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BY COURIER

November 14, 2018

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
P.O. Box 2319
Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: EB-2018-0190 – Wataynikaneyap Power GP Inc. on behalf of Wataynikaneyap Power LP Application for leave to construct transmission lines and associated facilities in northwestern Ontario – Interrogatory Questions

Please find attached Hydro One Remote Communities Inc.'s ("Remotes") interrogatory questions regarding the WPLP's Application for leave to construct transmission lines and associated facilities in northwestern Ontario.

An electronic copy of these questions has been filed through the Ontario Energy Board's Regulatory Electronic Submission System (RESS).

Sincerely,

ORIGINAL SIGNED BY JOANNE RICHARDSON

Joanne Richardson

Hydro One Remote Communities Interrogatories to EB-2018-0190

Issue: Reliability

INTERROGATORY #1

Reference:

Exhibit C, Tab 1, Schedule 1 (page 7) notes that, "issues of capacity and reliability are intertwined," and describes an emergency in Wawakapewin.

a) Was the described emergency due to generating capacity constraints? Please explain.

INTERROGATORY #2

Reference:

Exhibit C, Tab 1, Schedule 1 (page 9) states that, "each of the remote communities faces severe limitations on its supply capacity and the ability to increase this capacity in a timely manner."

a) Please provide a list of the communities that are currently in supply capacity restrictions.
b) Please provide a forecast of the communities that will be in capacity restriction by 2024.

INTERROGATORY #3

Reference:

Exhibit C, Tab 5, Schedule 1, (pages 7 & 8). The IESO supported scope for the project suggests that WPLP "facilitate the arrangement of backup electricity supply resources for connecting communities where: such facilities do not already exist, other arrangements have not been made, or the community has not specifically requested an exemption."

a) Please outline in detail the progress made to date on backup supply.
b) Do all of the communities have functional Emergency Preparedness Plans ("EPPs")? Please list those that do not have functioning EPPs.
c) Have any communities requested an exemption from backup supply?

d) Have consultations with the communities taken place, including the expected hours of loss of supply outages? Please provide documentation of these consultations, including any presentations made and any minutes of the discussions.

INTERROGATORY #4

Reference:

IESO Report: *Draft Technical Report and Business Case for the Connection of Remote First Nation Communities in Northwest Ontario*[1], dated August 21, 2014.

Preamble:

On page 112 of the Draft Technical Report and Business Case for the Connection of Remote First Nation Communities in Northwest Ontario' (the "Report") issued on August 21, 2014 by the Ontario Power Authority (now the IESO), for the Northwest Ontario First Nation Transmission Planning Committee, it provides expected outages by community as shown below.

[1] Link to Report on IESO Website:
http://www.ieso.ca/-/media/Files/IESO/Document-Library/regional-planning/remote-community-connection/OPA-technical-report-2014-08-21.pdf?la=en

Extract of Table 25 from the IESO Report: *Draft Technical Report and Business Case for the Connection of Remote First Nation Communities in Northwest Ontario*

Table 25: Expected Outage Time Post-Connection by Community

	Planned Outages			Forced Outages				Total Outages	
Community	Planned Outages/year	Planned Outage time (hr/yr)	Percent of time	Momentary Forced Outages/year	Sustained Forced Outages/year	Sustained Forced Outage time (hr/yr)	Percent of time	Total Outage Time (hr/yr)	Total percent of time
Deer Lake	6	81	0.9%	6	17	38	0.4%	119.15	1.36%
North Spirit Lake	5	69	0.8%	5	13	29	0.3%	97.60	1.11%
Poplar Hill	4	54	0.6%	4	11	26	0.3%	79.81	0.91%
Pikanjikum	4	49	0.6%	4	10	22	0.3%	70.86	0.81%
Kee-way-win and Koocheching	7	82	0.9%	6	16	36	0.4%	118.26	1.35%
Sandy Lake	7	85	1.0%	7	17	38	0.4%	122.24	1.40%
Kingfisher Lake	6	79	0.9%	6	18	42	0.5%	120.81	1.38%
Wawakepewin	8	97	1.1%	6	25	56	0.6%	153.06	1.75%
Kasabonika Lake	8	106	1.2%	7	28	63	0.7%	169.30	1.93%
Wunnumin Lake	7	86	1.0%	6	21	48	0.5%	133.84	1.53%
Wapekeka	9	112	1.3%	7	29	67	0.8%	178.57	2.04%
Kitchenuhmaykoosib Inninuwug (Big Trout Lake)	9	115	1.3%	7	30	69	0.8%	183.22	2.09%
Bearskin Lake	8	97	1.1%	7	23	52	0.6%	148.76	1.70%
Muskrat Dam	6	81	0.9%	6	20	45	0.5%	126.21	1.44%
Weagamow (North Caribou Lake)	6	70	0.8%	5	16	37	0.4%	106.66	1.22%
Sachigo Lake	8	97	1.1%	7	23	52	0.6%	148.48	1.70%
Eabametoong (Fort Hope)	7	86	1.0%	6	19	44	0.5%	130.32	1.49%
Landsdowne House (Neskantaga)	6	77	0.9%	5	18	42	0.5%	118.92	1.36%
Webequie	7	92	1.1%	7	21	47	0.5%	139.12	1.59%
Nibinamik (Summer Beaver)	8	101	1.2%	7	24	56	0.6%	156.52	1.79%
Marten Falls	8	99	1.1%	7	25	57	0.7%	156.37	1.79%

Source: OPA, IESO

On Page 110 and 111 the Report notes that, "the expected outage duration for transmission supply alone is estimated to be an improvement for IPA communities but not generally for the average HIRC community". The IESO supported scope, as described in Exhibit C, Tab 5, Schedule 1, indicates that backup diesel generation would be needed in the communities.

a) The above table shows supply-related outages that range from about 70 hours per year to about 179 hours per year, depending on proximity to the grid. Exhibit C, Tab 5, Schedule 1 (page 7) references a BBA report that updates expected supply related (transmission) outages in the communities. Please provide a copy of that report.
b) Has WPLP provided a copy of the BBA report with the expected transmission outages and backup options to the communities?
c) Has WPLP or any of its partners initiated any discussions with the communities regarding backup power? If so, please provide a summary of the discussions including comments from communities.

INTERROGATORY #5

Reference:

Table 2-13 below was filed in Hydro One Remotes' Distribution System Plan ("DSP") as part of its 2018 revenue requirement application (EB-2017-0051) at Exhibit B, Tab 1, Schedule 1, Section 2.3.3.4.2, Table 2-13, page 51.

The table provides actual annual percentage of minutes of supply related outages across all the communities Remotes currently serves from 2013 to 2016.

Extract of Table from Remotes' 2018-2022 Distribution System Plan

Table 2-13: Percentage of Generation Availability 2013-2016

Year	2013	2014	2015	2016
Generation Availability	99.86%	99.97%	99.97%	99.96%

Preamble:

Based on the information from Remote's 2018-22 DSP, Table 2-13 (provided above), the annual supply outage as a percentage of total time, and average annual hours of supply outages by Community in Remotes service territory is as follows:

Table 1
Remote Communities Actual Annual Supply Data - 2013 to 2016

Year	2013	2014	2015	2016	Row
Total Time	100.00%	100.00%	100.00%	100.00%	A
Generation Availability all Stations	99.86%	99.97%	99.97%	99.96%	B
Supply Outage as a Percentage of time	0.14%	0.03%	0.03%	0.04%	C = A - B
Total Hours per Year	8,760	8,760	8,760	8,760	D = 365 (days) x 24 hours
Average Hours of Supply Outages by Community	**12.26**	**2.63**	**2.63**	**3.50**	E = C x D

a) In its Report the OPA/IESO estimates a range of 70-179 hours[2] of supply related (transmission) outages per individual community following connection, compared to an annual average range of 2.63 hours to 12.26 hours (Table 1, Row E, above) of supply related outages currently experienced, per individual community. Based on the estimates of supply related outages in the OPA/IESO (as provided in Interrogatory 4 reference material above), does WPLP agree that backup generation is required following grid connections to provide service reliability, that would, on average, be equal to what these communities currently experience?
b) Currently, Hydro One Remotes is considering retaining the generation assets to provide backup generation in the communities it currently serves and has also been working on a backup study for INAC (ISC) and one of WPLP's partners, Opiikapawiin Services Limited Partnership (OSLP) related to all of the connecting communities. Based on the IESO forecast for the communities Hydro One Remotes currently serves, and on station design, capacity is expected to be sufficient to supply backup power to the communities for at least 20 years, with minor capital upgrades and with small quantities of fuel kept at the community. Would Watay support Hydro One Remotes in including these costs in Remotes' own revenue requirement?
c) Does WPLP or its partners have any information about the current hours of loss of supply outages in the IPA communities?

Issue: Operations, Access and Community Readiness

INTERROGATORY #6

Reference:

Exhibit C, Tab 5, Schedule 1, (page 9) in reference to the IESO scope.

a) What are the estimated line losses on the Remote Connection Lines?
b) Will the cost of line losses on the Remote Connection Lines be recovered through the IESO's uplift charges and recovered from all transmission customers (as per current practice)? What are the estimated line losses by community?

[2] As show in Table 25 (provided in Remote's Interrogatory # 4 (above), as extracted from the IESO Report: *Draft Technical Report and Business Case for the Connection of Remote First Nation Communities in Northwest Ontario*, found in the table's column titled "Total Outage Time (hrs/yr)".

INTERROGATORY #7

Reference:

Exhibit C, Tab 1, Schedule 1 (page 6) estimates a combined on-reserve registered population of approximately 14,000.

a) Please provide the source for this estimate.
b) Please provide a breakdown of the population by community.
c) Please provide an estimate of the unregistered population residing in the communities, including the teachers, nurses and others residing in the communities referenced in the exhibit.
d) Does Watay have an estimate of the number of distribution customers (i.e. entities that receive an electricity bill) in each community? If so, please provide.

INTERROGATORY #8

Reference:

Exhibit C, Tab 6, Schedule 1 (pages 2 & 3) - Community Readiness. References made outlining Hydro One Remotes' obligations to ensure each of its distribution systems is designed, maintained and operated in compliance with O.Reg. 22/04 (Electrical Distribution Safety).

Preamble:

Hydro One Remotes designs, maintains and operates its distribution systems in compliance with the O.Reg. 22.04. Hydro One Remotes anticipates that all of the distribution systems will need to be upgraded as a consequence of grid connection to meet IESO market rules and settlement requirements. Hydro One Remotes has budgeted costs for wholesale metering, to facilitate the community distribution system connections as follows:

Table 2
Cost Budgeted by Remotes to Connect Community Distribution Systems to Project Lines

Distribution System / Community	Estimated Cost ($)	Estimated In-Service Year
Pikangikum	370,000	2018
Poplar Hill, Deer Lake, Muskrat Dam, Kingfisher, North Caribou	1,855,000	2021
Sachigo, Bearskin, Wawakepewin	1,113,000	2022
North Spirit, Sandy Lake, Keewaywin, Wunnumin, Wapekeka, Big Trout, Kasabonika	2,597,000	2023
Total Investment Cost	**5,935,000**	

a) Can WPLP confirm that funding for this metering is not included in its proposed construction budget?

INTERROGATORY #9

Reference:

Exhibit C, Tab 6, Schedule 1 (pages 2 & 3) - Community Readiness. WPLP notes that the communities served by IPAs are currently in the process of transition from the IPAs to being served by Hydro One Remotes and that this transition is beyond the scope of WPLP's role as the licenced transmitter. Further, WPLP notes that infrastructure required as part of that process would be developed, owned and operated by Hydro One Remotes rather than the applicant.

Preamble:

a) As a point of clarification, Hydro One Remotes is not investing in the IPA communities or developing infrastructure prior to assuming responsibility for service. Hydro One Remotes and the ESA are supporting the communities, their Tribal Councils, WPLP, INAC and OSLP in this work by providing technical expertise and asset inspections. Hydro One Remotes and the ESA were contracted by each local community through INAC and OSLP to carry out distribution assessments and to identify necessary upgrades required before grid connection. It is Hydro One Remotes' understanding that, INAC is investing (as contributed capital) in any required distribution assessments and system upgrades in the IPA communities and that OSLP and the communities/ IPAs are responsible for completing the distribution upgrades to ESA and Hydro One Remotes' standards. The ESA and Hydro One Remotes will also assess the assets once the upgrades are complete. As part of these investments, INAC is also funding the construction of Hydro One Remote Communities work facilities Once Remotes

takes over service to the IPA communities Remotes expects to manage the assets and invest in the same way as it manages assets in its existing communities.

b) Hydro One Remotes generally agrees with the list of community readiness distribution activities provided and also notes for purposes of clarification that the IPA communities must also provide customer information to Hydro One Remotes before Hydro One Remotes can take over service to the community. The customer information required is: the customer name linked to the premise/existing meter, a signed request for service; a signed form for qualification for the HST/First Nation Energy rate including the customer's band status number. Where no band status number exists, information to specifically identify the customer is required. Once this information and the asset improvements are completed and prior to the agreed takeover date, Hydro One Remotes will send its staff to the community to map the existing transformers and poles, change the meters and enter this information into Hydro One Remotes billing system.

a) Please confirm, as the Project Manager of the distribution line readiness project in Pikangikum, if that project remains on schedule? Additionally please also confirm the scheduled readiness date. Please explain the role, if any, of OSLP in the WPLP project.
b) Given the clarifications provided in the preamble 1) above, does WPLP accept this clarification?
c) Given the clarifications provided in the preamble 2) above, does WPLP also accept this clarification?
d) Does WPLP accept that Hydro One Remotes does not currently serve any of the IPA communities and that there is a potential for delays in the connection of the communities if, for example, the required asset upgrades and customer information activities, ISC and Band Council approval to issue a Section 28(2) land access agreement are not completed on WPLP's schedule?
e) Is WPLP aware that various government approvals are required for Remotes to take over service to the IPA communities, including a provincial regulation to name each community in Remotes' service territory as well as a subsequent licence amendment approval from the OEB?

INTERROGATORY #10

Reference:

Exhibit C, Tab 1, Schedule 1, Page 6 and, Exhibit C, Tab 6, Schedule 1 (pages 2 & 3) - Community Readiness. The success of the transfer of IPA communities to Hydro One Remotes project hinges on distribution and community readiness of each IPA, including the repair of distribution systems and the construction of operating infrastructure such as a house, yard, garage, etc.

Preamble:

Hydro One Remotes notes that the Pikangikum transfer for a connection date of "late 2018" may be at risk.

a) WPLP has stated that "In respect of the seven communities listed above that are served by IPAs, these communities are currently in the process of transitioning from the IPAs to being served by Hydro One Remotes. This transition is beyond the scope of WPLP's role as the licenced transmitter." (Reference, Exhibit C, Tab 6, Schedule 1 pages 2 & 3). Would you agree that community readiness is an important element to WPLP's success of the overall project?
b) If the response to a) above is yes, what specific contingencies have you implemented to address the potential delays due to insufficient community readiness?

INTERROGATORY #11

Reference:

Exhibit C, Tab 6, Schedule 1 (page 5). WPLP is seeking an exemption from the requirements for CIAs in respect of Remote Communities. WPLP states that, "further consideration would need to be given to how section 6.2 should apply in respect of additional connecting customers."

a) Please clarify this statement. For example, under the proposed exemption, would a CIA be required if an industrial customer sought a connection to the remote community transmission lines?

INTERROGATORY #12

Reference:

Exhibit E, Tab 1, Schedule 1 (page 1). WPLP describes its plans to monitor the configuration and status of WPLP's transmission system using information collected by SCADA devices, relays and other sensors. Transmitters often use dual communications to Distribution and Transmission Stations to ensure reliable communications with the stations.

a) Does WPLP plan dual independent communications to the Distribution Stations using secondary communications through Bell fibre services in each community?
b) Does WPLP intend to have the secondary Bell fibre connection through the poles on the community distribution system?

c) Has WPLP investigated the cost to provide this secondary communications from Bell fiber to the Distribution Stations?

INTERROGATORY #13

Reference:

Exhibit E, Tab 1, Schedule 1 (page 4-5). Access to facilities; WPLP acknowledges the challenges related to access in this region and is proposing developing contracts with helicopter service providers to patrol the remote community lines. WPLP has also indicated (Exhibit F, Tab 1) that it plans to construct helicopter pads to enable construction of assets.

a) Please confirm that WPLP (directly or through contractors) intend to patrol the lines by helicopter once they are in service.
b) Does the construction plan include building helicopter landing pads?
c) Does WPLP believe that helicopter re-fueling stations/kiosks will be required due to the long length of these lines? If so, where would WPLP expect these refueling stations to be sited?
d) If re-fueling stations are required, has WPLP investigated the environmental risks and the mitigations required?

INTERROGATORY #14

Reference:

Exhibit F, Tab 1, Schedule 1 (page 10). WPLP says that the 56 laydown areas required during the construction period "will be required by WPLP on a temporary basis only."

a) How does WPLP anticipate making future repairs along these lines once they are in service? Will more permanent or additional temporary laydown areas be required in future?
b) Does WPLP anticipate the need to construct longer-term accommodations in any of the communities to conduct site maintenance or capital repairs on the Distribution Station ("DS") or Transmission Station ("TS") assets? If not, how does WPLP plan to manage accommodation/transportation for staff performing this work?
c) Does WPLP plan to purchase fleet to access its DS and TS assets located near the communities?
d) Does WPLP foresee a need to construct equipment storage sheds or garages near any of its TS or DS assets? If so, has funding to construct these storage facilities been included in the application?

INTERROGATORY #15

Reference:

Exhibit 1, Tab 1, Schedule 1, (page 13) describes access roads required to construct the project.

Preamble:

Hydro One Remotes requires communities to have year round access either by air or road to each community to safely transport people and equipment to the communities in order to serve them. Wawakapewin currently has neither an all-season road, or an airport. In discussions with WPLP, Remotes expressed concerns about locating the TS and the distribution metering that Remotes will be required to maintain in Wawakapewin. WPLP suggested to Remotes that a service road between Wawakapewin and Kasabonika Lake is a reasonable alternative to a permanent road or airport.

a) Please describe WPLP's planned access to the Wawakepwin TS.
b) Has WPLP included funding for an access road to Wawakapewin in its application?
c) Does WPLP still consider a service road from Kasabonika Lake as a viable option for Remotes to service this community?
d) If so, has funding for road access been included in this application?
e) Can WPLP provide an update on discussions with Wawakapewin on establishing a more permanent link between the two communities?
f) If no road is currently planned is WPLP aware of the timing and location of roads or airports that any other entity (for example MTO/ISC) is constructing to the community?
g) Please confirm this proposed access will likely increase Remotes' OM&A costs post-implementation?

Issue: Ratepayer Impact

INTERROGATORY #16

Reference:

Exhibit J, Tab1, Schedule1, (page 2) states, "Under the alternative rate framework, the implications for ratepayers are the same as under the existing TSC and uniform transmission rates.

a) Please clarify WPLP's understanding of how the implications for rate payers are the same under the alternative framework.

INTERROGATORY #17

Reference:

Exhibit J, Tab 1, Schedule 1 (pg. 10) includes the following statement:

"The Remote Connection Lines' capital cost would be recorded and accounted for separately from the Line to Pickle Lake. Rate base additions for the Transmission Project would be segregated into two pools: (i) the amount for the Remote Connection Lines, and (ii) all other in-service capital costs. The revenue requirement impact would be calculated for each pool per the current regulatory revenue requirement methodology for transmitters."

a) Please confirm if the pool that includes "all other in-service costs" would include all capital costs associated with the Line to Pickle Lake? If not confirmed, please explain.
b) Please confirm the Pikangikum line will be recorded in rate base, and if so will it be included in one of the two pools?
c) Please confirm if the calculation of the revenue requirement associated with each pool (i.e. the Remote Connection Lines and "all other in-service capital costs" pools) would take into account any Capital Contribution received from the government of Canada for funding WPLP? If not confirmed, please explain.

INTERROGATORY #18

Reference:

Exhibit J, Tab 1, Schedule 1 (page 10) includes the following statement:

"To permit recovery of WPLP's OM&A expense, the expense will be allocated between the Remote Connection Lines and the Line to Pickle Lake on the basis of direct cost and indirect costs allocated based on the proportionate asset value in each rate base pool relative to total rate base."

a) Please clarify if its WPLP's intent that only indirect OM&A costs (e.g. administrative OM&A) are proposed to be allocated based on the proportionate asset value in each rate base pool, and that direct costs associated with maintaining assets in each pool would be directly assigned to that pool.

INTERROGATORY #19

Reference:

Exhibit J, Tab 1, Schedule1 (pg. 10) includes the following statement:

"The resulting revenue requirement impact arising from the Remote Connection Lines capital and OM&A expense would be charged to Hydro One Remotes as a direct expense through a rate applicable to service provided from the Remote Connection Lines."

a) Does WPLP anticipate that other customers (e.g. mining customers) may connect to the proposed Remote Connection Lines?
b) Would all existing Transmission System Code requirements apply to any customers looking to connect to the Remote Connection Lines?
c) What rate would be applicable to any new customers making use of the service provided from the Remote Connection Lines?
d) Would revenues collected from new customers using the Remote Connection Lines be used to offset the charges paid by Hydro One Remotes?

INTERROGATORY #20

Reference:

Exhibit J, Tab 1, Schedule 2, (pages 1-2) includes the statement, "Following the substantial completion and completion dates, Canada will fund the Transmission Project in part as a capital contribution paid to WPLP and with the remainder placed in an independent trust (the "Trust") which will provide a ratepayer subsidy payment over time to offset transmission rates charged by WPLP."

Slide 36 in the presentation made by Wataynikanenyap Power LP, to the OEB, on November 2, 2018 indicates that only the amount of "Rate base before capital contribution" that is in excess of the implied rate base of $1,550 million will be paid as a capital contribution to WPLP, with the balance amount allocated to the Trust for use in offsetting RRRP costs.

a) What determines how much of the $1.56B in Canada funding will be paid as a capital contribution to WPLP versus being put into the Trust?
b) Has WPLP considered splitting the government funding between the Remote Connection Lines (whose costs to be covered by RRRP) and "all other in-service capital costs" pools (whose costs will be covered by UTRs) based on the proportionate asset value in each pool? If not, why not?

c) Given that the Trust will be used to offset the increase in RRRP costs associated with the increase to Hydro One Remotes' revenue requirement as a result of charges for use of the Remote Connection Lines, why is it appropriate that the government funding allocated to the Trust be more than the rate base associated with the Remote Connection Lines?

INTERROGATORY #21

Reference:

Exhibit J, Tab 1, Schedule 2, (page 2) includes the following statement:

"The purpose of the Trust is to offset the impact on RRRP of any rates charged by WPLP in respect of transmission services."

a) Is it the intent that payments from the Trust would fully offset the impacts on RRRP due to the increase in Hydro One Remotes' revenue requirement as a result of paying for the use of the Remote Connection Lines?
b) How does WPLP assume that the payments from the trust to offset the impact on RRRP of any rates charged by WPLP in respect of transmission services will be administered? Would the Trust make payments to the IESO or some other entity?

INTERROGATORY #22

Reference:

Exhibit J, Tab 3, Schedule 1

a) Please confirm that the impacts shown in Tables 2 to 4 are based on receiving no funding contributions from any level of government?
b) What would the impacts in Tables 2 to 4 be assuming government funding of the Transmission Project per the Funding MOU WPLP has entered into with Canada?
c) The residential bill impact shown in Table 2 is based on the average annual revenue requirement associated with the Line to Pickle Lake. Can you please reproduce Table 2 to show what the maximum impact on a typical residential bill will be (i.e. when the project is first put into service and costs are collected through rates)?
d) The impact on the RRRP rate is shown based on the average annual revenue requirement associated with the Remote Connection Lines. Can you please reproduce Table 3 to show the maximum impact on the RRRP rate will be (i.e. when the full cost of all Remote Connection Lines are charged to Hydro One Remotes)?

e) Does WPLP agree that the RRRP rate impact shown in Table 3 will be higher allowing for typical inflationary increase in the cost-to-serve for Algoma Power Inc. and Hydro One Remotes over the 2024 to 2033 period?

f) Please provide an update to Table 4 and Table 5 taking into account the maximum impacts as calculated in c) and d) above.