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2300 Yonge Street
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October 31, 2018
Our File: EB20170182

Attn: Kirsten Walli, Board Secretary

Dear Ms. Walli:

Re: EB-2017-0182/0194/0364 – EWT/LSL LTC – SEC Public Final Argument

We are counsel to the School Energy Coalition ("SEC"). Attached, please find the public redacted version of SEC's Final Argument.

Yours very truly,
Shepherd Rubenstein P.C.

Original signed by

Mark Rubenstein

cc: Wayne McNally, SEC (by email)
Nextbridge, Hydro One, and interested parties (by email)

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

ONTARIO ENERGY BOARD

Upper Canada Transmission Inc. (on behalf of NextBridge Infrastructure) Application for leave to construct an electricity transmission line between Thunder Bay and Wawa, Ontario

- and –

Hydro One Networks Inc. Application to upgrade existing transmission station facilities in the Districts of Thunder Bay and Algoma, Ontario

-and-

Hydro One Networks Inc. Application for leave to construct an electricity transmission line between Thunder Bay and Wawa, Ontario

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FINAL ARGUMENT OF THE SCHOOL ENERGY COALITION (Public Version)

October 31, 2018

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1 OVERVIEW

1.1 ***Introduction***

1.1.1 In Procedural Order No. 1**,** issued August 13, 2018, the Ontario Energy Board (the "Board") combined three applications for leave to construct into a single hearing. The three applications relate to the construction of a transmission line between Thunder Bay and Wawa, in northwest Ontario (the "East-West Tie Line"), which has been designated a priority project by way of Order-in-Council.[1]

1.1.2 The first application (EB-2017-0182), filed on July 31, 2017, by Upper Canada Transmission Inc., operating as Nextbridge Infrastructure LP ("Nextbridge"), is for leave to construct the East-West Tie Line by way of a new double circuit line that will traverse about 450km and travel around Pukaskwa National Park ("EWT Project"). Nextbridge was chosen as the designated transmitter as part of the Board's EB-2011-0140 proceeding.

1.1.3 The second application (EB-2017-0364), filed on February 15, 2018 by Hydro One Networks Inc. ("Hydro One"), is also for leave to construct the East-West Tie Line, by way of its own double circuit line of approximately 400km, and travels through Pukaskwa National Park (the "Lake Superior Link" or "LSL" Project).

1.1.4 The third application (EB-2017-0194), filed on July 31, 2017, is for leave to upgrade certain transmission facilities[2], that are required to connect the East-West Tie Line regardless of which project is granted leave to construct the line (the "Stations Project".)

1.1.5 This is the Final Argument of the School Energy Coalition ("SEC"). SEC's submissions seek to provide the Board with a detailed analysis regarding the important aspects of the two projects, and how it should approach its decision.

1.1.6 The Board is tasked in this proceeding with determining which of two applicants, Nextbridge or Hydro One, should be granted leave to construct the East-West Tie line. The EWT Project is very close to having all necessary major environmental approvals and has been in the

[1] Order-in-Council, *326/2016*, dated March 02 2016

[2] These facilities include the Wawa TS, Marathon TS, and Lakehead TS

planning stages for over 5 years. Yet, the forecast costs of the project are dramatically higher than what was before the Board when it chose to designate Nextbridge. The LSL Project is materially less expensive, but due to Hydro One's abbreviated development process to date, it is not close to any of the major necessary environmental approvals. The project carries a material risk that it will not be able to be brought into service until long after required by the IESO, and at a cost significantly more than budgeted.

1.1.7 Regardless of which project the Board determines should be granted leave to construct, it must ensure that we do not find ourselves in a similar situation as with the development costs. The Board must ensure that we do not find ourselves in a situation where after whichever project is granted leave to construct, the actual costs are significantly different from those forecast in the application, which would undermine the basis for the selection between Nextbridge and Hydro One.

1.2 ***<u>Background</u>***

1.2.1 In EB-2011-0140, the Board initiated a proceeding to designate a proponent to undertake development work for the construction of the East-West Tie Transmission Line with a target in-service date of 2017. Six different transmitters participated in the process, including Nextbridge (at the time known as Upper Canada Transmission) and an affiliate of Hydro One, EWT LP.[3] Each proponent was required to file proposals based on a set of common filing guidelines, and to ensure comparability between them, the Board created a reference option which included a certain design for the line. While parties were allowed to deviate from the option, they all filed cost estimates that included the reference option route ("reference route") which included traversing through Pukaskwa National Park. [4]

1.2.2 After considering all six transmitters' proposals, and weighing various criteria, the Board in August 2013 issued its *Phase 2 Decision and Order* ("Designation Decision"), designating (i.e. selected) Nextbridge as the successful proponent. It did so based, in part, on its cost forecast, which included not just development but also its construction costs.[5] At the time,

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[3] EWT LP, was at the time a partnership, 1/3 of which was Hydro One Inc. and 1/3 Great Lakes Power Transmission, which was subsequently purchased by Hydro One Inc. (See EB-2016-0050).

[4] *Phase 2 Decision and Order* (EB-2011-0140 - East-West Tie Line Designation), August 7 2013, p.23

[5] Tr.5, p.3 *Phase 2 Decision and Order* (EB-2011-0140 - East-West Tie Line Designation), August 7 2013;

Nextbridge had forecast total construction cost, including escalation, to be $430M.[6]

1.2.3 Two significant events occurred that would have an impact on the East-West Tie Line. First, in September 2014, the OPA wrote to the Board to recommend that the original in-service of 2017 be delayed until 2020.[7] Second, in the spring of 2015, Parks Canada informed Nextbridge that it would not allow it to access Pukaskwa Park to do needed development work, and thus ultimately, the construction work to build the line.[8] Nextbridge was thus required to consider a different route around the park.

1.2.4 Even with these two significant changes to the underlying assumptions of its forecast construction budget presented in the designation proceeding, at no point before filing its leave to construct in July 2017, did Nextbridge inform the Board or anyone else that its forecast construction budget had dramatically increased. The Board and ratepayers were never previously made aware that its forecast costs had increased by approximately 70% to $737M.[9] Even normalizing for the aspects of the construction budget that were not included at the time of the designation proceeding (i.e. First Nations and Metis participation costs and interest during construction) as well as using 2020 dollars, the increase in forecast costs is more than 60%.[10]

1.2.5 Nextbridge claims that it only determined that there would be a significant cost increase in 2017, when it received the results of its RFP for its main contractor.[11] While it may not have known the exact increase in costs, it is simply not credible for Nextbridge to claim it did not know that its costs would likely be significantly greater than what it had forecast at the designation proceeding. If it truly did not know, then that raises a broader concern regarding its oversight capabilities over the project.

1.2.6 Hydro One's evidence of how it came to file a competing application is that during its interactions with Nextbridge coordinating the filing of its Stations Applications, "for reasons that weren't immediately clear to us at the time, there were delays requested from NextBridge

[6] EB-2011-0140, Board Interrogatory to All Parties No. 26; K5.1, p.6; Tr.5.3
[7] EB-2017-0182, NB Pre-filed Evidence, Exhibit B-9-1, p.9
[8] EB-2017-0182, NB Pre-filed Evidence, Exhibit B-9-1, p.8
[9] Tr.5, p.5; NB Interrogatory Response Exhibit I.B.Nextbridge.SEC.6; K5.1, p.7
[10] Tr.5, p.6; NB Interrogatory Response Exhibit I.B.Nextbridge.SEC.6; K5.1, p.7
[11] Motion Technical Conference Vol.1, p.44, 63

to allow additional time."[12] Hydro One became suspicious that Nextbridge's delay was due to cost increases.[13] In March of 2017, it gave notice to Nextbridge to no longer share confidential information with Hydro One regarding the project.[14] At that time it was considering bringing its own leave to construct application. Yet, it did not tell the Board of this development, and waited until after Nextbridge had filed its leave to construct application - revealing its forecast costs - before informing the Board of its intention in September of 2017.[15] In that letter it said it would file an application on a "not-to-exceed" basis.[16] It took until February 2018 for Hydro One to file its leave to construct application for the LSL, and by then it had dropped the "not-to-exceed" pricing approach that it had said would be central to its project.

1.2.7 The conduct of both Nextbridge and Hydro One in the lead up to filing their respective leave to construct applications has harmed ratepayers.

1.2.8 If Nextbridge had publicly informed the Board that the forecast costs that were part of the basis for it being designated were woefully inaccurate, then other potential proponents would have had time to consider if they wanted to bring forward their own leave to construct applications. Hydro One would have had ample time to undertake environmental assessment work and similar development activities, and to mitigate or eliminate the major problems with their application that are primarily due to the condensed time they have to prepare to potentially undertake such a large project.

1.2.9 If Hydro One had informed the Board as soon as it knew it was considering bringing forward a competing leave to construct application, which was months before Nextbridge filed their application, a more appropriate and fair process could have been developed. In making its intentions known in September 2017, Hydro One ensured that it had a chance to view Nextbridge's proposed costs before it filed, and thus removed the ability for the Board to design a process that would be most appropriate for a competitive selection. That process might have been similar to the designation process, or more recently, the Board's competitive

[12] Motion Technical Conference Vol.2, p.44, 163

[13] *Ibid*

[14] *Ibid*; Motion Technical Conference Undertaking JT 2.18

[15] Hydro One Correspondence to Ms. Walli (Board Secretary), September 22 2017 Re: Hydro One Networks' Letter of Intent to file Leave to Construct Application - East West Tie Line

[16] *Ibid*

process to bring natural gas service to the Southern Bruce municipalities. The Board would have been a process designed to promote competition.[17] This could, for example, have led to a process being developed that required both Nextbridge and Hydro One to file their applications at the same time without having seen each other's bids. SEC submits that it is likely that Nextbridge would have 'sharpened its pencil' and would have provided a lower forecast cost. Hydro One's approach has robbed the Board of many of the benefits of a competitive process.

1.3 ***Selection Criteria***

1.3.1 The selection criteria that the Board must consider are broadly determined by the specific considerations permitted for a leave to construct application in the *Ontario Energy Board Act, 1998* ("*OEB Act*").

1.3.2 Pursuant to section 92(1) of the *OEB Act*, no person shall construct, expand or reinforce an electricity transmission line without leave of the Board.[18] In considering an application under section 92 for leave to construct, the Board must be in the opinion that the "proposed work is in the public interest".[19] The *OEB Act* constrains the factors the Board can consider in making its public interest determination on a proposed transmission construction project.

1.3.3 First, section 96(2) provides that the Board shall only consider, i) the interest of consumers with respect to price, reliability and quality of electricity service, and ii) where applicable, in a manner consistent with the policies of the Government of Ontario with respect to the use of renewable energy.[20] The latter consideration is not applicable with respect to the East-West Tie Line.

1.3.4 Second, pursuant to section 96.1, if by Order-in-Council, a specific transmission line is deemed a "priority project", the Board is required to accept that the project is needed when making its public interest determination for leave to construct.[21] The East-West Tie Line has

[17] See EB-2016-0137/138/138
[18] *Ontario Energy Board Act, 1998*, ["*OEB Act*"], s.92
[19] *OEB Act*, 96(1)
[20] *OEB Act*, 96(2)
[21] *OEB Act*, 96.1(1),(2)

been deemed a priority project.[22]

1.3.5 In this proceeding, the factors the Board can consider are more limited than would otherwise be the case. This includes the designation proceeding where the Board was exercising its public interest licensing authority under section 74, which has not been similarly constrained, as well as its broader rate-making authority under section 78. [23] The legislative scheme has the effect that the factors the Board considered in the designation proceeding were much broader than what it can consider in its consideration of the applications for leave to construct. SEC recognizes that this is an unfortunate consequence of unique circumstances that unfolded and the particular provisions of the *OEB Act*.

1.3.6 In comparing the two projects, the Board's selection criteria are only related to two factors – price and reliability. This is because the line is not needed to connect a renewable energy source and thus this factor is not applicable, and there is no difference between either projects with respect to the quality of electricity (as distinct from reliability).[24]

1.3.7 The factors of price and reliability can be broadly grouped into three categories. First, both project and system costs impact price of electricity. Second, issues related to tower and line design and route may impact electricity reliability. Third, each project's schedule may impact both price and reliability. SEC addresses each of these three broad categories in these submissions.

1.3.8 While the Board may find that both applications to build the East-West Tie Line meet the applicable factors to determine that the public interest has been met, only one application can be granted leave to construct.[25] It would clearly not be in the public interest to grant leave to build duplicative facilities on the same route.[26]

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[22] Order-in-Council, *326/2016*, dated March 02 2016
[23] *OEB Act*, s.74 and 78
[24] Tr.3, p.192
[25] *Board Policy: Framework for Transmission Project Development* Plans (EB-2010-0059), August 26, 2010, p.17
[26] *Ibid*

2 COSTS

2.1 *Overview*

2.1.1 A fundamental issue the Board will need to consider is the difference in costs of the two projects. Those cost differences can be categorized into three broad categories:

(a) ***Project Costs:*** Project costs included to build the EWT and LSL. This includes construction costs, depending on how one categorizes the costs, Hydro One's development costs, as well as on-going costs such as annual OM&A expenses.

(b) ***System Costs****:* Costs identified by the IESO that it will incur to manage the capacity shortfall in the northwest if the in-service date for the line is beyond the end of 2020.

(c) ***Nextbridge Sunk and Wind-up Costs:*** Sunk costs of Nextbridge that have been incurred since the filing of the EWT leave to construct application, and any wind-up costs recoverable from ratepayers if Hydro One is granted leave to construct.

2.1.2 SEC addresses each of these categories in turn.

2.2 *Project Costs*

2.2.1 The most important consideration for ratepayers is the costs that customers are going to end up bearing related to the East-West Tie Line, and the single largest component of that is the project cost. This includes not just the cost to build the line, but also the on-going OM&A cost over its life.

2.2.2 ***Nextbridge.*** Nextbridge filed its leave to construct application forecasting construction costs of $737M for its EWT Project.[27] Even though that cost forecast was made over a year ago, and there have been some material changes to some of the assumptions related to the plan, it has steadfastly refused to provide a specific update to its forecast construction budget.[28] Nextbridge has simply said that it expects that its cost will be $737M plus or minus 10%.[29] Its evidence is that internally it does not have a more precise forecast, and that it expects the costs

[27] EB-2017-0182, Pre-filed Evidence, Exhibit B-9-1, p.1
[28] NB Interrogatory Response Exhibit I.Nextbridge.Staff.49; Tr.5, p.17
[29] Tr.5, p.17

will come in within this range based on where Nextbridge is currently with the AACE cost estimate framework (within the Class 2 estimate).[30]

2.2.3 The Board can likely rule out the possibility that the project will come in under the forecast cost of $737M In response to Staff Interrogatory #49 regarding an updated construction budget, Nextbridge stated that while it continued to believe that its December 2020 date is still achievable, the *increase* in cost of construction would be a function of a number of factors, and all relate to risks that appear to be likely to occur.[31]

2.2.4 SEC submits Nextbridge's reluctance to update its construction cost forecast, even though both the environmental assessment ("EA") and leave to construct dates that were built into its original schedule have sufficiently changed, is an indicator that the real forecast cost sits at the +10% amount. This means the starting point for a cost comparison is a forecast construction cost of an additional $73.8M.

2.2.5 In addition, based on SEC's written submissions in the Development Costs phase of this proceeding, the Board should add an additional $1.9M to Nextbridge's construction cost forecast. These relate to phase shift costs, which are activities which Nextbridge originally planned to do in the construction phase, but moved up to the development phase. SEC's position is that doing so was not appropriate, but that Nextbridge should still be eligible to recover those costs if it is granted leave to construct.[32]

2.2.6 Based on the above, the Board should consider a realistic forecast for the EWT Project construction costs for comparison purpose to be at last the $738.9M ($737M + $1.9M) up to $812.6M ($737M + $73.8M + $1.9M).

2.2.7 ***Hydro One.*** Hydro One's LSL project costs were originally forecast at approximately $636.2M.[33] This was broken down into $12.2M in what it categorized as development costs

[30] Tr.5, p.17; NB Interrogatory Response Exhibit I.Nextbridge.Staff.49(a)
[31] NB Interrogatory Response Exhibit I.Nextbridge.Staff.49(a)
[32] School Energy Coalition Written Submissions on Nextbridge's Development Costs, para 20
[33] EB-2017-0364, Hydro One Pre-filed Evidence, Exhibit B-7-1, p.2

and $623.9M in construction costs.[34] The demarcation line between the two categories was the then forecast leave to construct decision date.[35]

2.2.8 In response to interrogatories, Hydro One updated its forecast costs. The updated total project costs is now $641.8M, with development costs increased by $4.7M, and constructions costs increased by $0.9M.[36] Contained within those increases is a shift of $1.9M from the construction phase to the development phase caused by the delay in the forecast leave to construct decision. [37]

2.2.9 The Board will need to determine if Hydro One is allowed to recover its development costs, even if the LSL project is granted leave to construct. The Board's *Framework for Transmission Project Development Plans* ("*Framework*") was clear that while it cannot prevent an undesignated transmitter such as Hydro One from bringing forward an application, that "undesignated transmitter would have undertaken development at its own cost which would not be recoverable from ratepayers."[38]

2.2.10 The definition of development costs in the Framework is costs incurred until the filing of the leave to construct application.[39] This is the same definition that Nextbridge has used but does differ from Hydro One. Based on the Framework, at the very least, the costs incurred up until the filing of the LSL application in February 2018 should be excluded.

2.2.11 On the other hand, the *Framework* did not contemplate the exact scenario that is currently before the Board where a second proponent brings forward a leave to construct application with substantially all of its 'development' activities taking place after it files. This is an argument for a greater amount of the development costs being unrecoverable from ratepayers, even if it is granted leave to construct. To the benefit of Hydro One, the less costs that it can recover from ratepayers, the lower its overall LSL project costs are for the purpose of

[34] *Ibid*
[35] *Ibid*, see footnote 3 and 4
[36] *Ibid*, p.19
[37] Hydro One Interrogatory Response Exhibit I-I-11, p.15; Tr.3, p.147
[38] *Board Policy: Framework for Transmission Project Development* Plans (EB-2010-0059), August 26, 2010, p.17
[39] *Ibid*, p.15

comparison with Nextbridge's EWT project.

2.2.12 If the Board accepts that Hydro One's development costs before the filing of the application are not recoverable, then the exact amount is somewhere between the $1M incurred in 2017[40], and the $4.4M incurred to the end of August 2018.[41] Assuming an equal distribution of spending per month up until the end of August, then $825K would have been incurred in 2018 before the filing of the application in mid-February. Based on this, SEC submits $1.83M is not recoverable from ratepayers and should not be considered as part of Hydro One's costs.

2.2.13 Another way for the Board to consider the cost for the LSL is to consider the upper bound of the range of -5% to 6% that Hydro One has determined is appropriate.[42] This approach was the basis for Hydro One's not-to-exceed proposal. The amount, which still requires an adjustment for ineligible development costs, would be a forecast project of 681.2M ($683M – 1.83M) for both the LSL development and construction phase.[43]

2.2.14 Based on the above, the Board should consider a realistic starting point for the LSL for comparison purposes to be at least $640M and up to$ 683M.

2.2.15 ***Contract Risk Allocation.*** Both Nextbridge and Hydro One have structured the construction costs around fixed price engineering, procurement and construction ("EPC") contracts. Nextbridge, through a competitive procurement process, has signed a contract with Valard Construction ("Valard") worth approximately [redacted] of the original $737M construction budget.[44] Hydro One selected SNC-Lavalin, one of its two pre-qualified construction partners, and has negotiated an "execution-ready" contract worth 85% of their construction budget.[45]

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[40] Motion Technical Conference Undertaking Response JT 2.19, Attachment 1

[41] Hydro One Interrogatory Response Exhibit I-1-11, p.8, Table 8

[42] Motion Technical Conference Undertaking Response JT 2.25

[43] Hydro One Interrogatory Response Exhibit I-1-18; K2.2, p.61

[44] [redacted]

[45] Tr.3, p.84, 157; Hydro One Interrogatory Response Exhibit I-5-7(d)

2.2.16 [redacted] Nextbridge is responsible for a greater proportion of the division of responsibilities between the project owner and EPC contract as compared to Hydro One. [46] For example, for the EWT project, it is Nextbridge who is responsible for significant engineering and the procurement of materials, whereas for the LSL that work is to be undertaken by SNC-Lavalin.[47]

2.2.17 The benefit of a higher percentage of activities and costs included within the fixed price contract is that the project owners, and potentially ratepayers, have greater protection from issues that arise such as construction difficulties and forecast error.

2.2.18 By way of illustration, two of the areas in which the LSL Project forecast costs are significantly higher than the EWT Project costs are in the areas of materials and equipment, and site clearing and access.[48] Nextbridge's evidence is that this is likely due to Hydro One's providing an inaccurate forecast of the actual costs it will be required to incur for those activities.[49] But as Mr. Karunakaran from SNC-Lavalin confirmed, those activities are the responsibility of theirs, and are included within the fixed price EPC contract.[50] Insofar as Nextbridge is correct that the costs are understated, that is ultimately a problem for SNC-Lavalin, not Hydro One, or ratepayers. [51]

2.2.19 Mr. Mayers on behalf of Nextbridge forcefully defended their contracting approach as compared to Hydro One in two ways.

2.2.20 First, unlike Hydro One, Nextbridge took the view that it manages the contractors and is more involved to ensure they are on top of problems that may arise.[52] Nextbridge may very well take this approach, but that has nothing to do with the cost differences and has nothing to do

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[46] See SEC comparison table provided at K5.1, p.35-37; Tr.5, p.31
[47] *Ibid*
[48] Tr.5, p.46; SEC Comparison Table K5.1, p.55
[49] NB Interrogatory Response Exhibit I.Nextbridge.SEC.24; Tr.5, p.46
[50] Tr.3, p.169
[51] *Ibid*
[52] Tr.3, p.33-34

with its project management costs. In fact, Hydro One has budgeted more in both absolute dollars, and as a percentage of the overall budget, to project management.[53]

2.2.21 Second, Nextbridge testified that the understated costs are likely why Hydro One does not actually have a signed contract with SNC-Lavalin.[54] SEC agrees that it would have been preferable for Hydro One and SNC-Lavalin to have executed the contract, but it is not entirely clear if Nextbridge is truly in a better position with its signed contract with Valard. When the Hydro One panel was asked about the contract not being signed, Mr Karunakaran testified that the reason was that "whilst it is a contract that is ready to go, obviously there could be conditions or adjustments and so forth placed in as part of a leave to construct and we want the opportunity to be able to reflect that accurately within the agreement." [55] When asked directly what happens if Hydro One were granted leave to construct and there were no unexpected conditions, would there be any changes to the EPC contract, both Mr. Karunakaran and Mr. Spencer said there would be not be.[56]

2.2.22 In contrast, the Nextbridge-Valard EPC contract is not as iron-clad as one would have expected based on Mr. Mayers' comments regarding the Hydro One-SNC-Lavalin contract. While Nextbridge testified at length that it had reviewed the revised project schedule with Valard and it had assurances that only the milestones and not the costs would change, it admitted that it did not have this assurance in writing.[57] Not only does Nextbridge have no such assurance in writing from Valard, its own evidence is that there is not a single *internal* document referencing the assurance.[58] With no Valard witness on the witness panel, there is

[53] SEC Comparison Table K5.1, p.55

[54] Tr.5, p.46

[55] Tr.3, p.157

[56] *Ibid*:

> MR. RUBENSTEIN: So if there are no unexpected conditions that are attached to the leave to construct and you get the leave to construct when you expect, will there be any changes to that EPC contract?
>
> MR. KARUNAKARAN: No foreseeable changes, no.
>
> MR. SPENCER: We have no foreseeable changes at this point from Hydro One and SNC-Lavalin's perspective.

[57] Tr.6, p.129; Tr.6, p.137, 139

[58] Tr.6, p.138:

nobody to verify the positon of the contractor that there is no change in the budget based on the changes in the project milestones. Nobody on the witness panel had ever discussed the issue of cost changes with Valard. This was a surprising revelation considering that Valard will be reporting to Nextbridge, not NextEra.[59] SEC submits the Board should approach the assurance with caution.

2.2.23 ***Certainty & Contingency.*** While fixed price EPC contracts limit the project owner and ratepayers from cost risk, they do little to protect against schedule risk. If either EPC contractors take longer to do work it could result in a delay in the in-service date. In that case, ratepayers may only see an offsetting benefit in the form of a contract penalty clause, which may or may not offset the system costs and reliability concerns of not having the line in-service on time. Since so much of the construction work is being done by those EPC contractors, it is important for the Board to understand the track record of the EPC contractors in delivering projects of a similar magnitude on time. Nextbridge's evidence regarding Valard's similar transmission project over the last 10 years shows every single project has been brought in on time.[60]

2.2.24 On the other hand, Hydro One refused to provide similar information regarding SNC-Lavalin's track record.[61] It is not sufficient for SNC-Lavalin to point to its 110 year old history as evidence of its ability to manage similar projects on time.[62] Large capital projects in the electricity sector very frequently end up over-budget and behind schedule. The only evidence on the record is that Valard does have a track record for completing projects on time. With that said, one aspect of the information provided by Valard should be of concern. Of the 18 completed projects it listed, 12 ended up costing more than forecast due to scope changes.[63] Without understanding the specifics of each project and the reason for the scope change it is hard to draw any definite conclusions, but it may be a sign that the contract Valard signs may

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MR. STEPHENSON: I am going to keep asking this question until I get an answer. The question is very clear. My question is: Did you memorialize that confirmation between people in NextBridge in writing? That is my question.

MR. MAYERS: No, we have not.

[59] Tr.7, p.9-10

[60] NB Interrogatory Response Exhibit I.NextBridge.SEC.26, Attachment

[61] Hydro One Interrogatory Response Exhibit I-2-41, p.2; Tr.3, p.166

[62] Tr.3, p.167

[63] NB Interrogatory Response Exhibit I.NextBridge.SEC.26, Attachment

allow for more leeway for scope changes than one would expect.

2.2.25 Hydro One undertook a Monte Carlo simulation to determine the level of contingency it believes it requires to reach a confidence interval of 95% (P95) based on identification of risks that it is responsible for and not contained within the fixed price contract.[64] But what Hydro One has not included in the Monte Carlo analysis is the largest risk the project faces – that it will not be able to use the Nextbridge EA and that it will get final approval from Parks Canada to go through Pukaskwa Park .[65] Without including these major risks that are both material in likelihood and impact, the analysis does not mean very much. Similarly, the updated AACE analysis that Hydro One has done shows that its range is -5% to 6%.[66] That accuracy range also assumes Hydro One can use the Nextbridge EA and go through Pukaskwa Park.

2.2.26 In contrast, Nextbridge did not undertake a Monte Carlo analysis at all.[67] Nextbridge's approach is that which is used by its affiliate NextEra, which is to set a contingency level based on its experience undertaking similar projects and then making adjustments for the specifics of the EWT Project.[68] In its view it's more appropriate to rely on the AACE range approach to determine the appropriate cost, which it believes at this point in the process yields a -10% to +10% range.[69]

2.2.27 ***OM&A.*** Hydro One has a cost advantage with respect to forecast OM&A costs. It has forecast incremental annual OM&A costs of $1.5M as compared to $3.9M for Nextbridge. [70] This should not come as much as a surprise, since Hydro One owns 98% of the transmission assets in Ontario, whereas Nextbridge owns none. Thus Nextbridge is starting from scratch whereas Hydro One only needs to incur limited incremental costs.

2.2.28 Measuring the impact of the OM&A differential over the life of the line is very hard as the costs will undoubtedly change over decades, so the Board should be cautious. But the

[64] I-2-64, Attachment 1; Tr.3, p.171
[65] Tr.3, p.171
[66] Motion Technical Conference Undertaking JT.2.25
[67] Tr.5, p.30
[68] Tr.5, p.31; May 7 Tr., p.23
[69] Tr.5, p.31, 36
[70] K4.2

evidence does show, as would be expected, that Hydro One does have a cost advantage, and it is a factor the Board should consider.

2.2.29 ***Tax Benefits.*** Hydro One's LSL Project also has an on-going benefit of lower income tax payable as compared to the Nextbridge EWT Project as a result of increased First Nation equity participation. Hydro One's proposal is to offer 34% of the equity in the line to BLP First Nations, as compared to the 20% offered by Nextbridge.[71] Under provincial and federal income tax legislation, First Nation ownership is tax-exempt. Thus the larger equity stake held by qualifying First Nations communities will lead to lower taxes payable, which ultimately means lower rates.[72]

2.2.30 SEC does note while Hydro One's project proposes to offer the BLP First Nations 34% equity, Hydro One has not actually negotiated that arrangement yet, and so it is unclear if the additional tax benefit over Nextbridge's project will materialize.

2.3 ***System Costs***

2.3.1 The basis for the designation of the East-West Tie Line as a priority project is the IESO's assessment that there is a need for increased transmission capacity in northwest Ontario.[73] The IESO is able to manage that need until the recommended in-service date of 2020 by way of the existing Northwest Special Protection Scheme, which allows for the rejection of load in cases of the loss of the existing East-West Tie line.[74] Beyond 2020, it will be unable to do this, and will be required to take interim measures to procure additional capacity which, if required, will come at an additional cost.[75] These costs will be recovered from ratepayers, not through transmission rates, but through commodity related rates (i.e. as part of the global adjustment or uplift charges) and so they are better described as system costs.

2.3.2 Insofar as the two projects are expected to have different in-service dates, for cost comparison purposes, the incremental system costs that will occur as a result of the in-service date of the

[71] Hydro One Interrogatory Response Exhibit I-9-7, Exhibit I-9-11
[72] EB-2017-0182/194 Technical Conference Transcript , Tr., p.144
[73] Order-in-Council, *326/2016*, dated March 02 2016
[74] IESO, Addendum to the 2017 Updated Assessment for the Need for the East-West Tie Expansion, June 29 2018, p.1
[75] *Ibid*

later project, should be attributed to that project.

2.3.3 The IESO has forecast costs in 2021 to be approximately $19M and in 2022 to be $23M (in 2017$). [76] It has also provided forecast costs for 2023 and 2024, although as discussed later in this argument, its view is that their reliability risk becomes unacceptable if the project is delayed until after the end of 2022.[77] Since these are high level estimates, they have been unable to provide a breakdown of these costs on a monthly basis to allow for greater precision to more accurately forecast the system cost impact of a difference in project in-service dates that are less than a year.[78]

2.3.4 As discussed later in these submissions, based on the information available on the record, a realistic forecast of in-service dates would see Nextbridge's EWT be completed by the end of September 2018 and Hydro One's LSL by the end of April 2022. This would mean that due to the delay in the in-service of the line if Hydro One is granted leave to construct, for cost comparison purposes, it should be attributed an additional $12.8M (in nominal dollars)[79] as those costs would likely not be incurred if the EWT Project is built instead. The amount may end up being smaller depending on the delay caused by the Ministry of the Environment, Conservation and Parks' ("MECP")[80] decision to require a Class EA for the Wawa TS that was communicated to Hydro One after the end of the hearing on October 26, 2018.[81]

2.4 ***Nextbridge Sunk and Wind-up Costs***

2.4.1 Nextbridge forecasts that, between the filing of the EWT leave to construct application, and the upcoming decision (end of 2018), it will have spent approximately $38.9M in addition to

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[76] Tr.4, p.147

[77] IESO, Addendum to the 2017 Updated Assessment for the Need for the East-West Tie Expansion, June 29 2018, p.1

[78] IESO Response to Interrogatory SEC-2

[79] SEC has estimated the system costs incurred between the two forecast in-service dates by adding the following: i) 2022 additional costs of $19M 2017$ inflated to 1.5%/y to 2022 dollars ($20.2M), divided by 3/12 (October-December), ii) 2023 additional costs of $23M 2017$ inflated to 1.5%/y to 2022 dollars ($24.4), divided by 4/12 (January to April).

[80] Until the end of June 2018, the Ministry of the Environment, Conservation and Parks (MECP) was known as the Ministry of the Environment and Climate Change (MOECC).

[81] Hydro One Letter to the Board Secretary, October 29 2018, p.1

those either previously approved or being considered as part of its development costs.[82] Nextbridge has taken the position it will seek recovery of these amounts from ratepayers if its leave to construct application is denied.[83]

2.4.2 In addition, Nextbridge's evidence is that it will incur wind-up costs over above these amounts.[84] It has not forecast these costs but notes that the non-engineering and construction costs alone would be a minimum of $1M. [85]

2.4.3 While the Board has been clear that all costs incurred in excess of the approved development budget are at risk, the issue of what, if any, additional costs incurred by Nextbridge after the development period should be recoverable if Hydro One LSL project is granted leave to contract will need to be considered. SEC accepts that *some* of these costs should fairly be recovered from ratepayers even if Nextbridge is not granted leave to construct. As the designated transmitter, it would not have been fair to expect Nextbridge to stop incurring any costs after the filing of its leave to construct, which marks the point in time that the project moves from the development to the construction phase. This demarcation point does not truly reflect the point in time where the type of activity changes from development to construction. Further, a significant portion of those costs relate to activities such as the environmental approvals, which Hydro One itself is also relying on for its LSL Project.

2.4.4 In the Board's Phase 1 Decision, it commented in answering the issue related to cost recovery if there is no successful leave to construct, that it may be appropriate to allow recovery of reasonable wind-up costs:

> On the issue of cost recovery after a failure to obtain an order for leave to construct the line, the Board agrees with Board staff and other parties that the reason for failure will be an important consideration in determining what costs, if any, are to be recovered from ratepayers. Generally, if the project does not move forward due to factors outside the designated transmitter's control, the designated transmitter should be able to recover the budgeted development costs spent and reasonable wind-up costs. If failure occurs due to factors within the designated transmitter's control, neither recovery nor

[82] The $38.9M is based on the following information: Nextbridge has incurred $34.4M from the filing of its application until the end of September 2018. It forecasts an additional $4.5M until the end of December 2018. See Tr.5, p.44-45; K7.1.

[83] Tr.5, p.43-44

[84] Motion Technical Conference Undertaking JT 1.25

[85] *Ibid*

> automatic denial is certain. The Board will review the circumstances of the failure to determine a fair level of cost recovery. The Board acknowledges that it may not be possible to attribute failure to a single cause, and the sources of failure may be both internal and external to the designated transmitter. It is not possible to decide on the level of cost recovery in the abstract at this time, as the specific circumstances of the failure will need to be considered.[86]

2.4.5 SEC notes that the Board did not explicitly appear to contemplate recovery of costs that are incurred after the filing of the leave to construct application but before the decision, where the proponent is not granted leave. SEC submits that the reasonable approach is to conclude the Board believed that development type costs incurred at any point could *potentially* be recoverable like wind-up costs if leave to construct was not granted.

2.4.6 The amount of costs that Nextbridge should be able to recover considering the circumstances of competing applications has not been sufficiently explored in this proceeding for SEC to make any specific recommendations. The evidence shows that at first Nextbridge's response was to increase spending by advancing activities[87], and then later to slow it down by pushing off significant financial commitments for some materials.[88]

2.4.7 Ultimately, if Nextbridge is unsuccessful in its request for leave to construct but later seeks recovery of these sunk costs, then the intervenors and the Board will have opportunity to review in detail the costs and their prudence. But for the purposes of this proceeding, the Board needs to make some assumptions in order to compare costs between the two projects.

2.4.8 SEC submits for comparison purposes the Board should use a worst case type scenario approach, and assume that all of these costs are recoverable from ratepayers even if Nextbridge is not granted leave to construct. These $38.9M in sunk and windup costs should then be attributable to the Hydro One for the purposes of comparing costs of each application.

[86] *Phase 1 Decision and Order* (EB-2011-0140), July 12 2012, p.19

[87] Tr.5, p.28

[88] Tr.5, p.43-44

3 Reliability

3.1.1 The major difference between the design of the line between the two projects is that for Hydro One to utilize the same right of way through Pukaskwa Park as its existing line now occupies, it has proposed to combine the existing and new line on 87 quad circuit towers for that portion of the route (approximately 35km). Nextbridge, in both its motion evidence and during the oral hearing, raised an issue with respect to the reliability impact of the Hydro One quad circuit tower design.[89]

3.1.2 SEC recognizes that it is fair to conclude, all things being equal, Nextbridge's proposed design which includes an entirely two circuit tower design should be *more* reliable than Hydro One's design, which requires a certain segment of the line use of a quad circuit tower. SEC accepts that the chance of a weather event knocking out all four lines of the new and existing line is higher when they are combined on a single tower.

3.1.3 But not all incremental reliability has significant value. The issue from the Board's perspective should not simply be the comparative level of reliability, but the absolute level.

3.1.4 Both Nextbridge and Hydro One have received positive System Impact Assessments ("SIA") from the IESO regarding their respective projects.[90] In doing so, the IESO has deemed that both projects meet the relevant NERC, NPCC, and ORTAC planning standards.[91] The IESO confirmed that insofar as the projects meet the conditions set out in the SIA, it does not have any concern with respect to the reliability impact of either project.[92] The conditions in the SIA for the LSL project include a more robust restoration plan than would otherwise be the case, to address the IESO's lack of experience with quad circuit towers in Northwest Ontario.[93] There was no suggestion during the hearing that Hydro One would not be able to meet the conditions in its SIA.

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[89] EB-2017-0364, Nextbridge Additional Material, Appendix B, Evidence of Robert E. Nickerson; Tr.1, p.120, Tr.4, p.171;

[90] See EB-2017-0182, Pre-filed Evidence, Exhibit F-1-1 EB-2017-0364, Pre-filed Evidence, Exhibit F-1-1

[91] *Ibid*,

[92] Tr.4, p.110

[93] T,4, p.112

3.1.5 Based on the expert assessment of the IESO, there does not appear to be a practical difference in the reliability between the two projects. Both are "reliable enough". Nextbridge has not tendered any evidence to demonstrate that customers are willing to pay an additional cost for whatever theoretical difference there may be. From the perspective of the reliability of tower design, the issues do not appear to favor one project over the other.

3.1.6 Nextbridge appeared to also raise concerns about the LSL project's requirements regarding galloping.[94] The concern appears to be that since the LSL design has a smaller right of way footprint, without taking additional actions there is a higher chance of galloping of the lines, which may lead to conductor and tower damage, including potential failure.[95]

3.1.7 SEC notes there has been conflicting evidence on this. In response to questioning from counsel to SEC, Mr. Mayers on behalf of Nextbridge testified that it was not taking the position that Hydro One had failed to meet any of the minimum technical requirements. [96] Later on during the hearing, after SEC and Hydro One had concluded their cross-examination, Mr. Brott on behalf of Nextbridge appeared to take a different position.[97] This leaves the record very unclear, and Mr. Brott's revised position for Nextbridge essentially untested. Based on how Nextbridge's evidence on the issue was put on the record, SEC is not in a position to properly evaluate the claim. All that SEC can reasonably conclude is that if the issue were a material concern, one would expect that it would have been raised by the IESO in the LSL Project SIA, which it did not do.

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[94] Tr.7, p.42-44

[95] *Ibid*

[96] Tr.5, p.47:

> MR. BROTT: I would add that if -- had we disregarded the minimum technical requirements, the OEB's minimum technical requirements, our cost would be lower for our towers and our foundations, and it would be closer to this cost. And I would also add that that is a reliability concern, which is part of the Board's purview.
>
> MR. RUBENSTEIN: Sorry, back up for a second. Is it your position that they have not met the –
>
> MR. MAYERS: No, it is not our position. Let me clarify…

[97] Tr.7, p.43-46

4 SCHEDULE

4.1.1 A key component of the Board's task in determining which project should be granted leave to construct is their likely in-service dates.

4.1.2 The in-service date will impact not just project and system costs, but also reliability. The IESO's evidence is that while it still maintains a 2020 recommended in-service date, the line must be in-service by the end of 2022.[98] It is their view that a delay past 2022 will result in "unacceptable risks to system reliability and the associated cost uncertainties."[99]

4.1.3 The basis for the IESO's end of 2022 'drop dead' date is primarily that certain generation contracts based in the northwest expire.[100] Between 2020 and 2022, the IESO is able to manage the reliability risk with interim measures, but after 2022, with the expiry of certain generation contracts, the risk to reliability in the northwest becomes too great.[101] Those contracts are held by facilities that may be able to extend their contracts or enter into new ones, but the IESO has taken the view that ultimately their success in a competitive procurement process that would be undertaken is unknown.[102]

4.1.4 ***Nextbridge.*** Nextbridge's forecast in-service date for the EWT Project remains December 2020. SEC submits this is unlikely, at least without a significant increase in construction costs.

4.1.5 Its forecast December 2020 in-service date has not changed since the filing of the application. The original forecast was premised on leave to construct approval in Q1 2018, EA approval in Q2 2018, and construction beginning in Q4 2018.[103] By the spring of 2018, after changing its forecast leave to construct approval to July 2018 and EA approval to October 2018, Nextbridge still maintained that it could begin construction in Q4 2018, and still bring the line

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[98] IESO, Addendum to the 2017 Updated Assessment for the Need for the East-West Tie Expansion, June 29 2018, p.1
[99] *Ibid*, p.4
[100] Tr.4, p.94
[101] Tr.4, p.143
[102] Tr.4, p. 160
[103] EB-2017-0182, Exhibit B1-1, Attachment 1 K5.1, p.9

into service by December 2020.[104] When questioned during the technical conference about the achievability of its schedule if there were further changes, Ms. Tidmarsh testified that it was doable as they had "one month contingency flat" built into the schedule.[105]

4.1.6 Between the technical conference and the oral hearing, there were further changes. Evidence during the motion hearing was that the MECP would not be in a position to grant EA approval until later in Q4.[106] Further, it was very unlikely the Board would be in a position to grant leave to construct in July. One would have assumed based on its previous testimony that it only had one month of float, Nextbridge would then have to move its proposed December 2020 in-service date.

4.1.7 Nextbridge has not. In its most recent schedule, it has delayed all activities by more than a single month. It now expects a leave to construct approval by the end of the year, EA approval by February 2019, and construction beginning in Q2 2019. Yet, somehow it still believes it can maintain the December 2020 in-service date.[107] This is simply not credible, and is unlikely to be achieved without additional costs, regardless of the so-called assurance that Nextbridge claims it has gotten from Valard. Similar to its approach to construction costs, Nextbridge did not undertake a Monte Carlo analysis to determine the likelihood of a December 2020 in-service date.[108]

4.1.8 It may not even matter if the December 2020 in-service date ends up being accurate or not since Hydro One's evidence is that its Stations project will not be in-service until September 2021.[109] Since the Stations project is required for the East-West Tie line to be connected, the earliest either the EWT or LSL project could go in-service would be September 2021. The delay in the Stations Project is due to a decision from the MECP to link the issuance of any permits required for construction to the issuance of the Nextbridge EA.[110] Based on a forecast February 2019 EA approval, this would not allow Hydro One to begin work on the Marathon

[104] Motion Hearing Technical Conference Undertaking JT1.16, K5.1, p.10,12
[105] EB-2017-0182/194 Technical Conference, Tr.1, p.27
[106] Motion Technical Conference Vol 1, p.187; MOECC Evidence, p.5
[107] Undertaking J6.1
[108] Tr.5, p.31
[109] Undertaking J4.1
[110] Tr.7, p.144

TS until February, and thus will delay the Station project start date until September.

4.1.9 The cost impact of the Stations Application delay is not entirely clear. Ms. Tidmarsh stated, in response to questions from Panel Member Duff, that if told that a 2021 in-service date was more appropriate then "we believe that we could actually bring the costs in lower than what we have".[111] This is the opposite of a response given to a similar question posed earlier in the hearing, where Ms. Walding testified that "[t]he only thing with going to a 2021 project is that there will be additional interest during construction."[112] So either the delay is going to result in Nextbridge's construction costs increasing, or decreasing. The lack of a consistent or precise answer to this important question is concerning.

4.1.10 ***Hydro One.*** Hydro One faces substantial risk that not only will the LSL not meet an in-service date of December 2021, but it will not even be operational by the end of 2022.

4.1.11 A central premise of the LSL Project is its ability to use studies and other work completed by Nextbridge for the purposes of its own EA approval.[113] Hydro One's plan is to work on a parallel track to seek a Designation Order and complete an individual EA. To complete either of these options and receive EA approval anywhere close to the timeframe required to meet the planned in-service date, it plans to use the studies and information that Nextbridge completed in the process of seeking EA approval for the EWT Project.[114] Its ability to use this information at this time is not entirely known. While MECP has not told Hydro One that its proposed approach is unacceptable, it likewise has not told Hydro One that it can fulfill the EA requirements this way.

4.1.12 This should not be surprising. The situation is entirely unique. Hydro One's own Risk Register describes it as "unprecedented".[115] To be clear, SEC is not saying that the approach is not going to be successful. There is no fundamental reason why it cannot work. It is simply that there has never been a situation where a proponent has undertaken an EA using primarily

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[111] Tr.7,p.50

[112] Tr.5, p.25

[113] EB-2017-0364, Hydro One Pre-filed Exhibit B-7-1, p.6-7

[114] Tr.7, p.116

[115] Hydro One Interrogatory Response Exhibit I-1-13, Attachment 1, p.1; K2.2, p.35

information from another proponent proposing essentially the same project. This is primarily due to the odd regulatory regime applicable to the East-West Tie Line.

4.1.13 The risk that Hydro One cannot use the Nextbridge EA work is an important consideration for the Board since that risk, if realized, would likely derail the entire project. Hydro One's own evidence is that requiring it to start from scratch and conduct the various studies and analysis itself could impact the schedule by 2 or more years[116], and that the impact would be "catastrophic".[117]

4.1.14 Even if there are no issues using the Nextbridge EA information, Hydro One's own EA approval schedule is unrealistic. MECP has informed Hydro One that it will not even consider a Declaration Order submission until the Nextbridge EA has been approved.[118] Upon filing that submission, the evidence from MECP is that the process takes on *average*, six to nine months.[119] Considering the scope of a 400km linear infrastructure project that crosses many different environmental habitats and First Nations and Metis communities, one would expect that, if anything, the approval process will be on the longer not shorter end of the suggested timeframe. Yet, Hydro One is forecasting that the Designation Order will be granted in only 6 months.

4.1.15 Even with respect to the individual EA process, Hydro One is forecasting that if it is required to use that route to approval, it will take 8 and a half months from submission.[120] This is an optimistic schedule to say the least, considering the delays Nextbridge has had over just the last few months getting their approval. As Mr. Evers on behalf of MECP described it, "I think that is an ambitious schedule".[121]

4.1.16 The cost impact of this scenario is significant. The cost to undertake the additional EA work would be about $20M.[122] In addition, the incremental construction costs and other non-EA

[116] Hydro One Interrogatory Response Exhibit I-1-13, Attachment 1, p.1; K2.2, p.35
[117] Motion Hearing Technical Conference Undertaking JT 2.19, Attachment 3, p.23
[118] Tr.2, p.75
[119] EB-2017-0182/194 Technical Conference,Tr.1 p.16; Tr.7, p.117
[120] Tr.7, p.119-120
[121] Tr.7, p.120
[122] Hydro One Interrogatory Response Exhibit I-1-13, Attachment 1, p.1; K2.2, p.35*;*

approval costs would be about $30M.[123] A two year delay will also require the IESO to incur additional system costs which, according to its cost forecasts, could be up to $62M.[124] Together, a two year delay could result in increased costs to ratepayers of over $102M.

4.1.17 Further, while Hydro One has progressed much further than Nextbridge did in getting the relevant environmental approvals from Parks Canada to traverse Pukaskwa Park, one cannot ever be entirely certain until those approvals have been granted. A delay in getting those approvals, or outright refusal, will have both cost and schedule implications. Furthermore, since there is an interplay between the provincial and Federal processes, the delay of the Nextbridge EA approval until February 2019 will likely lead to a delay in the Parks Canada approval by a few months as well.[125]

4.1.18 Most concerning is the impact of the decision by the MECP to link the issuance of any permits for the Stations Applications to approval of the EA for the East-West Tie Line. Mr. Evers on behalf of MECP testified that even if Hydro One is granted leave to construct, and the Nextbridge EA is approved in February 2019, permits for the Station Application will not be granted until Hydro One receives their EA approval for the LSL Project.[126] This means Hydro One will not be able to begin construction on the Marathon TS as indicated to bring the Station Project by September 2021. Its revised in-service addition for the Station Project is based on getting necessary permits right after the Nextbridge EA approval.[127]

4.1.19 The exact impact is not known, but at the very least, it will result in a delay of six months if its

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[123] Hydro One estimates a 12 month delay in EA approval would be approximately $15 in project costs (See I-1-7, p.2)

[124] The IESO estimates the total potential cost delay in 2022 to be $23M and 2023 to be $39M. *See* IESO, Addendum to the 2017 Updated Assessment for the Need for the East-West Tie Expansion, June 29 2018, p.5; K2.2, p.59

[125] Hydro One Interrogatory Response I-1-14, Attachment 1

[126] Tr.7, p.126:

> MR. MURRAY: …
>
> So let's assume for a second that Hydro One was granted leave-to-construct by the OEB. If the NextBridge EA is still then ultimately approved, at that point could the Marathon substation work begin?
>
> MR. EVERS: No. It is the ministry's position that the Hydro One would have to fulfil their EA requirements for the Lake Superior Link before the Marathon transformer station permits could be issued.

[127] Undertaking J4.1, p.3

EA approval date is accurate (unlikely) and the delay in the start of construction simply pushes completion at an equal rate. SEC submits it would appear the Stations Project and thus the LSL Project cannot go into service until at least April 2022. More likely, it will be later.

4.1.20 Further, on October 29th, Hydro One wrote to the Board regarding a meeting that occurred with MECP on October 26th. In that meeting,[128] MECP informed Hydro One that the EA screening that it had submitted in December 2017, for the Wawa TS expansion, was being rejected, and that it would be required to conduct a full Class EA. Hydro One's letter states that regularly this takes 12 to 18 months to complete.[129] There is no detailed project schedule on the record regarding the Wawa TS so it is not clear what, if any, the impact of the delay would be to the overall Stations Project considering the MECP's decision to tie the granting of any project permits to the receiving of the EA approval for the EWT Line by the successful leave to construct proponent. If the delay in the Wawa TS extends past the revised completion of the Marathon TS, then the incremental system costs attributable to Hydro One will be lower than what SEC has estimated.

[128] Hydro One Letter to the Board Secretary, October 29 2018 p.1
[129] *Ibid*, p.2

5 ENSURING RATEPAYERS ARE PROTECTED

5.1.1 Based on the above assessment of the proposals, it would appear that Hydro One's LSL Project, if it is able to secure the necessary environmental approvals within its forecast time frame, may provide an estimate net benefit to ratepayers of anywhere from $5.1M to $120M.

5.1.2 The true difference is likely to be larger for a number of reasons. First, if Hydro One is granted leave and the Board orders the payment of Nextbridge's development and sunk costs, the approved amounts could simply be recovered right away from ratepayers[130], as opposed to if it was granted leave, where the amounts would be capitalized and earn a return on capital over the life of the line.[131] Second, as discussed earlier, Hydro One has a significant OM&A expense advantage which will impact the difference in the annual revenue requirement. Third, based on Hydro One's proposed equity proposal to the BLP First Nations, there will be a tax advantage which is not accounted for but will impact the annual revenue requirement. Further, there may in fact be a property tax advantage for Hydro One due to the shorter project route.

5.1.3 Hydro One provided a Discounted Cash Flow ("DCF") analysis in its pre-filed evidence.[132] Ideally, using this approach would allow the Board to compare all facets of the two projects' costs over the life of the asset but properly discounted. The model Hydro One used and provided in response to a SEC interrogatory, only looks at the first 25 years of any given project (the Hydro One depreciation life of the line is 50 years[133]) and so provides an incomplete picture.[134] It is also why the inclusion of the system costs, and a delay of the in-

[130] This would likely be done by adding the amounts to the annual total revenue requirement that makes up the UTR so they are collected from ratepayers

[131] Another potential approach is for the approved amounts is for Hydro One to compensate Nextbridge directly, and then allow Hydro One to capitalize those amounts so to smooth the recovery from ratepayers over the life of the line. This would be similar to how the Board treats capital contributions.

[132] EB-2017-0364, Hydro One Pre-filed, Exhibit B, Tab 9, Schedule 1, p.2; Hydro One Undertaking Response Exhibit I-5-22, Attachment 1

[133] Hydro One Undertaking Response Exhibit I-5-22, Attachment 1

[134] SEC attempted to expand the model which was provided in excel format out to 50 years to try to run a DCF for each of the two projects. The model Hydro One uses appears to be an internal mode that it uses to forecast DCF, revenue requirements, and rate impacts, and built into the model are a number of assumptions SEC was unable to properly adjust so as to ensure that an accurate comparison could be included (e.g. removing the tax impact of the large equity portion, assumed property tax). Further, there are additional inputs for Nextbridge that SEC does not have, such as its cost of capital.

service by a year, had almost no impact on the calculation.[135]

		Cost Comparison ($M)		
Category		**NB EWT**	**Hydro One LSL**	**Argument Para.**
NB EWT Development Costs		**34.8**	**34.8**	*See* SEC Written Submissions on NB Development Costs
NB EWT Sunk + Windup Costs			**39.9**	2.4.8
	Sunk Costs		38.9	2.4.1
	Wind up Costs		1.0	2.4.2
NB EWT Construction Costs		**738.9-812.6**		2.2.6
	Construction Costs	737-810.7		2.2.4
	Phase Shift Costs	1.9		2.2.5
HO LSL Project Costs			***639.9-681.1***	2.2.24
	Development Costs		15.1	2.2.12
	Construction Costs		624.8	2.2.8
IESO System Costs			**12.8**	2.3.3
Total		***773.7-847.4***	***727.4-768.6***	
Differential			***(5.1- 120)***	

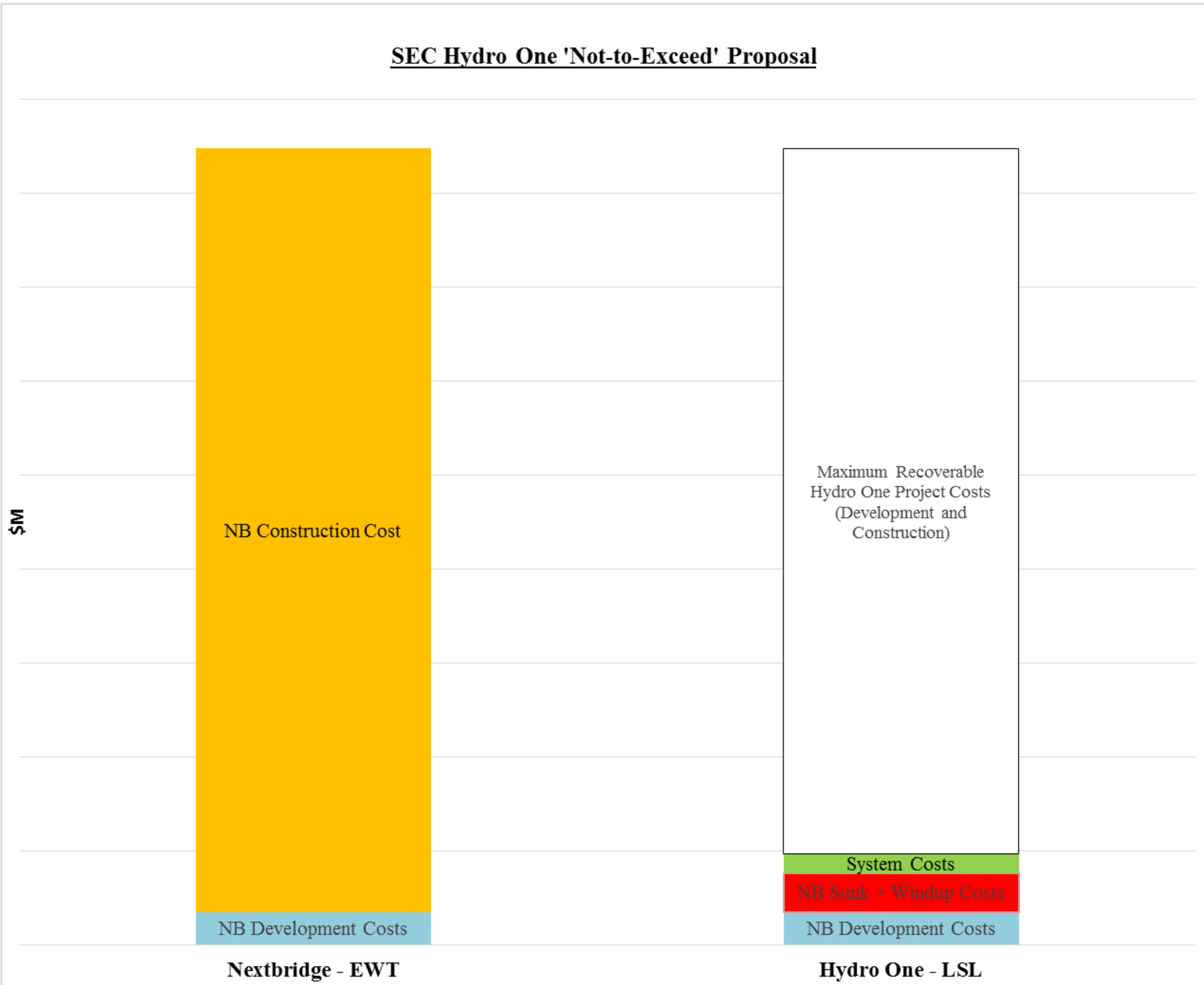
5.1.4 The problem with only considering a cost comparison is that Hydro One's proposed LSL Project and its costs are based on significant assumptions and risks that are not present in the Nextbridge EWT Project.

5.1.5 They assume that Hydro One will receive certain environmental approvals that are far from certain. If on balance, the Board believes Hydro One's project is preferable based on the lower cost, then it should ensure that ultimately ratepayers are protected, through the Board's assignment of risks, to avoid a situation where, if those risks materialize, the final costs are higher than Nextbridge's proposal.

5.1.6 SEC submits the most efficient and effective way to ensure ratepayers are protected is to order that, with limited exceptions, Hydro One's recovery of project costs will be capped at an amount that ensures that customers are no worse off by Hydro One's selection to build the East-West Tie Line.

[135] Hydro One Undertaking Response Exhibit I-5-22. SEC agrees with the comments made by Ms. Walding (Nextbridge) at Tr.6, p.191.

5.1.7 How this would be calculated is that Hydro One's recovery of actual project costs for the LSL Projec twould be limited to the difference between whatever cost the Board determines is a *reasonable and realistic* forecast of the EWT project costs, and the Nextbridge costs that may be recovered even if Hydro One is selected. Those costs include Nextbridge's sunk and windup costs, as well as the incremental system costs that ratepayers will bear due to the difference in in-service delay.



5.1.8 Based on the information on the record to date, and making a number of assumptions about Nextbridge's forecast costs, what it will be able to recover in sunk and windup costs, and the system costs that may be incurred, Hydro One would be limited to recovering between $676.2M and 725.1M in project costs (construction and development costs).[136]

5.1.9 This number would be updated based on Nextbridge's actual sunk and windup costs that the Board determines are recoverable from ratepayers. If the Board seeks to include in the calculation the forecast system costs related to a delay, that cap may significantly decrease depending on the actual in-service date for LSL Project. The IESO has said that it is able to track some of the actual system costs that would be attributable to the delay.[137]

5.1.10 This true "not-to-exceed" price would ensure that the risks that exist for the LSL Poject and are not included in the LSL Project forecast costs will not in the end be borne by customers. This includes risks related to the potential inability in using the Nextbridge EA information, delays in getting necessary environmental approvals from Parks Canada and the Minister of the Environment (either by way of Designation Order or Individual EA), and being required to go around Pukaskwa National Park. These are risks that for the most part are unique to the LSL Project since it is much farther behind in the planning process than Nextbridge's EWT Project.

5.1.11 If Hydro One truly believes that these risks are minimal and unlikely to occur, then it should "put its money where its mouth is". If the Board believes that the Hydro One LSL Project provides a superior proposal, it should grant it leave to construct conditional on Hydro One accepting such a cap on recovery.[138] Hydro One should then be given a short duration of time to decide if it accepts the condition (for example, 7 days), and if not, then leave to construct should revert to Nextbridge's EWT Project.

5.1.12 In Hydro One's letter to the Board indicating it would file a leave to construct application, it

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[136] Numbers derived from Cost Comparison Table

[137] In response to OEB Staff IR No.4, the IESO has said that it can track capacity costs related to interim measures it is required to acquire, but would be unable to track the actual difference in production and foregone loss savings. Based on the IESO's forecast of delay costs, more only small fraction of the costs relate to energy and foregone loss savings costs (See IESO, Addendum to the 2017 Updated Assessment for the Need for the East-West Tie Expansion, June 29 2018, p.5)

[138] The Board has the authority to enact this condition using its authority under section 23(1) as well as its rate-making authority under section 78 of the *OEB Act*.

stated that it would include a not-to-exceed proposal.[139] Ultimately, when it filed its application in February 2018, it did not include a cap. [140] Hydro One was asked during interrogatories by a number of parties if it would consider one, and it has made a proposal. The problem is, it's proposed 'not to exceed' price is more limited than what is appropriate and does not protect ratepayers from the most significant risks of its application.

5.1.13 Hydro One proposes that it shall not be allowed to seek recovery of additional amounts above $683M, the upper bound of its cost estimate range, but on the condition that it receives leave to construct approval by January 2019, and the necessary environmental approvals by August 2019.[141] In addition, its own Board of Directors has not signed off on this proposal and Hydro One has said that their concurrence is required to bind the company.[142] The expectation is that management would bring the proposal forward to the Board of Directors in November, with a vote in December.[143]

5.1.14 By making their proposal conditional on receiving environmental approvals by August 2019, Hydro One has carved out the most significant risks that the project faces, and asks that those be borne by ratepayers. While it is perfectly reasonable for the Board to accept Hydro One's 'not-to-exceed', it is the broader cost cap that SEC proposes that it must also be imposed to protect ratepayers' interests if the Board decides to grant Hydro One's LSL Project leave to construct.

5.1.15 To be clear, whichever project is granted leave to construct, Hydro One or Nextbridge will still require a prudence review from the Board for recovery of whatever its actual capital costs end up being. Any approved 'not-to-exceed' price or cost cap would simply limit what either company would be permitted to *request* to be included in rates.

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[139] Hydro One Correspondence to Ms. Walli (Board Secretary), September 22 2017 Re: Hydro One Networks' Letter of Intent to file Leave to Construct Application - East West Tie Line

[140] Motion Technical Conference Vol.2, p.44, 170

[141] Hydro One Interrogatory Response I-1-18(a)

[142] *Ibid*

[143] Tr.1, p.51

6 OTHER

6.1 ***EA Approval Must Not Be Withdrawn or Obstructed.***

6.1.1 One of the peculiar features of this process is that it is likely that the Board's decision will be issued before the Nextbridge EA is approved. This raises a concern that if LSL Project is granted leave to construct, Nextbridge may either withdraw or obstruct its EA approval, which is necessary for Hydro One, once it is issued, to use to further its own environmental approvals.

6.1.2 Section 6.2(3) of the *Environmental Assessment Act* does limit the ability of Nextbridge to unilaterally withdraw the EA[144], but it does not limit either their ability to request a withdrawal, or obstruct the remainder of the approval process at this point.

6.1.3 Ms. Tidmarsh testified that Nextbridge "would potentially pull its environmental assessment"[145] and that it would also not progress the EA forward.[146] The Board should make it very clear to Nextbridge that if Hydro One is granted leave to construct, it must *actively* ensure that the EA for the EWT Project moves forward to approval. Even though it cannot unilaterally withdraw it, it can request a withdrawal and obstruct the remaining process. The MECP witness testified that even though their review is complete, depending on comments it receives during the five week public review that it has begun, and potentially the Minister's review, Nextbridge may be required to provide additional information.[147]

6.1.4 If it does cooperate to ensure the EA is approved even if the EWT Project is denied leave to construct, then it should not be denied recovery of its development costs as well as any sunk or windup costs.

6.2 ***Costs***

6.2.1 SEC hereby requests that the Board order payment of our reasonably incurred costs in

[144] Section 6.2(3) of the *Environmental Assessment Act, R.S.O. 1990, c. E.18*, states that a proponent may amend or withdraw its EA after the deadline of competition of review by the MECP "only upon such conditions as the Minister may by order impose." MECP has now published its review and so the Nextbridge cannot unilaterally withdraw its EA. (See Tr.7, p.113-114)

[145] Tr.5, p.38-39

[146] Tr.5, p.37-38

[147] Tr.7, p.100-101

connection with our participation in this proceeding. It is submitted that SEC has participated responsibly in all aspects of the process, in a manner designed to assist the Board as efficiently as possible.

ALL OF WHICH IS RESPECFULLY SUBMITTED THIS 31st DAY OF OCTOBER 2018.

Original signed by

Mark Rubenstein
Counsel for the School Energy Coalition