# **Interrogatories of AltaLink Ontario, L.P.**

East-West Tie Designation Proceeding

EB-2011-0140

January 30, 2013

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# **General Interrogatories for all Applicants**

# General - Question 1

Decision Criteria: Technical Capability, Schedule, Costs, First Nation and Métis Consultation

**Background:** Each of the Applicants included examples of successful transmission line projects and other energy projects in their respective Applications. To better understand the risk associated with each Applicant, the Board should also consider evidence of projects that were not successful, whether elsewhere in Ontario, in Canada or overseas. This information is best elicited through a specific IR to each Applicant.

# **Questions:**

- a) On a national and international basis, identify any and all transmission projects where the applicant, its partner(s), shareholder(s), affiliate(s) or other related entities (collectively referred to as the "Applicant") have commenced the construction of a new transmission line but which the Applicant has been unable to complete and/or bring into service.
- b) Describe the reasons why the Applicant has been unable to complete the transmission line and/or bring it into service?

#### General - Question 2

#### **Decision Criteria:** Costs

#### **Questions:**

a) Please provide the present value of your estimate of total O&M costs over the 50 year life of the East-West Tie line, assuming a discount factor of 7%.

# **Interrogatories for UCT**

UCT - Question 1

#### Decision Criterion: Organization

**References:** UCT Application, Section 1.3, Page 20:

"NextBridge will pursue development of the Project through a limited partnership (NextBridge Infrastructure LP), in which UCT, operating as NextBridge, will be general partner and will remain the entity responsible for the Project."

**Background:** Organization is a key decision criterion. Yet, NextBridge Infrastructure LP is an unknown entity to the Board. It was not mentioned in UCT's transmission licencing application and there is very little detail provided in the UCT Application.

## **Questions:**

- a) Please provide full and complete organization particulars of NextBridge Infrastructure LP, including a listing of all limited partners and their respective interests in NextBridge Infrastructure LP.
- b) Will the development work be financed directly through UCT, or through the limited partners of NextBridge Infrastructure LP?
- c) If NextBridge Infrastructure LP does not yet exist, what is UCT's plan if its stakeholders cannot reach agreement on the creation or financing of NextBridge Infrastructure LP?

UCT - Question 2

#### **Decision Criterion:** Financial capacity

References: UCT Application, Section 5.8, Page 76-77.

"While the owners of NextBridge are fully prepared to fund 100% of the cost of construction for the EWT Line, as discussed above, we envision that the utility will ultimately have its own third party debt financing, and that this could be advantageously put in place during the construction phase. We therefore propose to receive a return on construction work-in-progress (CWIP) during the construction phase, in line with the OEB's Regulatory Treatment of Infrastructure Investment in connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario policy [January 15, 2012 Report of the Board in EB-2009-0152] (Infrastructure Investment Policy). We envision that a return on CWIP would be earned at the weighted average cost of capital (WACC), reflecting standard 60% debt, standard market rate interest (or actual cost of

debt if a construction financing is obtained), and standard ROE. Placing CWIP in rates is appropriate for a single asset company with a large multi-year construction program, which would otherwise produce no cash flow until completion. Such rate treatment is credit supportive, and should therefore enable NextBridge to borrow funds during construction on more attractive terms than would otherwise be possible. Given NextBridge's cost-based rates, ultimately this benefit would be expected to flow through to customers. As noted above, NextBridge also intends to develop with its Ontario stakeholders a performance-based ratemaking construct. This construct could be viewed as a form of project-specific return on equity incentive, in line with the OEB's Infrastructure Investment Policy."

## **Questions:**

- a) Please provide a forecast of the costs to ratepayers on an annual basis to fund a return on CWIP during the construction phase of UCT's planned East-West Tie line and compare this to the costs to ratepayers under the Board's standard rate making approach.
- b) In the Report of the Board titled *The Regulatory Treatment of Infrastructure Investment in connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario* dated January 15, 2012 in EB-2009-0152, the Board acknowledges at page 15 that "including CWIP in rate base is a departure from traditional rate-making principles under which rate base is limited to plant that is "used and useful"." It shifts the risks of plant construction from the utility to the ratepayer. How does UCT propose to protect the interests of ratepayers using this model?
- c) Should ratepayers be required to fund UCT's CWIP in circumstances where UCT fails to complete construction of the East-West Tie line and it never becomes "used and useful"?
- d) How does UCT propose to address the intergenerational fairness issues raised by the ratepayer funding of CWIP during construction?

#### UCT - Question 3

**Decision Criterion:** Proposed Design for the East-West Tie Line

Reference: UCT Application, Appendix 13, Tab A13b, Section C and Figures 1-4.

#### **Question:**

a) In regards to galloping, does UCT's proposal to use 2.4m on the minor axis comply with Cigre 332 (MTR 3.6.4), which recommends a minor axis of 4.8m when assuming the maximum 12m major axis?

b) What limitations does a compact design of 6m between phases pose on the ability of workers to complete bare hand maintenance on live lines? If UCT's plan is to use stick extensions to complete live line work, how long would those sticks need to be at 230kV?

#### UCT - Question 4

#### **Decision Criterion:** Financial Capacity

Reference: UCT Application, Section 5.4, Page 74.

#### **Background:**

"Overall, NextBridge would seek to design a construct that produces a reasonable prospect for it to realize an ROE in the range of 9.5-9.9%, assuming similar risk-free interest rate levels and industry spreads as exist today."

On November 15, 2012 the Board issued its cost of capital parameter update, calculated based on the formulaic methodologies documented in the *Report of the Board on Cost of Capital for Ontario's Regulated Utilities* issued December 11, 2009. For rates effective January 1, 2013, the Board set the allowed ROE at 8.93%.

- a) Why should ratepayers be required to fund a UCT specific ROE that is nearly 100 basis points higher than the Board's currently allowed ROE (particularly given UCT's assumption of similar risk-free interest rate levels and industry spreads as exist today)?
- b) By requiring an ROE in the range of 9.5-9.9%, is UCT suggesting that the Board's allowed ROE does not meet the fair return standard? If yes, please explain the basis for this assertion with reference to considerations addressed in the *Report of the Board on Cost of Capital for Ontario's Regulated Utilities* issued December 11, 2009. If no, on what basis does UCT seek to earn more than a fair rate of return?

# **Interrogatories for ELP**

ELP – Question 1

Decision Criterion: First Nation and Métis participation

**References:** ELP Application, Summary at Page 6 and Part A, Exhibit 3 and Part A, Exhibit 1, Page 6 of 14.

"It has taken EWT LP's partners almost three years to negotiate and agree on how the Participating First Nations will participate in EWT LP, and during this time the partners have developed an enduring relationship based on trust, respect and equality. Such a relationship cannot be replicated quickly, if at all."

[...]

"EWT LP is unique in that it is a rare example of First Nations communities and industry joining together in a for-profit venture to develop, own and operate public infrastructure where the First Nations communities are equal owners."..... "Through BLP, they have an equal and *indivisible share* and ownership of the partnership assets and stand to make a return on their investment in EWT LP proportionate to their ownership share"

- a) Please confirm that ELP's partners or related entities commenced negotiations with the Participating First Nations prior to the Minister's letter asking the Board to initiate the East-West Tie designation process was issued March 29, 2011 (less than 2 years ago)?
- b) Did ELP draw on any existing resources of the incumbent transmitters, including existing relationships with the Participating First Nations, in negotiating the participation arrangement?
- c) Are the Participating First Nations bound by an exclusivity clause that may in any way restrict the ability of other registered transmitters from developing similar participation relationships, either before or after designation? Please provide full and complete particulars of the exclusivity requirements, as it is directly relevant to the competitive nature of this designation process.
- d) Why should the Board favour equity participation with the six Participating First Nations at the expense of equity participation with the other affected First Nations communities and Métis organizations (the "Excluded First Nations and Métis")? Does ELP take the position that rights and interests of the Excluded First Nations and Métis are not affected by the proposed East-West Tie line? In ELP's view are the Participating First Nations more important or more relevant than the Excluded First Nations and Métis?

- e) Please explain what is meant by "an equal and indivisible share"?
- f) On January 8, 2013 the Federal Court of Canada decided that Métis and non-status Indians are "Indians" under section 91 (24) of the Constitution Act. Explain how the ELP equity participation plan deals specifically with the interests of Métis communities?

ELP - Question 2

Decision Criterion: First Nations and Métis Participation

References: ELP Application, Part A, Exhibit 1 (para 6) and Part A, Exhibit 2, Pages 3-4 of 14

"EWT LP has detailed knowledge of the Project area and extensive relationships with local and Aboriginal communities." .....(also in para 6) "During development, EWT LP will also bring to bear experience gained from developing some of the most significant transmission projects recently constructed in Ontario..."

[...]

"Instead, a transmitter's success will depend largely on its ability to build broad-based stakeholder support for its project. Arguably, even the best and most innovatively engineered project will not be built in the absence of public acceptance. Therefore, gaining public acceptance from landowners, federal and provincial agencies, the public, and First Nations and Métis becomes the necessary condition for the project to move forward through development to completion. The designated transmitter must obtain a "social licence" from stakeholders to develop, construct and operate the Project."

[...]

"EWT LP will also bring to bear experience gained from developing some of the most significant transmission projects constructed in Ontario recently."

**Background:** ELP's application ignores any reference to Hydro One's failed Niagara Reinforcement transmission project ("NRP"). The NRP, a Hydro One initiative, was a 65 km transmission line in the Niagara Peninsula between Niagara Falls and Middleport south of Hamilton that was to increase electrical power transfer capability between the Niagara Falls area and the rest of Ontario by approximately 800 MW. This new transmission line was to be inservice by the summer of 2007.<sup>1</sup> Hydro One spent \$97M<sup>2</sup> on the NRP and all but 2 km of the transmission line was built, but it remains uncompleted and not in service because Hydro One and/or its shareholder have been incapable of resolving Aboriginal community land use issues.

<sup>&</sup>lt;sup>1</sup> www.hydroone.com/Projects/Pages/transmission-niagara.aspx

<sup>&</sup>lt;sup>2</sup> EB-2006-0501 Hydro One 2007-2008 Transmission Revenue Requirements, p. 64

However, Hydro One has been recovering the carrying costs associated with expenditures for the failed project from ratepayers since 2007.

#### **Questions:**

- a) First Nations and Métis groups have a historically unique, and sometimes contentious, relationship with the Provincial Crown. Does the Crown's indirect ownership interest in ELP complicate or increase the risk profile for the East-West Tie project? Can ELP guarantee that the East-West Tie line project will not become mired in a larger or ongoing unresolved dispute(s) with the Crown?
- b) Why has Hydro One, an ELP related party, been unable to resolve the easement and right-of-way issues to facilitate completion of the final 2 km of unfinished Niagara Reinforcement Project transmission line?
- c) Has the Province of Ontario ever directed or indicated to Hydro One that it should not attempt to resolve the Aboriginal community issues associated with the completion of the NRP? Has the Province of Ontario ever instructed Hydro One to stop its stakeholdering, discussions and/or consultations with First Nations impacted by the NRP?

ELP - Question 3

Decision Criteria: First Nation and Métis Participation

**References:** ELP Application, Part A, Exhibit 4, Pages 12-13 and Hydro One's 2011 Annual Report at Part A, Exhibit 5, Page 5.

# Acquisition of Land Use Rights

"The timely acquisition of land rights is essential for the Project. After designation, EWT LP will have the benefit of HONI and GLPTLP's experience of owning and operating electricity transmission facilities in northwestern Ontario. HONI and GLPTLP are familiar with the different types of land rights that need to be acquired to support an electricity transmission project and have recent experience negotiating and acquiring land use rights in Ontario. In addition, BLP and the Participating First Nations are familiar with the challenges of acquiring, owning, controlling and managing land use rights in northern Ontario, particularly in the traditional First Nations territories in the Project area."

#### Risk from Transfer of Assets Located on Indian Lands (p. 41)

"The transfer orders by which we acquired certain of Ontario Hydro's businesses as of April 1, 1999 did not transfer title to some assets located on lands held for bands of Indians under the *Indian Act* (Canada). Currently, the OEFC holds legal title to these

assets and we manage them until we have obtained necessary authorizations to complete the title transfer. To occupy reserve land, we must have valid permits issued by Her Majesty the Queen in the Right of Canada. For each permit, we must negotiate an agreement (in the form of a Memorandum of Understanding) with the band, OEFC and any First Nations individuals who have occupancy rights. The agreement includes provisions whereby the First Nations consent to the federal Department of Aboriginal Affairs and Northern Development issuing a permit."

"It is difficult to predict the aggregate amount that we may have to pay, either on an annual or one-time basis, to obtain the required agreements from the Indian bands. However, we anticipate that the amount will exceed the \$1,142,743 that we paid in 2011. OEFC will continue to hold these assets until we are able to negotiate agreements with the Indian bands and occupants. If we cannot reach satisfactory agreements and obtain federal permits, we may have to relocate these assets from the Indian reserve lands to other locations at a cost that could be substantial. In a limited number of cases, it may be necessary to abandon a line and replace it with diesel generation facilities. The costs relating to these assets could have a material adverse effect on our net income if we are not able to recover them in future rate orders."

#### Transfer of Assets (p. 80)

"The transfer orders by which Hydro One acquired certain of Ontario Hydro's businesses as of April 1, 1999 did not transfer title to some assets located on lands held for bands or bodies of Indians under the *Indian Act* (Canada). Currently, the OEFC holds these assets. Under the terms of the transfer orders, Hydro One is required to manage these assets until it has obtained all consents necessary to complete the transfer of title of these assets to itself. The Company cannot predict the aggregate amount that it may have to pay, either on an annual or one-time basis, to obtain the required consents. However, it anticipates having to pay more than the \$1,142,743 that it paid to these Indian bands and bodies in 2011. If Hydro One cannot obtain consents from the Indian bands and bodies, the OEFC will continue to hold these assets for an indefinite period of time. If the Company cannot reach a satisfactory settlement, it may have to relocate these assets from the Indian lands to other locations at a cost that could be substantial or, in a limited number of cases, to abandon a line and replace it with diesel-generation facilities. The costs relating to these assets could have a material adverse effect on the Company's net income if it is not able to recover them in future rate orders."

# **Questions:**

a) Approximately how much of Hydro One's existing transmission system is situated on lands that are the subject of unresolved agreements with "Indian bands" referenced above?

- c) Why has Hydro One been unable to resolve and complete satisfactory negotiated agreements with "Indian bands" to remedy the outstanding land use issues pertaining to Hydro One's transmission system in Ontario? Does Hydro One's indirect ownership interest in ELP complicate or increase the risk profile for the East-West Tie project? Can ELP guarantee that the East-West Tie line project will not become mired in a larger or ongoing dispute(s) with Hydro One?
- c) What is HONI's estimated time frame to negotiate agreements with "Indian bands" to remedy this situation referenced in the excerpted paragraphs above?

#### ELP - Question 4

#### Decision Criterion: Proposed Design for the East-West Tie Line

#### **References:** ELP Application, Pages 10 and 11

"In its December 17, 2012 Power Engineers report titled "Assessment of the Use of CRS Structures on HV/EHV Transmission Lines", which is attached at Appendix 6D (the "CRS Report"), Power Engineers further considered the electrical performance of a single circuit alternative (795 kcmil Drake Conductors in a 2 bundle arrangement) and concluded that it would have equivalent electrical performance to the single line options studied by the IESO in its August 18, 2011 Feasibility Study for Reinforcing the East-West Tie (the "IESO Study"). The IESO concluded that a single circuit line complies with all reliability standards but unlike a double circuit line would require the IESO to take post-contingency actions to prepare for a second contingency. Power Engineers indicated that steps could be taken to make a single circuit line more reliable than the design studied by the IESO for relatively small incremental costs. Doing so would reduce but not eliminate the difference in performance of a single circuit line compared to a double circuit line. Based on this initial consideration of the single line alternative, EWT LP has explored how the cost-benefit analysis would change if a single line option were considered in combination with cross-rope suspension ("CRS") structures. Power Engineers noted in the same report that CRS structures, though new to Ontario, have been widely and successfully used in other jurisdictions including a 2,000 km line in northern Québec. Power Engineers also notes that CRS structures have a significantly lower construction cost compared to conventional free-standing steel lattice towers. Power Engineers estimates a new single circuit East-West Tie line using CRS structures would be approximately \$116 million less expensive than a conventional double circuit line based on the existing X10 tower family."

**References:** Filing Requirements, S.6.4 of Appendix A to EB-2011-0140

"Where the Plan is not based on the Reference Option, the applicant must file a Feasibility Study performed by the IESO, or performed to IESO requirements."

**References:** IESO Feasibility Study IESO\_REP\_0748 ...

"Relative Merits of a new High-Capacity Single-Circuit line versus a new Double-Circuit line

One-plus-One Contingency

The NERC, NPCC & IESO criteria all refer to a requirement to respect a second singleelement contingency after experiencing an initial single-element contingency or outage, with control actions being taken between the two events to adjust the flows.

With the East-West Tie reinforced with a new single-circuit line, it would therefore be necessary, immediately following a contingency or outage involving this new line, to reprepare the system for the loss of one of the circuits on the remaining double-circuit line.

Since the loss of the new single-circuit line would leave only the existing double-circuit in-service over the affected section, the transfer capability of the East-West Tie would therefore be reduced to the present limit for a single- circuit contingency of 350MW. Since the targeted transfer capability of the reinforced East-West Tie is 650MW, a reduction to 350MW following the loss of the new single-circuit line would therefore require either additional generating resources totalling at least 300MW to be dispatched, or if there were the capability to arm load rejection of up to 150MW in response to the second contingency, then this would allow a corresponding lesser amount of generation to be dispatched.

Increasing the transfers via the Interconnections with Manitoba and Minnesota would also allow the amount of generation capacity that would need to be dispatched to be reduced.

All of these control actions would comply with the IESO's criteria.

Reinforcing the East-West Tie with a new double-circuit line would require no similar actions following the loss of either of the double-circuit lines (a simultaneous One-plus-One contingency) or the loss of one circuit of one of the lines followed by the loss of one of the circuits of the companion line.

# For the One-plus-One contingency condition, the installation of a new double-circuit line to reinforce the East-West Tie would therefore represent the superior option."

**Background:** Please refer to the excerpt section from the original IESO\_REP\_0748 noted above.

This original IESO feasibility study concludes on Page 7 that, for the one-plus-one contingency, also known as an N-1-1 contingency, the transfer capability of the East-West Tie would be reduced to 350MW.

The report goes on to conclude that, because 350 MW is 300 MW less than the targeted transfer capability of 650 MW, some combination of control actions must be taken to address this shortfall for the N-1-1 contingency.

Specifically, the report states that "the loss of the new single circuit line would therefore require either additional generating resources totaling at least 300MW to be dispatched, or if there were the capability to arm load rejection of up to 150MW in response to the second contingency, then this would allow a corresponding lesser amount of generation to be dispatched. Increasing the transfers via the Interconnections with Manitoba and Minnesota would also allow the amount of generation capacity that would need to be dispatched to be reduced."

The original feasibility report also concludes that "reinforcing the East-West Tie with a new double-circuit line would require no similar actions following the loss of either of the double-circuit lines (a simultaneous One-plus-One contingency) or the loss of one circuit of one of the lines followed by the loss of one of the circuits of the companion line."

# **Questions:**

- a) Has the IESO, the OPA or ELP determined the availability of the control actions noted in IESO\_REP\_0748 (up to 300 MW of additional generation or import, or some lesser amount of generation/import for armed load rejection up to 150 MW)?
- b) Has the IESO, the OPA or ELP determined the annual cost of the control actions noted in IESO\_REP\_0748 (up to 300 MW additional generation or import, or some lesser amount of generation/import for armed load rejection up to 150 MW)? If yes, and assuming that the economic analysis is conducted over a 50 year period, what is the total cost?
- c) Has the IESO conducted a Feasibility Study specific to ELP's proposed single circuit alternative using cross-rope structures, demonstrating the load flows under various contingencies including the N-1-1 contingency? If not, why not?

#### ELP - Question 5

**Decision Criterion:** Proposed Design for the East-West Tie Line

References: ELP Application, Appendix 6D, Page 4.

**Background:** The Power Engineers report titled "Assessment of the Use of CRS Structures on HV/EHV Transmission Lines" at page 4 provides a diagram illustrating the separation between lines.

a) What limitations does a compact design of 6m between phases pose on the ability of workers to complete bare hand maintenance on live lines? If ELP's plan is to use stick extensions to complete live line work, how long would those sticks need to be at 230kV?

# **Interrogatoires for RES**

<u>RES – Question 1</u>

#### **Decision Criterion:** Financial capacity

#### References: RES Application, Exhibit B, Tab 1, Schedule 1, Page 15.

"The Applicant is also requesting that the OEB vary its usual methodology that prescribes interest rates for approved regulatory accounts (except for Construction Work in Progress ("CWIP" accounts)) under the Uniform System of Accounts as the sum of the Bankers' Acceptances three-month rate, as published on the Bank of Canada's website and 25 basis points. The Applicant is requesting that, instead, the OEB approve a blended debt/equity rate as follows: the sum of the ROE determined by the Board annually, on 40 percent of development expenditures, and the lesser of the deemed short-term debt rate (determined by the Board annually) or the Board-approved "interest during construction" rate, on 60 percent of development expenditures. The ongoing balance associated with this accrual would be tracked separately on the Applicant's financial statements."

#### **Questions:**

a) Please provide a chart illustrating the interest rates that would have been applicable to approved regulatory accounts (except CWIP) under (i) the Board's usual methodology over the past five years on a monthly basis; and (ii) the Applicant's proposed methodology had it been applicable over the past five years, on a monthly basis.

#### RES – Question 2

#### **Decision Criterion:** Financial capacity

References: RES Application, Exhibit B, Tab 1, Schedule 1, Page 20.

"The calculation of interest for CWIP at a blended rate as follows: the ROE determined by the Board annually on 40 percent of development costs and the lesser of the actual construction facility rate (once established) or the interest during construction ("IDC") rate, determined by the Board annually, on 60 percent of the CWIP amount."

In the OEB's Regulatory Treatment of Infrastructure Investment in connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario policy dated January 15, 2012 in the Report of the Board in EB-2009-0152, the Board explains that one main reason for allowing the recovery of CWIP is that "[t]he long lead times required to plan and construct new facilities can affect utility cash flow, in turn affecting the overall financial health of a company and its ability to attract capital on reasonable terms."

- a) Please confirm that RES proposes to receive a return on CWIP during the construction phase, in line with the EB-2009-0152 Report of the Board dated January 15, 2012.
- b) Please provide a forecast of the costs to ratepayers on an annual basis to fund a return on CWIP during the construction phase of RES' planned East-West Tie line as compared to the costs to ratepayers under the Board's standard rate setting methodology.
- c) In the Report of the Board titled *The Regulatory Treatment of Infrastructure Investment in connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario* dated January 15, 2012 in EB-2009-0152, the Board acknowledges at page 15 that "including CWIP in rate base is a departure from traditional rate-making principles under which rate base is limited to plant that is "used and useful"." It shifts the risks of plant construction from the utility to the ratepayer. How does RES propose to protect the interests of ratepayers using this model?
- d) Should ratepayers be required to fund RES' CWIP in circumstances where RES fails to complete construction of the East-West Tie line and it never becomes "used and useful"?
- e) How does RES propose to address the intergenerational fairness issues raised by the ratepayer funding of CWIP during construction?

<u>RES – Question 3</u>

Decision Criterion: Proposed Design for the East-West Tie Line

References: RES Application, Exhibit B, Tab 1, Schedule 1, Page 7.

"The preferred design comprises an innovative, single-circuit 230 kV transmission line (the "Preferred Design") that meets or exceeds the Reference Design requirements. The IESO has completed a feasibility study to confirm the performance of the Preferred Design. This study is included at Exhibit H-2-3."

References: RES Application, Exhibit H, Tab 2, Schedule 3.

The IESO feasibility study conducted for RES Canada is silent with respect to the oneplus-one contingency and required control actions.

References: RES Application, Exhibit I, Tab 2, Schedule 2, Page 7.

"Relative Merits of a new High-Capacity Single-Circuit line versus a new Double-Circuit line

One-plus-One Contingency

The NERC, NPCC & IESO criteria all refer to a requirement to respect a second singleelement contingency after experiencing an initial single-element contingency or outage, with control actions being taken between the two events to adjust the flows.

With the East-West Tie reinforced with a new single-circuit line, it would therefore be necessary, immediately following a contingency or outage involving this new line, to reprepare the system for the loss of one of the circuits on the remaining double-circuit line.

Since the loss of the new single-circuit line would leave only the existing double-circuit in-service over the affected section, the transfer capability of the East-West Tie would therefore be reduced to the present limit for a single- circuit contingency of 350MW. Since the targeted transfer capability of the reinforced East-West Tie is 650MW, a reduction to 350MW following the loss of the new single-circuit line would therefore require either additional generating resources totalling at least 300MW to be dispatched, or if there were the capability to arm load rejection of up to 150MW in response to the second contingency, then this would allow a corresponding lesser amount of generation to be dispatched.

Increasing the transfers via the Interconnections with Manitoba and Minnesota would also allow the amount of generation capacity that would need to be dispatched to be reduced.

All of these control actions would comply with the IESO's criteria.

Reinforcing the East-West Tie with a new double-circuit line would require no similar actions following the loss of either of the double-circuit lines (a simultaneous One-plus-One contingency) or the loss of one circuit of one of the lines followed by the loss of one of the circuits of the companion line.

# For the One-plus-One contingency condition, the installation of a new double-circuit line to reinforce the East-West Tie would therefore represent the superior option."

#### **Background:**

Please refer to the excerpt section from the original IESO\_REP\_0748 noted above.

This original IESO feasibility study concludes on Page 7 that, for the One-plus-One contingency, also known as an N-1-1 contingency, the transfer capability of the East-West Tie would be reduced to 350MW.

The report goes on to conclude that, because 350 MW is 300 MW less than the targeted transfer capability of 650 MW, some combination of control actions must be taken to address this shortfall for the N-1-1 contingency.

Specifically, the report states that "the loss of the new single circuit line would therefore require either additional generating resources totaling at least 300MW to be dispatched, or if there were the capability to arm load rejection of up to 150MW in response to the second contingency, then this would allow a corresponding lesser amount of generation to be dispatched. Increasing the transfers via the Interconnections with Manitoba and Minnesota would also allow the amount of generation capacity that would need to be dispatched to be reduced."

The original feasibility report also concludes that "reinforcing the East-West Tie with a new double-circuit line would require no similar actions following the loss of either of the double-circuit lines (a simultaneous One-plus-One contingency) or the loss of one circuit of one of the lines followed by the loss of one of the circuits of the companion line."

The IESO feasibility study REP-2 conducted for RES Canada is silent with respect to the Oneplus-One contingency and required control actions.

## **Questions:**

- a) Has the IESO, the OPA or RES Canada determined the availability of the control actions noted in IESO\_REP\_0748 (up to 300 MW of additional generation or import, or some lesser amount of generation/import for armed load rejection up to 150 MW)?
- b) Has the IESO, the OPA or RES Canada determined the annual cost of the control actions noted in IESO\_REP\_0748 (up to 300 MW additional generation or import, or some lesser amount of generation/import for armed load rejection up to 150 MW)? If yes, and assuming that the economic analysis is conducted over a 50 year period, what is the total cost?
- c) Did the IESO study the same One-plus-One contingency, also known as an N-1-1 contingency, in the REP-2 feasibility study conducted on behalf of RES Canada that it studied in IESO\_REP\_0748? If yes, then please produce this study. What are the IESO's conclusions regarding the requirement for control actions as noted above after the loss of the new single circuit line (within the 30 minutes allowed to adjust the system prior to the second event in the N-1-1)? If not, why has the One-plus-One or N-1-1 contingency, which is a relevant P6 NERC criteria, not been studied?

#### RES – Question 4

#### **Decision Criterion:** Costs

**References:** RES Application, Exhibit B, Tab 1, Schedule 1, pages 17 to 21. Exhibit P, Tab 5, Schedule 1.

#### **Background:**

"The Applicant is prepared to develop, construct, own and operate any of the four design/route Options, as selected by the OEB. The Applicant is also prepared, at the option of

the Board, to develop and construct either of Option 1 (Preferred Design/Preliminary Preferred Route) or Option 3 (Reference Design/Preliminary Preferred Route) for a firm cost of \$413.4 million (\$21.5 + \$391.9) and \$493.7 million (\$21.5 + \$472.2) (each, the "Bid Amount"), respectively, subject to approval of the Board, in a future proceeding at the appropriate time, of the following:

(i) for development costs that are expressed in this Application in 2013 dollars, an annual inflation adjustment based on the Statistics Canada Consumer Price Index ("CPI") for the period January 2013 to the date that an LTC application is filed;

(ii) for construction costs that are expressed in this Application in 2013 dollars, an annual inflation adjustment to the Bid Amount (minus the development cost) based on the Statistics Canada Electric Utility Construction Price Index ("EUCPI") for the period January 2013 to the date that the EWTL is placed in service;

(iii) an incentive rate methodology that rewards RES Transmission for completing the development and construction of the Project for less than its Bid Amount and penalizes RES Transmission for exceeding the Bid Amount, as follows:

• *costs underages*: for each year that the EWTL is in service, the value of its Boardapproved rate base would be reduced by the amount of any cost underages (the "Subtracted Amount"). Sixty percent of the remainder would earn a return at the Board's deemed cost of long-term debt, determined annually, and 40 percent of the remainder would earn a return at the return on equity determined by the Board, annually ("ROE"). Forty percent of the Subtracted Amount would earn an incentive return equal to the sum of the ROE and 300 basis points. Sixty percent of the Subtracted Amount would earn a return at the Board's deemed cost of long term debt, determined annually;

• *cost overages*: for each year that the EWTL is in service, the ROE that would otherwise be earned on 40 percent of any prudently incurred cost overages would be reduced and RES Transmission would instead earn only the deemed cost of long term debt, as determined by the OEB annually, on 100 percent of such overages; and

• *exceptions*: The equity portion (i.e., 40%) of the difference between the actual costs incurred in four cost categories over which the Applicant has little or no control and the estimates of such costs that are embedded in the Bid Amounts in the four categories, up to a specified limit , would earn a return at the ROE determined by the Board, annually, and would not be subject to the penalty that would be otherwise applicable to cost overages under the Applicant's proposed incentive rate methodology. The four categories are as follows: land acquisition (up to \$15.5 million); First Nation and Métis participation costs and accommodation (up to \$1.0 million); environmental and permitting costs (up to \$2.5 million); and line costs in respect of a total line length that exceeds 410 km (\$1 million for each additional km);

(iv) the utilization of US General Accounting Principles ("USGAAP") for regulatory accounting, reporting and rate-making purposes; and

(v) the calculation of interest for CWIP at 1 a blended rate as follows: the ROE determined by the Board annually on 40 percent of development costs and the lesser of the actual construction facility rate (once established) or the interest during construction ("IDC") rate, determined by the Board annually, on 60 percent of the CWIP amount."

- a) *Cost Underages* A return on debt/equity is a cost of financing that is only applicable in circumstances where a utility actually spent the money. A return on amounts not spent would amount to windfall profit at the expense of ratepayers. On what principled basis is RES seeking to earn a return on debt and a return on equity on amounts of money that are not spent by RES (i.e. the Subtracted Amount)?
- b) *Cost Underages* Why should the Board allow RES to earn an additional windfall equity premium of 300 basis points in excess of the Board's standard return on equity on amounts of money that are not spent by RES (i.e. the Subtracted Amount)?
- c) *Cost Overages* Is RES proposing to forgo the Board's standard prudence review to earn a return on debt at the Board's deemed long-term debt rate on 100% of costs overages? If yes, on what basis is RES seeking this treatment of cost overages? If no, please confirm that RES would earn no return on any cost overages that the Board determines were not prudently incurred.
- d) *Cost Overages* It is acknowledged that due to current market conditions, the Board's deemed long-term debt rate currently is less that the Board's regulated ROE. However, in the future market conditions might change. In the event the Board's deemed long-term debt rate exceeds the Board's regulated ROE, the "penalty" for cost overages would in fact translate into a windfall profit pursuant to the RES proposal. On what basis is RES seeking to recover a windfall return on cost overages greater than what the Board would normally allow under its standard cost-of-service approach?
- e) *Exceptions* RES has identified 4 exceptions to its rate methodology that "would not be subject to the penalty that would otherwise be applicable to cost overages under the Applicant's proposed incentive rate methodology". On what basis is RES seeking to recover a windfall incentive for cost underages in the circumstances covered by these exceptions if RES is not exposed to the proposed "penalty" for cost overages?
- f) Figure B-2 Please provide an amended Figure B-2 under the following assumptions: Board's deemed long-term debt rate = 8.5%. Board's permitted ROE = 7.9%.

g) **Figure B-2** – Please provide an amended Figure B-2 under the following assumptions: All cost overages and underages are limited to the 4 categories where the exceptions apply.

# **Interrogatories for CNPI**

CNPI – Question 1

## Decision Criterion: First Nations and Métis Participation

References: CNPI Application, Section 3, Page 38

- a) How are the rights and interests of the 19 Lake Huron Anishinabek Transmission Company Inc. ("LHATC") First Nations not identified in the Ministry of Energy's May 31, 2011 letter (the "MOE Letter") directly affected by the proposed East-West Tie line? Does CNPI believe that the Ministry of Energy erred in not identifying these 19 First Nations as among those communities that are required for consultation?
- b) Will the equity participation of the 19 First Nations not identified in the MOE Letter dilute the potential level of equity participation available to those remaining First Nations that are not part of LHATC but are identified in the MOE Letter (the "Other First Nations"), particularly since CNPI is proposing a maximum equity participation of 49% for all First Nations? Has CNPI consulted with the Other First Nations to explain how this would affect their interests?

# **Interrogatories for ICN-TPT**

<u>ICN-TPT – Question 1</u>

**Decision Criterion:** Costs

References: TPT, Phase 1 Submissions, at Page 16.

"14. Should the designated transmitter be permitted to recover its prudently incurred costs associated with preparing its application for designation? If yes, what accounting mechanism(s) are required to allow for such recovery?

TPT submits that, in the event the Board designates a transmitter, all Applicants, including the Applicant that has been designated, should bear the costs of participating in the designation application and not be eligible for cost recovery."

References: Phase 1 Decision and Order, Page 5.

"Applicants should also describe any proposals they have regarding the recovery of the various categories of costs from ratepayers. For example, the Board notes TPT's submission that no applicant, including the designated transmitter, should be able to recover the costs of participating in the designation process. While this is not the Board's ruling (see issue 14 below), the Board invites any applicant to distinguish itself by proposals that reduce costs or risks for ratepayers for any category of cost."

References: ICN-TPT Application, Section 8.1, Page 1 of 9 and Section 8.6, Page 5 of 9.

"The Applicants have spent a total of approximately \$800,000 in preparing the application for designation and estimate that the total cost to achieve designation will be approximately \$1.5 million."

[...]

"The Applicants propose to recover their actual spent development costs. To the extent this is less than budgeted development costs, this saving will be passed along to ratepayers. If actual spent costs are above budget, recovery of these costs will be subject to the standard prudence review conducted by the Board for such expenses."

# **Questions:**

a) Please confirm that TPT is now of the view that ratepayers, rather than the Applicant, should bear the costs of participating in the designation application.

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