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**BY E-MAIL**

December 21, 2018

Kirsten Walli  
Board Secretary  
Ontario Energy Board  
2300 Yonge Street, 27th Floor  
Toronto, ON M4P 1E4  
[BoardSec@oeb.ca](mailto:BoardSec@oeb.ca)

Dear Ms. Walli:

**Re: OEB Staff Supplemental Interrogatories  
Wataynikaneyap Power GP Inc. on behalf of Wataynikaneyap Power LP  
Application for leave to construct transmission lines and associated  
facilities in northwestern Ontario  
Ontario Energy Board File Number EB-2018-0190**

In accordance with Procedural Order No. 2, please find attached the OEB staff supplemental interrogatories in the above proceeding. This document is being forwarded to the applicant and to all other registered parties to this proceeding.

Yours truly,

*Original signed by*

Ritchie Murray  
Project Advisor

Cc (by email):  
All parties to the proceeding

**OEB Staff Supplemental Interrogatories  
Wataynikaneyap Power GP Inc. on behalf of  
Wataynikaneyap Power LP (WPLP)  
Leave to Construct  
EB-2018-0190  
December 21, 2018**

**C-Staff-62**

Ref: Exh C-3-1

Ref: Exh J-1-1

Ref: Response to C-Staff-8

Ref: EB-2018-0267

In response to part (b) of C-Staff-8, WPLP states that it will record OM&A costs that it incurs during the temporary period during which the Pikangikum System operates at a distribution voltage, as well as any capital costs that it incurs during that period that are not covered by the \$60.2 million construction funding in the Wataynikaneyap Distribution System Deferral Account that has been established in EB-2018-0267.

In response to part (c) of C-Staff-8, WPLP states that it plans to roll the amounts recorded in the Wataynikaneyap Distribution System Deferral Account (including OM&A costs that WPLP incurs during the temporary period during which the Pikangikum System operates at a distribution voltage) into its initial transmission rates for the Transmission System. If the amounts are material, WPLP may apply to clear the amounts during the interim period when the Pikangikum System is operated at distribution voltage.

Please explain how rolling the amounts in the Wataynikaneyap Distribution System Deferral Account into its initial transmission rates for the Transmission System is consistent with the principle of “benefits follows costs”.

**C-Staff-63**

Ref: Exh C-6-1

Ref: Response to C-Staff-12

Ref: Response to HORCI-8

For all connecting communities, upgrades are required to install wholesale metering equipment. In the response to C-Staff-12, WPLP states that the costs are included in WPLP’s project cost estimate. HORCI set out a cost of \$5.935 million for wholesale metering in the preamble of HORCI-8. Is the amount of \$5.935 million consistent with the wholesale metering cost included in WPLP’s project cost estimate? Please explain.

**C-Staff-64**

Ref: Exh C-6-1

Ref: Response to C-Staff-12

Ref: Response to C-Staff-13

Ref: Response to C-Staff-15

WPLP states that the distribution systems operated by IPAs have been assessed and any deficiencies identified will be resolved. Parties involved in this work are the IPAs, Opiikapawiin Services Limited Partnership, INAC, HORCI and ESA.

In response to C-Staff-13, WPLP confirmed that, with the exception of Pikangikum, IPA system upgrades are not included in the estimate for the transmission facilities. WPLP advised that the forecast upgrade cost of \$3.8 million for Pikangikum is included in the overall cost for the Pikangikum system, and is being paid for through INAC funding for the Pikangikum System.

- a) Please confirm, as noted in Exh J-1-2, that the total funding provided by INAC for Pikangikum (which includes costs for the Pikangikum IPA system upgrades) is considered to be part of the funding INAC provides for substantial completion of the transmission project.
- b) Will INAC fund the cost of the assessments and resolution of deficiencies for the other six IPA systems? If yes, please advise whether the INAC funding is separate from the INAC funding described in Exh J-1-2. If no, please advise as to how the assessments and resolution of deficiencies for the other six IPA systems will be funded.
- c) No estimates were provided for the cost of the assessments and resolution of deficiencies for the other six IPA systems. Is it reasonable to assume \$3.8 million as an estimated cost for the other six IPA communities? If not, what is a reasonable amount?

**C-Staff-65**

Ref: Exh B-1-1 page 5

Ref: Exh C-8-1

Ref: Exh D-1-2

Ref: Response to C-Staff-2

Ref: Response to C-Staff-13

Ref: Response to C-Staff-16

Ref: Response to E-Staff-30

Ref: Response to HORCI-5

Ref: OPA / IESO Business Case Report, page 50

The above references identify costs that will be necessary for the implementation of the WPLP proposal, but which are not included in WPLP's project costs (i.e. at C-8-1).

These include:

- Bringing applicable communities to ESA standards (e.g. OEB Staff 13, OPA/IESO Business Case Report)
  - Securing backup generation (e.g. HORCI 5, C-Staff-16)
  - Wholesale metering to facilitate community distribution system connections (e.g. HORCI 8)
  - Establishing a control room from which operators will remotely monitor the configuration and status of WPLP's transmission system (e.g. OEB staff 30)
  - Transitioning IPAs to being served by Hydro One Remotes (e.g. OEB Staff 13)
- a) Please provide cost estimates for each, an explanation of who is responsible and who will pay for the above noted items, in order to provide the OEB with a full understanding of the costs required to make the project used and useful.
- b) Please also provide the same information for any additional work, beyond the above noted items, that WPLP is aware will be required to complete the overall project and make it used and useful.
- c) WPLP is not requesting leave to construct (LTC) for the control room. WPLP states that it will include the costs of the control room in its first transmission rate application. As such, the absence of the control room from this LTC application seems to suggest to OEB staff that the control room is a 'discretionary' investment in terms of this overall transmission project. Is this correct? Please explain.
- d) What would be the implications to the project if the OEB were to deny the cost recovery of the control room in WPLP's first transmission rate application?

**C-Staff-66**

Ref: Exh C-8-1

Ref: Exh E-1-1

Ref: Response to E-Staff-30

The response to D-Staff-29 discusses the costs of the Hydro One investments that the application identifies are necessary to make WPLP's transmission project viable and the agreement under which WPLP will compensate Hydro One for any amounts if the OEB were to deny Hydro One recovery in rates. According to the response, Hydro One estimates those investments will cost about \$30.5M and would result in a \$0.01 increase in the Network Service Rate and a residential customer bill increase of \$0.01

per month. However, WPLP notes those impacts are “*not incremental to the ratepayer impacts presented by WPLP*” because they are already included in the cost estimates set out in the application. OEB staff seeks clarification in relation to this interrogatory response.

- a) Are those costs (i.e., \$30.5M) included in the \$1.26B associated with the Remote Connection project?
- b) If so, please clarify why WPLP would include the costs associated with investments it will not make in its own project cost
- c) Please also clarify why WPLP believes it would be appropriate to include costs in its own project cost for recovery from ratepayers if the OEB were to deny Hydro One cost recovery in relation to the same costs.

**C-Staff-67**

Ref: Exh C-5-1, pages 7 – 8

Ref: Exh B-2-1

Ref: Exh B-4-1, Appendix D, page 4

Ref: Response to C-Staff-16

WPLP’s response to OEB Staff IR 16 confirms that “all of the Remote Communities being connected to the proposed Transmission Project will require backup power”. WPLP’s response further references WPLP’s obligation under the IESO Scope Report to facilitate the arrangement of backup supply. WPLP’s response also indicates that the BBA Backup Power Report obtained by WPLP is to provide a “basis for informed discussion between the appropriate parties” and that “discussions between these parties are ongoing”.

- a) Is WPLP able to confirm that all necessary back-up generation will be available within the timelines set out by WPLP for the connection of remote communities?
- b) Would WPLP agree that its responsibility to facilitate the arrangement of backup supply includes ensuring that backup supply is available on or before the date of grid connection?

**C-Staff-68**

Ref: Exh C-5-1

Ref: Exh D-1-2

Ref: Response to C-Staff-17

Ref: Response to D-Staff-28

Ref: Response to D-Staff-29

The response to C-Staff-17 refers to HORCI and HONI infrastructure elements and work that is outside the direct control of WPLP.

The response to C-Staff-29 states that an estimated cost of \$30.5 million for HONI investments to connect WPLP has been included in the WPLP project estimate.

- a) What is the estimate of the costs related to HORCI infrastructure to connect WPLP?
- b) Are costs in (a) included in the WPLP project estimate?

**C-Staff-69**

Ref: Exh I-1-1 pages 1-10

Ref: Exh KP1

Ref: Response to I-Staff-37

WPLP states that the Ministry of the Environment, Conservation and Parks (MECP) received a request for hearing on WPLP's Environmental Assessment (EA) for the line to Pickle Lake. WPLP has filed a submission in the matter.

Has the MECP issued a decision in the matter? If so, please briefly describe the outcome and any potential impact on the project schedule and budget. If not, when is the decision expected?

**C-Staff-70**

Ref: Exh J-3-1 page 1

Ref: Exh B-1-1 page 10

Ref: Response to J-Staff-42

Ref: KP1

OEB staff finds the response to J-Staff-42 somewhat confusing. Regardless of the manner in which the Federal funding is provided, OEB staff's understanding from the application is the Federal Government is providing funding of \$1.55B towards the costs of the transmission project. That, in turn, amounts to \$1.55B that will not ultimately be recovered from ratepayers since it would already be provided by taxpayers. Staff's understanding is the increase in RRRP is an "interim" approach to help cover the capital and operating cost of the project because Federal Funding is being provided in two lump sum payments, with half provided once the project is completed (i.e., offset the increase in RRRP and a capital contribution to WPLP).

- a) If staff's understanding is not correct, please explain the purpose of the RRRP increase (that the Federal Government will provide funding to offset) if it is not to pay for the Remote Connection Line project.
- b) Given a number of IR responses note that none of the Federal funding will be used to cover any of the cost of the Line to Pickle Lake, please provide a table showing how the cost of the Remote Connection Line project would meet or exceed the \$1.55B that the Federal Government has committed to provide.

- c) The response to J-Staff-42 also only discusses how RRRP and the Federal Capital Contribution will be used to fund the Remote Connection project (where the increase in RRRP would offset the rate WPLP proposes to charge HORCI to recover capital and operating costs). However, WPLP's presentation (KP1) indicates that the "Revenue requirement impact" associated with "part of Remotes" will be "recovered via UTR". Please clarify why the UTR would be used to recover WPLP's revenue requirement associated with the Remote Connection project and identify the annual amount WPLP expects to recover through the UTR. Please also clarify where that is explained in the application.

### **J-Staff-71**

Ref: Exh J-1-1

Ref: Response to J-Staff-43

- a) The response to J-Staff-43(a) states that costs to date, other than costs related to the Pikangikum System, have been financed by WPLP shareholders.
- i. Are the costs that have been financed to date limited to the costs that have been recorded in the Wataynikaneyap Transmission Development Deferral Account? If not, what other costs have been financed?
  - ii. Please clarify the financing by WPLP shareholders. Was the financing provided by FNLP and/or Fortis (WP) LP, or other sources? If from other sources, please explain.
- b) The response to J-Staff 43(c) states that the Government of Ontario will provide a loan of \$1.355 billion for construction financing.
- i. Has the financing arrangement with the Government of Ontario been finalized? If not, what steps need to be completed before finalization?
  - ii. Is the financing an arrangement through Infrastructure Ontario? If not, please explain the source of the Government of Ontario financing.
- c) The response to J-Staff 43(c) states that non-government sources will provide a loan of \$0.295 billion for construction financing. Given the \$1.355 billion loan from the Government of Ontario, when does WPLP forecast the need to have the non-government loan in place?
- d) The response to J-Staff 43(c) states that, "Operations financing will be provided by non-government third party sources in the amount of 60% of the OEB approved rate base with the remaining 40% being provided by the shareholders in line with the OEB deemed debt to equity structure and in consideration of any capital contribution that may be made to the project under the funding agreements."

- i. What is “operations financing”? Does “operations financing” include financing for OM&A? Please provide details of what is included in operations financing.
  - ii. Please explain why operations financing would be treated as, or in a manner equivalent to, rate base.
- e) The response to J-Staff 43(d) states that “there are alternative cost recovery frameworks.” Other than the cost recovery framework based on the Transmission System Code (including the alternative capital contribution installment approach that OEB staff identified in J-Staff-52), what are the other cost recovery frameworks were considered and why were they not used by WPLP?

**J-Staff-72**

Ref: Exh J-1-2

Ref: Exh KP1

Ref: Response to J-Staff-41

Ref: Response to J-Staff-46

The responses to J-Staff-41 and J-Staff-46 refer to the design of the Funding MOU holding ratepayers in a “neutral position” when assessing the avoided costs of diesel fuel vs. the WPLP transmission project, HORCI revenue and other avoided costs.

- a) Please clarify what “neutral position” means.
- b) Is WPLP aware of the assumptions that underpin the “neutral position” analysis? If so please provide the assumptions, including the assumed WPLP Transmission system reliability, and the assumed costs to maintain backup power supply and diesel storage in the response.
- c) Please explain the “neutral positions” analysis in the context of slide 38 of Exh KP1, which estimates that the Trust would offset RRRP for approximately 13 years. Is the “neutral position” for ratepayers time limited?
- d) WPLP’s response to J-Staff-41(b) explained that “Efforts are being made to finalize the definitive documents [in respect of government funding] in December 2018.” Please provide an update on the status of the definitive documents.

**J-Staff-73**

Ref: Exh J-1-2

Ref: Exh KP1

Ref: Response to C-Staff-7

Ref: Response to J-Staff-46

In the response to C-Staff-7 regarding Pikangikum, WPLP states that, “The current forecast for construction differs slightly from the \$60.2 million INAC funding announcement on August 17, 2017. The difference is approximately \$1.6 million (2.7%).”

Construction is currently being completed and at this stage the costs have not been finalized. WPLP is in discussion with INAC (Indigenous Services Canada) regarding the provision of funding for any prudently incurred final costs in excess of the \$60.2 million that has already been funded.”

In response to J-Staff-46, WPLP states that it has incentives to control the transmission project capital costs, as additions to rate base are subject to OEB review, and WPLP’s equity position goes down as OEB-approved costs go up, per the Funding MOU.

Please explain why there are different approaches to variances in capital costs between the Pikangikum connection and the Line to Pickle Lake and Remote Community Connection projects.

#### **J-Staff-74**

Ref: Exh J-1-2

Ref: Exh KP1

Ref: Response to J-Staff-48

- a) In response to J-Staff-48(c), it states that WPLP understands that the recipient of the funds from the Trust will be IESO. Is WPLP expecting that there will be future amendments to O. Reg. 442/01 to address the treatment of the funds from the Trust and the responsibilities of the IESO and the OEB with respect to RRRP?
- b) In response to J-Staff-48(c), it states that “funding of the Trust does not occur until the entire project is in-service”.
  - i. Please explain this response in the context of the evidence at page 2 of Exh J-1-2, which describes funding in two tranches (substantial completion and completion).
  - ii. Please confirm that all electricity ratepayers in Ontario will pay increasingly higher RRRP, as communities are connected, until the entire transmission project is in-service, at which point the RRRP will drop significantly when the Trust is funded and is then applied to offset RRRP.
  - iii. Will capital contributions from the Government of Canada be provided in two tranches, or only when the entire project is in-service?

#### **J-Staff-75**

Ref: Response to C-Staff-51

Ref: Response to C-Staff-52

Ref: Notice of Amendment to Codes, December 18, 2018, EB-2016-0003<sup>1</sup>

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<sup>1</sup> [Notice of Final TSC and DSC Amendments and Supplemental Proposed DSC Amendment](#)

In C-Staff-52, OEB staff asked questions about a proposed TSC amendment that would allow for payment of the capital contribution by HORCI to WPLP in installments over the expected service life (ESL) of the Remote Connection project. WPLP identified the ESL to be 40 years. WPLP also identified that the capital contribution installment (based on the estimated fully allocated cost) would be \$31.5M per year. The response to C-Staff-51 also indicated that WPLP would charge to HORCI \$104M per year based on the average of the expected annual rate under WPLP's proposed approach.

OEB staff notes that the TSC amendment related to the installment approach was made by the OEB on December 18<sup>th</sup> and therefore now forms part of the current TSC.

WPLP correctly identified that WPLP would charge HORCI interest on the outstanding balance using the OEB's current approved CWIP rate of 3.35%. WPLP assumed it would remain the same over the next 40 years in calculating "incremental interest in the amount of approximately \$844M" that would be paid by HORCI. WPLP also claimed that "Overall, the Annual Installment Option ... would therefore have a negative impact on the ratepayer due to the increased costs associated with financing the capital contribution over a period of 40 years."

In the response to C-Staff-51, WPLP identified that, "Based on straight line depreciation over 40 years and constant cost of capital parameters over that period, WPLP's estimated total return on rate base from 2024-2063 would be \$1,358M, based on an assumed 9% [ROE]".

- a) Since HORCI is a non-profit entity (i.e., 0% ROE) and WPLP is a for-profit entity (i.e., 9% ROE), please explain how the Annual Installment Option "would therefore have a negative impact on the ratepayer".
- b) Please do the same calculation as WPLP did for the interest costs but also take into account the incremental costs associated with the ROE differential noted above.
- c) Given the above, it would seem HORCI's customers may be better off under the Annual Installment approach at \$35M per year, while they would pay \$110M per year based on WPLP's proposed rate based on the application. However, it appears WPLP based the \$35M on only the development and capital costs (i.e., not OM&A costs). Since capital contributions also include OM&A costs under the TSC, as set out in Appendix 5 of the TSC, please recalculate the annual installments and show the calculations if OEB staff's understanding is correct that OM&A costs were not taken into account.

**J-Staff-76**

Ref: Exh J-3-1

Ref: Response to J-Staff-59

Ref: Response to J-Staff-60

- a) Please explain why the grossed-up income taxes start in 2029 in the responses to J-Staff-59 and J-Staff-50. Do these taxes reflect the exemption related to First Nations ownership?
- b) Please provide the assumptions underpinning the 5.28% WACC, including debt rates.

### **J-Staff-77**

Ref: Exh J-3-1, Table 3, page 2

Table 3 estimates the RRRP Rate Impact resulting from the revenue requirement increase of \$104 million over the 2024-2033 period. The baseline in Table 3 is the 2018 RRRP Rate, which was based on 131.8 TWh. The estimated Residential Bill Impact in the application is 0.48%. In deriving the estimated RRRP rate and bill impact, 152 TWh was used by WPLP. OEB staff is uncertain how 152 TWh was arrived at based on the IESO's September 2016 *Ontario Planning Outlook (OPO)* as explained in the associated footnote in the application. However, for 2024, it appears to assume an increase of over 20 TWh relative to 2018.

- a) Please explain how 152 TWh was determined, as there is a reference to an "average" in the footnote. For example, is it a simple average over the full forecast period (2024-2033) that includes both high demand forecasts (i.e., Outlook "C" and "D") in the IESO's OPO?
- b) Since Outlook A (in the IESO's OPO) was the most accurate in forecasting Ontario energy demand in 2018 and is closest to the IESO's forecast in its more recent October 2018 18-Month Outlook (i.e., overstated the least), please provide a table that shows the estimated impact on the RRRP Rate and the associated Residential Bill Impact using "Outlook A" in the IESO's OPO, for each three-year interval – 2024, 2027, 2030, 2033 (using Ontario demand set out in the table on page 14 of the OPO). For example, for 2024, use the forecast demand of 133.5 TWh to estimate the residential bill impact and RRRP rate impact.

### **J-Staff-78**

Ref: Response to HORCI-4

HORCI-4 contains a table extracted from the OPA/IESO report called "Draft Technical Report And Business Case For The Connection Of Remote First Nation Communities In Northwest Ontario". The table is entitled "Table 25: Expected Outage Time Post-Connection by Community".

WPLP's response to HORCI-4 includes a copy of the BBA Backup Power Report.

- a) Please confirm that the expected outage information presented in the OPA/IESO's Table 25 referenced above reflects outages to transmission facilities only and that it does not account for the use of backup generation. In other words, please confirm the outage figures presented do not reflect estimated outage time that would be experienced by connected customers under a scenario where transmission was coupled with back-up generation.
- b) Please confirm the same for the outage information presented in the table in Appendix D of the BBA Report on Backup Power Supply.

**J-Staff-79**

Ref: Response to HORCI-4

HORCI IR-4 makes reference to the OPA/IESO report called "Draft Technical Report and Business Case for the Connection of Remote First Nation Communities in Northwest Ontario".

- a) Please confirm the OPA/IESO report cited above concludes that the proposed combination of transmission and back-up generation would result in similar or better reliability to remote communities than the continued use of diesel generation only (i.e. with respect to loss of supply performance).
- b) Do the Line to Pickle Lake and Remote Connections contribute to reliability and quality of service in other ways? If so, please describe, including in comparison to the existing reliance on diesel generation alone.

**J-Staff-80**

Ref: Response to HORCI-4

HORCI IR-4 makes reference to the OPA/IESO report called "Draft Technical Report and Business Case for the Connection of Remote First Nation Communities in Northwest Ontario".

- a) Please confirm that the OPA/IESO Business Case accounted for the cost of back-up generation that would be needed to complement the proposed remote connection transmission lines.
- b) If so, please confirm that the OPA/IESO Business Case concluded that the combination of transmission and back-up generation would be more cost effective than continued reliance on diesel generation alone.

**J-Staff-81**

Ref: Response to HORCI-4

WPLP's response to HORCI-4 includes a copy of the BBA Backup Power Report.

Table 3 on page 13 of the BBA Backup Power Report is called "Key Factors to Limit Outages". The text below Table 3 says: "Knowing that design, construction and O&M considerations clearly have the potential to impact reliability of the network, BBA is convinced, based on its experience, that outages requiring the backup power system can be reduced up to 50% by implementing the good practices described in the table above in design and O&M of the line."

Please discuss the extent to which WPLP's proposal incorporates the "good practices" outlined by BBA in Table 3 of the Backup Power Report.

**J-Staff-82**

Ref: Response to HORCI-5

HORCI IR-5 presents a table which provides actual annual percentage of time of supply related outages across all the communities Hydro One Remotes currently serves from 2013 to 2016.

Please confirm that the estimated outage time presented in the HORCI table referenced above is less than the expected outage time presented in the OPA/IESO's "Table 25: Expected Outage Time Post-Connection by Community". In other words, please confirm the loss of supply performance of a transmission solution without back-up power would be worse than the loss of supply performance of existing generators as shown by Hydro One Remotes in HORCI-5.