted leave to construct will be in service by the end of 2021.

Both applicants stated that they would be ready to start construction in 12 months if granted the leave to construct approval. The OEB finds it reasonable to impose a 12-month expiry on the leave to construct if construction does not start within 12 months. The OEB typically imposes an expiry on leave to construct approvals. Given this is a Priority Project, the OEB must know if the applicant is unable to proceed with construction in a timely fashion. By imposing this condition, the OEB will have notice of

¹⁵¹ The last of the three TS station upgrades (Wawa) is projected to be in-service on October 28, 2021.

at least 22 months prior to the IESO's 2022 deadline to consider alternative options for the transmission line.

Table 5 provides a schedule of regulatory activities for the new transmission line between Wawa and Thunder Bay.

Regulatory Activity	Time Period	Date
Decision and Order	N/A	December 20, 2018
NTE Price Filing	1 month after OEB's Decision and Order	January 31, 2019
Leave to Construct Decision	1 month after NTE Price Filing	February 2019
Expiry of Leave to Construct Approval (if construction not commenced)	12 months after Leave to Construct Decision	February 2020
In-Service Date	34 months after Leave to Construct Decision	December 31, 2021

Table 5 – Schedule of Regulatory Activities for EWT Project

7.3 Findings on the EA Approvals

NextBridge has substantially completed its Provincial Individual EA work and expects to receive its approval in February or March of 2019.

Hydro One is pursuing both a full Provincial Individual EA and an exemption from a Provincial Individual EA in parallel. In the case of the requested exemption by Declaration Order, Hydro One is relying on NextBridge's approved EA work. Hydro One expects approval of the Individual EA by December 7, 2019. If the exemption by Declaration Order is pursued, Hydro One expects this approval by October 15, 2019.¹⁵²

NextBridge's development work, including the cost of the Provincial Individual EA, has been approved to be recovered from ratepayers as per Chapter D of this Decision and Order. The OEB finds that all of NextBridge's documents filed with the MECP in support

¹⁵² EB-2017-0182/EB-2017-0194/EB-2017-0364, Hydro One Reply Submission, November 9, 2018, Attachment 1.

of its EA, subject to any third party confidentiality concerns, are to be made available to Hydro One if Hydro One is granted leave to construct. The OEB makes this finding because, independent of NextBridge's position regarding ownership, it is ratepayers who will pay for the development work. The OEB will require that in order for NextBridge to receive full payment for its eligible development costs, NextBridge must make the EA work that has been completed available to Hydro One for use if NextBridge is not granted leave to construct.

In this proceeding, the OEB expects to grant approval for the construction of a new transmission line from Wawa to Thunder Bay. The OEB is not approving the specific location of towers, so the successful applicant must manage to build the new transmission line between Wawa and Thunder Bay, by the specified timeline, for the specified cost. The OEB will not allow changes to the EA approvals to be reasons for changing the price or schedule of the project, for example Hydro One will not be able to change its NTE price or schedule if it is not able to route through the Pukaskwa National Park.¹⁵³

7.4 Findings on Indigenous Consultation and Participation

The issue of whether the Crown has fulfilled its duty to consult is part of the provincial EA process and is not a matter that the OEB will decide in relation to the applications for leave to construct before it in this proceeding. However, the OEB has considered unresolved issues relating to Indigenous consultation that could affect the costs of and schedule for the transmission line. The need to negotiate land agreements, including the crossing of the MFN reserve, and outstanding negotiations of Indigenous economic participation are major project risks. In the OEB's view, NextBridge and Hydro One are in the best position to cost those risks and factor them into a price that will be put forward in response to this Decision and Order.

There is no dispute that NextBridge has undertaken more consultation than Hydro One to this point. However, the OEB is of the view that both NextBridge and Hydro One are capable of carrying out consultation with Indigenous communities. None of the parties have taken issue with NextBridge's ability to carry out consultation for its proposed project. With respect to Hydro One, concerns were raised about the schedules and costs proposed to complete consultation. The OEB notes that Hydro One has extensive experience in consulting with Indigenous communities, including previous partnerships

¹⁵³ See Section 7.6 Findings on Construction Costs, where the OEB defines criteria for a NTE price.

on transmission line projects. While parties raise questions about the costs and schedules associated with Indigenous consultation, it is up to NextBridge and Hydro One to evaluate the costs and schedule necessary to complete Indigenous consultation in arriving at the price that they will put forward.

The OEB has also considered conditions that Indigenous intervenors propose be included in an order granting leave to construct. The OEB's conditions of approval will address some of the concerns raised by Indigenous intervenors.

First, the OEB will (i) require that construction of the transmission line commence within 12 months, failing which approval expires, and (ii) impose financial consequences if the line is not in-service by the end of 2021. These conditions promote timeliness in completion of the project. The OEB will not, however, provide timing and construction milestones to be met as proposed by Anwaatin. The OEB does not intend to micromanage the successful applicant's construction of the line. It is up to that party to ensure that the project comes into service on schedule and budget.

Second, as it typically does in decisions granting leave to construct electricity facilities, the OEB will require that the successful applicant obtain all necessary approvals, which includes EA approval, as may be required to construct the project. The MECP has confirmed that environmental approval will not be granted if there are outstanding issues related to Indigenous consultation.¹⁵⁴ As a result, this condition will ensure that the adequacy of Indigenous consultation has been determined during the project approvals phase. BZA asks for an additional condition requiring its consent to the project prior to the commencement of construction. The OEB will not require this condition. If BZA wishes to pursue this approach, it should do so as part of the EA process.

Third, the OEB has considered proposed conditions relating to economic participation, including equity partnerships/training/employment/procurement. The MNO asks for a condition that approval for Hydro One require that it reach an economic participation agreement with the MNO that is equal or superior to the MNO – NextBridge agreement. In the event that Hydro One is granted leave to construct, the OEB will not impose that condition. It is not appropriate for the OEB to dictate terms for any agreement between the MNO and Hydro One, especially based on an agreement that is not in evidence. For similar reasons, the OEB will not impose a condition on Hydro One (if successful)

¹⁵⁴ EB-2017-0182/EB-2017-0194/EB-2017-0364, Oral Hearing Transcript Volume 7, October 12, 2018, p. 121, lines 7-16.

requiring that all arrangements for Indigenous procurement and work opportunities be identical to or better than those proposed by NextBridge. In terms of Indigenous procurement and work opportunities, the OEB also notes that both NextBridge and Hydro One state they are committed to maximizing Indigenous employment and contracting opportunities on their respective projects. Moreover, from the testimony of its witnesses, it is clear that Hydro One understands the benefit of maximizing the participation of local labour and businesses in relation to its proposed project.

In its submission, BFN asks the OEB to direct that the successful applicant engage in dialogue with Indigenous communities about potential business opportunities including equity participation. The OEB is of the view that it is not appropriate for the OEB to mandate that negotiations of equity participation occur with BFN. The OEB further notes that Hydro One has not foreclosed the possibility of equity participation for BFN and stated that it would be open to having that discussion once it better understands the impacts of the LSL project on BFN.¹⁵⁵

7.5 Findings on OM&A Costs

OM&A costs will not determine the OEB's decision with respect to prices. While OM&A costs impact prices, the OEB has two concerns (i) these costs can change (as was seen in the OM&A costs proposed in the Designation Process as compared to this proceeding); and (ii) OM&A costs have not been thoroughly tested as part of this proceeding as they were not directly at issue. The OEB acknowledges that there may be some OM&A savings if Hydro One is selected but the quantum is uncertain.

In addition, the OEB notes that OM&A cost will be assessed for OEB approval in a subsequent proceeding, after the project is in service.

7.6 Findings on Construction Costs

Given that both projects meet the IESO requirements for reliability and quality of service, the remaining factor to consider between the NextBridge-EWT Application and Hydro One-LSL Application is price.

The OEB's Transmission Policy Framework, among other things, aims to drive economic efficiency for the benefit of Ontario ratepayers through supporting

¹⁵⁵ EB-2017-0182/EB-2017-0194/EB-2017-0364, Oral Hearing Transcript Volume 3, October 4, 2018, p. 109, lines 19-27.

competition. In the context of the new transmission line between Wawa and Thunder Bay, the OEB implemented this policy through establishing a Designation Process to determine the most qualified and cost-effective transmission company to complete development work.

In accordance with the Transmission Policy Framework, the Designation Decision clarified that designation did not carry with it the exclusive right to build the new line between Wawa and Thunder Bay or the exclusive right to apply for leave to construct. The designated transmitter was only assured of recovery of the budgeted amount for project development. As a result, a non-designated transmitter would be able to apply for leave to construct the line between Wawa and Thunder Bay as there were no specific criteria set out in the Transmission Policy Framework to prevent this situation. This would enable an application by a non-designated transmitter that would require, presumably, a comparison of the leave to construct applications using the considerations set out in the Act.

In this proceeding, the OEB has been presented with applications from two applicants that differ in maturity of plan development, First Nations and Métis community support, routing choice, construction methods, contractor arrangements, stage of environmental approvals, operating protocol and expense, risk of overruns, in-service date, and overall estimate of costs. The new transmission line between Wawa and Thunder Bay is, first and foremost, responsive to the transmission needs as defined by the IESO. The IESO has informed the OEB that both the NextBridge-EWT Application and Hydro One-LSL Application would meet those needs. The OEB therefore believes that there is a need for a more focused method of cost comparison in order to approve a leave to construct application that minimizes ratepayer risk while meeting the identified need.

The OEB's proceeding has involved a comparative analysis between two applications to construct the new transmission line between Wawa and Thunder Bay. However, this process has not provided the OEB with sufficient evidence to complete that comparative analysis. For example:

- Cost information was not provided on the same day, on the same basis.
- There were significant differences in the two filed applications, as noted above, making comparisons difficult.
- Some of the conditions proposed by the applicants were not acceptable to the OEB including the financial implications related to the in-service date.

- Hydro One knew NextBridge's proposed costs in developing their application.
- Hydro One provided a final, Board of Directors-approved, NTE price only as part of its reply submission (i.e., in the final stages of the proceeding). NextBridge, therefore, did not have a chance to respond.
- The in-service date for the Stations Upgrade Project changed to October 2021 during the proceeding based on new information from the MECP and NextBridge did not provide a satisfactory cost estimate for a 2021 in-service date during the hearing. There was no witness from Valard to speak to the pricing for a 2021 in-service date as a result of changes to the station upgrades schedule. Further, no witness on the stand had actually spoken to Valard regarding this issue.

The OEB finds that the applicants are in the best position to assess risks, cost those risks and factor them into a NTE price. These include risks involving negotiations for land, environmental approvals and permitting and economic participation/equity ownership for First Nations and Métis communities.

The OEB has decided to provide NextBridge and Hydro One with an opportunity to submit a NTE price based on the conditions stipulated by the OEB in this Decision and Order. Among other things, the successful applicant will agree not to seek recovery in rates for amounts beyond the NTE price specified, except for OM&A costs of the transmission line. In the event that the actual costs to construct the line come in below the successful applicant's submitted NTE price, the applicant may apply in its rates case to recover the difference. A future rates panel will make that determination.

In its submissions, CCC took the view that the OEB does not have authority to compel NextBridge to accept a price cap. To be clear, neither NextBridge nor Hydro One is required to submit a NTE price. Neither party is required to build the transmission line. However, the OEB expects that applicants will not seek recovery in rates for any amount more than the amount they submit as their NTE – considering the conditions the OEB has imposed.

NextBridge and Hydro One if interested in submitting an NTE price, will be required to submit their respective NTE prices on January 31, 2019, in accordance with the following conditions.

NextBridge is advised of the following conditions in submitting its NTE price:

- If granted leave to construct, NextBridge shall construct a transmission line between Wawa and Thunder Bay to be in service no later than December 31, 2021.
- The NTE price is to account for all construction costs that NextBridge would seek to recover from ratepayers other than the \$31.241 M amount provided in the Decision on NextBridge's development costs in Chapter D.
- 3. The NTE price must include all costs related to the duty to consult.
- The NTE price must include all costs related to potential routing changes, including if NextBridge is unable to get permission to cross either of the First Nations' reserves.
- 5. The NTE price must include all potential costs related to delays in receiving approvals or changing approval requirements, including EA approvals.
- 6. NextBridge must commit to only seeking to recover in rates amounts in excess of the NTE price where those incremental amounts are the result of project changes imposed by unforeseen new legislation, government directive or *force majeure* events such as forest fires, riots, etc.
- 7. Unless otherwise ordered by the OEB, construction must start within 12 months of receiving leave to construct approval, or the leave to construct expires.
- 8. In the event that the December 31, 2021 in-service date is not met, NextBridge shall reduce the maximum amount that it will seek to recover in rates by an amount equal to the actual additional system costs incurred by the IESO as a result of the delay, unless the delay has occurred as result of the unforeseen events as set out in condition 6 above.
- 9. For every month the in-service date is delayed beyond December 31, 2021, the applicant will permanently forego the equivalent associated revenue requirement from ratepayers, unless the delay has occurred as result of the unforeseen events as set out in condition 6 above.
- 10. In the event that NextBridge is the successful applicant, Hydro One and NextBridge are to cooperate in the completion of the work each is required to perform to construct the new transmission line between Wawa and Thunder Bay

and associated stations' upgrades. Any additional costs caused by unreasonable or uncooperative conduct by either party may be borne by the party whose conduct caused the costs. Such additional costs may reduce the amount that the uncooperative party might otherwise recover in rates for the project for which they receive leave to construct.

- 11. Approval for leave to construct requires fulfillment of the requirements of the System Impact Assessment and Customer Impact Assessment and all other necessary approvals, permits, licences, certificates and rights required to construct, operate and maintain the proposed facilities.
- 12. In the event that NextBridge is the successful applicant, before construction begins, NextBridge must receive sign-off by a Professional Engineer in Ontario ensuring consistency of the NextBridge-EWT Project's technical specifications and design with the OEB's minimum technical requirements outlined in the Designation Process.
- 13. NextBridge's NTE price for constructing the new transmission line between Wawa to Thunder Bay, considering all of the conditions noted above, is to be in 2021 dollars.

Hydro One is advised of the following conditions in submitting its NTE price:

- If granted leave to construct, Hydro One shall construct a transmission line between Wawa and Thunder Bay to be in service no later than December 31, 2021.
- 2. The NTE price is to account for all construction costs (i.e., costs since filing the Hydro One-LSL Application on February 15, 2018) that Hydro One would seek to recover from ratepayers in relation to the Hydro One-LSL Project. As noted above, based on the OEB's Transmission Policy Framework, Hydro One should not expect to recover its development costs incurred prior to filing the Hydro One-LSL Application.¹⁵⁶
- 3. The NTE price must include all costs related to the duty to consult.

¹⁵⁶ See Section 3 of Chapter D of the Decision and Order.

- 4. The NTE price must include all costs related to potential routing changes, including if Hydro One is not able to go through the Pukaskwa National Park or to get permission to cross either of the First Nations' reserves.
- 5. The NTE price must include all potential costs related to delays in receiving approvals or changing approval requirements, including EA approvals.
- 6. Hydro One must commit to only seeking to recover in rates amounts in excess of the NTE price where those incremental amounts are the result of project changes imposed by unforeseen new legislation, government directive or *force majeure* events such as forest fires, riots, etc.
- 7. Unless otherwise ordered by the OEB, construction must start within 12 months of receiving leave to construct approval, or the leave to construct expires.
- 8. In the event that the December 31, 2021 in-service date is not met, Hydro One shall reduce the maximum amount that it will seek to recover in rates by an amount equal to the actual additional system costs incurred by the IESO as a result of the delay, unless the delay has occurred as result of the unforeseen events as set out in condition 6 above.
- 9. For every month the in-service date is delayed beyond December 31, 2021, the applicant will permanently forego the equivalent associated revenue requirement from ratepayers unless the delay has occurred as result of the unforeseen events as set out in condition 6 above.
- 10. Approval for leave to construct requires fulfillment of the requirements of the System Impact Assessment and Customer Impact Assessment and all other necessary approvals, permits, licences, certificates and rights required to construct, operate and maintain the proposed facilities.
- 11. In the event that Hydro One is the successful applicant, before construction begins, Hydro One must receive sign-off by a Professional Engineer in Ontario ensuring compliance of the Hydro One-LSL Project's technical specifications and design with the OEB's minimum technical requirements outlined in the Designation Process.
- 12. Hydro One's NTE price for constructing the new transmission line between Wawa to Thunder Bay, considering all of the conditions noted above, is to be in 2021 dollars.
NextBridge and Hydro One will file their NTE price filings with the OEB's Board Secretary. NextBridge and Hydro One are to file its NTE price by completing Schedule E with no attachments permitted. The OEB will not accept any additional conditions or qualifiers from NextBridge or Hydro One. The OEB will send both proposals out to parties after they have been received. NextBridge and Hydro One should not circulate their NTE price filings to other parties.

Once the OEB receives NTE price filings from NextBridge and Hydro One on January 31, 2019, it will make its final decision with respect to leave to construct the new transmission line based on the lowest cost. The applicants should be aware that the OEB reserves the right not to grant leave if the lowest NTE price is so high as not to be in the public interest. The OEB does not foresee further procedural steps.

CHAPTER G: CONCLUSION

This Decision and Order determines that NextBridge is eligible to recover \$31.241 M from ratepayers as development costs for the NextBridge-EWT Project.

The OEB finds that the proposed station facilities upgrades are in the public interest. Therefore, the OEB grants Hydro One leave to upgrade station facilities that are necessary for the enablement and operation of the new transmission line between Wawa and Thunder Bay, pursuant to Section 92 of the Act, subject to the OEB's leave to construct approval for the new transmission line between Wawa and Thunder Bay.

The OEB approves the forms of agreements to landowners pursuant to Section 97 of the Act for the Hydro One-Station Upgrades Application.

The OEB's approval of the Hydro One-Station Upgrades Application is subject to conditions set out in the Order section of this Decision and Order.

The OEB has provided further procedural steps for NextBridge and Hydro One to file a NTE price for the NextBridge-EWT Project and the Hydro One-LSL Project, respectively.

The NTE price filing is the final step in this proceeding before the OEB will make its Decision and Order.

CHAPTER H: ORDER

ON THE DEVELOPMENT COSTS, THE ONTARIO ENERGY BOARD ORDERS THAT:

1. NextBridge is eligible to recover total development costs of \$31.241 M from ratepayers which includes a pre-approved development budget of \$22.4 M as established by the Designation Decision.

ON THE HYDRO ONE-STATION UPGRADES APPLICATION, THE ONTARIO ENERGY BOARD ORDERS THAT:

- Hydro One is granted leave pursuant to Section 92 of the Act to upgrade the Wawa TS, Marathon TS and Lakehead TS, subject to leave to construct approval for the new transmission line between Wawa and Thunder Bay being granted to either Hydro One or NextBridge.
- Hydro One's leave pursuant to Section 92 of the Act to upgrade the Wawa TS, Marathon TS and Lakehead TS, requires the fulfillment of the requirements of the System Impact Assessment and Customer Impact Assessment and all other necessary approvals, permits, licences, certificates and rights required to construct, operate and maintain the proposed facilities.
- 4. Unless otherwise ordered by the OEB, the Hydro One-Station Upgrades Project shall be completed such that it enables an in-service date of December 31, 2021 at the latest for the new transmission line between Wawa and Thunder Bay.
- 5. Hydro One shall notify the OEB of any material change to the Hydro One-Station Upgrades Project, including but not limited to changes to the completion dates for any of the three transformer stations or the necessary environmental assessment approvals, and all other approvals, permits, licences, certificates and rights required to construct the proposed facilities.
- 6. In the event that NextBridge is granted leave to construct the new transmission line between Wawa and Thunder Bay, Hydro One shall coordinate with NextBridge to align the in-service date of its station upgrades with the in-service date for the new transmission line. Any additional costs caused by the unreasonable or uncooperative conduct by either party may be borne by the party whose conduct caused the costs. Such additional costs may reduce the

amount that the uncooperative party might otherwise recover in rates for the project for which they receive leave in this Decision and Order.

ON THE NEXTBRIDGE-EWT APPLICATION AND THE HYDRO ONE-LSL APPLICATION, THE ONTARIO ENERGY BOARD ORDERS THAT:

- NextBridge may file a not-to-exceed price for the construction of the new transmission line between Wawa and Thunder Bay in a sealed envelope addressed to the Board Secretary marked confidential by 4:45 pm on January 31, 2019.
- Hydro One may file a not-to-exceed price for the construction of the new transmission line between Wawa and Thunder Bay in a sealed envelope addressed to the Board Secretary marked confidential by 4:45 pm on January 31, 2019.

DATED at Toronto December 20, 2018

ONTARIO ENERGY BOARD

Original Signed By

Kirsten Walli Board Secretary

SCHEDULE A

LOCATIONS OF TRANSFORMER STATIONS IN THE HYDRO ONE-STATION UPGRADES APPLICATION

DECISION AND ORDER

UPPER CANADA TRANSMISSION INC.

(ON BEHALF OF NEXTBRIDGE INFRASTRUCTURE)

HYDRO ONE NETWORKS INC.

EB-2017-0182 | EB-2017-0194 | EB-2017-0364

DECEMBER 20, 2018



Lakehead, Marathon and Wawa Transformer Stations in the Hydro One-Station Upgrades Application

SCHEDULE B ROUTE IN THE NEXTBRIDGE-EWT APPLICATION

DECISION AND ORDER

UPPER CANADA TRANSMISSION INC. (ON BEHALF OF NEXTBRIDGE INFRASTRUCTURE)

HYDRO ONE NETWORKS INC.

EB-2017-0182 | EB-2017-0194 | EB-2017-0364 DECEMBER 20, 2018

Route in the NextBridge-EWT Application



SCHEDULE C ROUTE IN THE HYDRO ONE-LSL APPLICATION

DECISION AND ORDER

UPPER CANADA TRANSMISSION INC. (ON BEHALF OF NEXTBRIDGE INFRASTRUCTURE)

HYDRO ONE NETWORKS INC.

EB-2017-0182 | EB-2017-0194 | EB-2017-0364 DECEMBER 20, 2018



Route in the Hydro One-LSL Application

SCHEDULE D

PROCEDURAL STEPS OF NEXTBRIDGE MOTION, DEVELOPMENT COSTS HEARINGS AND COMBINED HEARING

DECISION AND ORDER

UPPER CANADA TRANSMISSION INC.

(ON BEHALF OF NEXTBRIDGE INFRASTRUCTURE)

HYDRO ONE NETWORKS INC.

EB-2017-0182 | EB-2017-0194 | EB-2017-0364

DECEMBER 20, 2018

NextBridge Motion Hearing

A Notice of Hearing of Motion was issued by the OEB on April 6, 2018 and began with the filing of additional material from NextBridge. An opportunity for additional intervention requests was also established. The OEB received evidence on the NextBridge Motion from intervenors¹⁵⁷, NextBridge and Hydro One. A transcribed technical conference on the NextBridge Motion was held on May 16 and 17, 2018.

Development Costs Hearing

This procedural schedule included direction to NextBridge to file further evidence, which was received by the OEB on March 14, 2018. A technical conference on NextBridge's development costs was held on May 7, 2018 while an oral hearing was held on July 5, 2018. NextBridge filed its oral hearing undertaking responses on July 23, 2018. The OEB allowed for written interrogatories on the oral hearing undertaking responses and for NextBridge to file its responses on August 24, 2018. NextBridge filed its Argument-in-Chief on September 10, 2018 while intervenors and OEB staff filed submissions on September 19, 2018. On September 28, 2018, NextBridge filed its reply submission on development costs.

Combined Hearing

The OEB set out the procedural steps for hearing the three applications, including a written interrogatory process for questions relating to the Hydro One-LSL Application and an oral hearing. Written discovery in the Combined Hearing was completed on September 24, 2018 with NextBridge and Hydro One filing written responses to their respective interrogatories. On October 2-4 and 9-12, 2018, the OEB held a combined oral hearing. Argument-in-Chief was received from NextBridge and Hydro One on October 22, 2018. Submissions from all parties responding to the Arguments-in-Chief were received on October 31, 2018.

Reply submissions from NextBridge and Hydro One were initially due on November 6, 2018, however, the deadline for reply submissions from both NextBridge and Hydro One was extended to November 9, 2018 to allow the MECP to respond to a letter from the OEB by November 7, 2018.

On November 9, 2018, both NextBridge and Hydro One filed their reply arguments.

¹⁵⁷ Intervenors included the Métis Nation of Ontario; the IESO; School Energy Coalition; Consumers Council of Canada; Bamkushwada L.P. and Five First Nations; Batchewana First Nation of Ojibways; Biinjitiwaabik Zaaging Anishinaabek; the Ministry of the Environment and Climate Change; the Association of Major Power Consumers in Ontario; the Power Workers' Union; and the Vulnerable Energy Consumers Coalition.

SCHEDULE E

NOT-TO-EXCEED PRICE FILING TABLE FOR THE NEXTBRIDGE-EWT PROJECT AND THE HYDRO ONE-LSL PROJECT

DECISION AND ORDER

UPPER CANADA TRANSMISSION INC.

(ON BEHALF OF NEXTBRIDGE INFRASTRUCTURE)

HYDRO ONE NETWORKS INC.

EB-2017-0182 | EB-2017-0194 | EB-2017-0364

DECEMBER 20, 2018

Not-to-Exceed Price Filing Table

	Category	Price
		(2021\$ million)
	Applicant:	
1	Engineering, Design and Procurement	
2	Materials and Equipment	
3	Environmental Approval/Monitoring/Mitigation	
4	Land Rights	
5	Indigenous Participation	
6	Indigenous Consultation	
7	Other Stakeholder Engagement	
8	Site Clearing, Access	
9	Construction	
10	Site Remediation	
11	Interest During Construction	
12	Contingency	
13	Regulatory	
14	Project Management	
15	Overhead	
16	Other Costs	
	Total Cost – Construction	