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BY EMAIL AND RESS

November 22, 2024

Ms. Nancy Marconi
Registrar
Ontario Energy Board
Suite 2700, 2300 Yonge Street
P.O. Box 2319
Toronto, ON M4P 1E4

Dear Ms. Marconi,

EB-2024-0180 – Hydro One Remote Communities Inc. – Shoulderblade Falls Hydel – Funding Application – Interrogatory Responses

In accordance with Procedural Order No. 1 issued by the Ontario Energy Board (OEB) on October 15, 2024, please find attached responses by Hydro One Networks Inc., on behalf of Hydro One Remote Communities Inc. (Remotes), to interrogatory questions posed by OEB Staff.

An electronic copy of these responses has been submitted using the Board's Regulatory Electronic Submission System.

Sincerely,

Kathleen Burke

OEB STAFF INTERROGATORY - 01

Reference:

Page 10

Preamble:

Hydro One states that "if this Application is approved, Remotes and Deer Lake will enter into an agreement under which Remotes will incur approximately $547k per year in total costs. These total costs include costs ($190k and $75k) to operate and maintain the Hydel (described in sections 3.1 and 3.2) and amounts paid ($78k and $204k) to Deer Lake for road maintenance and for the electricity generated by the Hydel".

Interrogatory:

1. Are the costs of $190k and $75k to "operate and maintain" the generating station by Hydro One Remotes, costs to Hydro One Remotes, or payments to Deer Lake?
   a) Will the employees who plan and execute the work at the generating station be employed by Hydro One Remotes?

2. Are the costs to be paid to Deer Lake fixed for the contract period, or will the agreement include cost escalation each year?

3. What is the anticipated term of the agreement.

4. Please submit a copy of the agreement, or the most current draft of the agreement.

Response:

1. Both the $190k and $75k are costs to Hydro One Remotes. Approximately 70% of the $190k is a Hydro One Remotes direct cost for maintenance, and the remaining 30% represents daily operations, which includes a payment to Deer Lake for the local operators. 100% of the $75k is a Hydro One Remotes cost.
   a) Hydro One Remotes employees would plan and execute the work at the generating station. Local operators employed by the community would be responsible for daily operations and also support larger maintenance activities.

2. Generally, Hydro One Remotes does a 3-year operation and maintenance contract with a monthly fixed rate and provides a reasonable cost escalation at renewal.

3. Please refer to part 2, however the anticipated term of the agreement will be largely determined by the OEB's decision.

4. There is no draft agreement as it is dependent on the OEB's decision in this Application.

OEB STAFF INTERROGATORY - 02

Reference:

Pages 8-9

Preamble:

Hydro One Remotes states that the power from the Shoulderblade Falls generating station is supplied to the community of Deer Lake by a 6km, 25kV distribution pole line, and that on April 16, 2024, Hydro One Remotes' "rights, title, and interest in, and to, the Hydel and associated distribution line was transferred to Deer Lake".

Interrogatory:

a) Under the proposed agreement between Hydro One Remotes' and the community of Deer Lake,
   1. Who will be responsible for the costs for ongoing operation and maintenance of the 25kV pole line?

   2. Who will be responsible for the costs for ongoing operation and maintenance of the connection and transformation equipment located at both the Shoulderblade falls generating station and the diesel generating station.

b) Regarding the 25kV pole line,
   1. Please provide the age distribution of the poles on the line.

   2. Please provide the most recent asset condition assessment of the line.

Response:

a)
   1. Hydro One Remotes believes that it is best positioned to perform the ongoing operation and maintenance of the 25kV pole line. Accordingly, Hydro One Remotes would offer to do this work as part of the proposed agreement with Deer Lake.

   2. Hydro One Remotes believes that it is best positioned to perform the ongoing operation and maintenance of the connection and transformation equipment. Accordingly, Hydro One Remotes would offer to do this work as part of the proposed agreement with Deer Lake.

b)

1. The majority of the poles' ages are between 15 to 28 years old, aligning with initial construction of the system in 1996-1998. Refer to the table below.

Table 1 - Age Distribution and Number of Poles

Year	Number of Poles
1995	1
1996	35
1997	10
1998	23
2008	1
Total	**70**

2. The most recent asset condition assessment of the line is "R0" or good condition. Remotes does not expect any change to the condition of the poles by 2030.

OEB STAFF INTERROGATORY - 03

Reference:

1. Page 11
2. EB-2022-0041 / Distribution System Plan 2023-2027 / Page 85 (pdf page 440)

Preamble:

Hydro One Remotes states "Both Hydel generating units are past due on scheduled capital rebuilds based on operating hours and unit condition. This work was not performed as scheduled since future Hydel operations were uncertain but is necessary for future safe operation."

The 2023-2027 Distribution System Plan categorized the condition of both Hydel units as Fair.

Interrogatory:

a) Does the $75k in capital per year, over 2024-2027, include the referenced capital rebuilds?

b) Will the proposed capital and maintenance expenditures be sufficient to maintain the condition of the unit assessments as "Fair" until the end of the agreement to provide back up generation, i.e., 2030?

c) Are the annual capital and operating costs for 2025 forecast to be similar in each year until 2030, or are there forecast variations?

Response:

a) Yes, the $75k in capital expense per year is for the referenced capital rebuilds in the DSP as they were not completed.

b) Yes, Hydro One Remotes' expectation is that the rebuild work will provide at least 5 years of service.

c) Yes, the annual and operating costs until 2030 are expected to be similar to the 2025 forecast.

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OEB STAFF INTERROGATORY - 04

Reference:

Page 8

Preamble:

The Shoulderblade Falls generating station is a run-of-the-river generating station.

Interrogatory:

a) Is the generating station able to operate at full capacity during winter months?

b) For the past ten years, please provide

1. The hours the station was not generating due to planned work at the station.

2. The hours the station was not able to generate at full capacity, categorized by capacity and reason. For example, Reasons could include such items as low water levels, frozen water conditions and equipment failure.

Response:

a) Yes, the generating station is able to operate at full capacity during winter months.

b) The hours the station was not able to generate at full capacity over the past ten years is shown in the table below.

Table 1 - Number of hours the Shoulderblade Falls Hydel was not able to generate at full capacity

Year	Hours not generating		Reason
	G1	G2	
2023	-	-	
2022	1,464	1,464	Both units were unavailable in August/September; required repairs to the gear boxes in which delays occurred due to issues in sourcing parts.
2021	732	732	Both units required minor maintenance in August/September.
2020	-	-	
2019	-	-	
2018	-	-	
2017	-	480	Minor maintenance on one unit in April/May.
2016	720	720	Both units required minor maintenance in September.
2015	-	-	
2014	-	558	Minor maintenance on one unit in October.

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OEB STAFF INTERROGATORY - 05

Reference:

EB-2022-0041 / Distribution System Plan 2023-2027, Pages EB-2022-0041 / Distribution System Plan 2023-2027, Pages 80-81 (pdf page 436)

Preamble:

The following table has been reproduced from the Hydro One Remotes 2023-2027 Distribution System Plan.

Table - 5.3-4 - Actual Peak Loads by Community (kW)

Community	2017	2018	2019	2020	2021
Deer Lake	1,230	1,319	1,328	1,324	1,368

Table - 5.3-5 - Forecasted Peak Loads by Community (kW)

Community	2022	2023	2024	2025	2026	2027
Deer Lake	1,389	1,409	1,430	1,452	1,474	1,496

Interrogatory:

a) Please provide the actual peak load of the Deer Lake community each year from 2022 through to 2024 year-to-date.

b) Has there been new load or load growth in anticipation of connection to the Wataynikaneyap Power Limited Partnership (WPLP) Line in 2024?

c) Please update the peak load forecast for Deer Lake, contained in Table 5.3-5, and expand to 2030.

d) What is the estimated cost of upgrading the diesel generation station to meet the load in 2030?

e) What is the estimated cost of upgrading the diesel generating station to meet the load in 2040?

Response:

a) The actual peak load from 2022 to 2024 year-to-date is provided below:

	Peak Load (kW)
2021-2022 Winter	1,399
2022-2023 Winter	1,414
2023-2024 Winter	1,382
2024 October YTD	1,082

b) All Indigenous communities served by Hydro One Remotes are currently experiencing a period of growth driven by Federal investments in community infrastructure and housing. As such, Hydro One Remotes is seeing initial growth in 2024 and continuing increases in load in 2025. Beyond 2025, Hydro One Remotes is anticipating a steady increase in annual load with a step-change in load every 3 years, to allow for housing upgrades or new subdivisions from CMHC or other revenue sources. As a general note, Hydro One Remotes is expecting most grid connected communities to eventually transition to electric heating, which will continue to drive peak load.

c) The updated peak load forecast (in kW) for Deer Lake to 2030 is provided below:

2025	2026	2027	2028	2029	3030
1,687	1,771	1,860	2,073	2,177	2,285

d) Hydro One Remotes is not expecting to need any upgrades to the diesel generating station to meet the load in 2030.

e) Based on similar projects executed by Hydro One Remotes, the current estimated cost to upgrade the diesel generating station to meet the forecast 2040 load is approximately $9M (in 2024 dollars), consisting of electrical equipment upgrade costs of approximately $3M and diesel generator upgrade costs of approximately $6M.

OEB STAFF INTERROGATORY - 06

Reference:

EB-2022-0041 / Distribution System Plan 2023-2027/ Appendix D/ pp. 21-22 (499-500 of pdf)

Preamble:

The Deer Lake DGS Summary submitted in as part of the 2023-2027 DSP states

> "The Detroit genset is slated for replacement in 2022. That could be affected by the timeline of the transmission line connection…The generation portion of the station is sized to provide full backup until the mid 2040s. The electrical portion is more restrictive but is suitable until around 2030… Upgrades to the electrical equipment around 2030 would increase the capability of the station for over 10 years until the generating equipment becomes a limitation."

Interrogatory:

a) Was the Detroit genset replaced as planned? 1) If not, please provide the plan

b) Are the upgrades to the electrical equipment still contemplated?

c) Please provide the most current estimate to upgrade the electrical equipment.

Response:

a) Yes, the Detroit genset was replaced as planned, as the WPLP project was delayed.

b) Yes, the electrical equipment upgrade is still being complemented. The decision to pursue the upgrade will depend on the desire for back-up power by the various stakeholders.

c) The cost to upgrade the electrical equipment in the station is estimated to be approximately $3M as discussed in Interrogatory I-01-05 e).

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OEB STAFF INTERROGATORY - 07

Reference:

Page 11

Preamble:

Table 1 - Hydel Historical and Forecast Costs compares the financial arrangements regarding payments to Deer Lake prior to the connection to WPLP; and after the connection to WPLP under this proposal.

Interrogatory:

a) Please confirm that prior to connection to WPLP, on average for the past 10 years:
   1. Hydro One Remotes paid Deer Lake $237k per year for "road and energy costs".
   2. Hydro One Remotes was responsible for "OM&A Site Maintenance" of $184k per year and "capital" work averaging $37k per year.
   3. Hydro One Remotes saved $682k per year that it would have otherwise had to pay for diesel fuel, due to the energy generated by the Shoulderblade Falls generation stations.
   4. Hydro One Remotes benefitted to a total of $224k per year due to the arrangement with Deer Lake regarding the Shoulderblade Falls generating station ($682K - $184K - $37K - $237K = $224K).

b) If OEB staff's understanding is incorrect in part a), please explain.

c) Please confirm that the variance in costs related to the Shoulderblade Falls generation station prior to connecting to WPLP compared to this proposal is a total of $567k ($224k+$343k), or correct OEB staff's understanding.

Response:

a)
   1. Confirmed.
   2. Confirmed.
   3. Confirmed.
   4. It should be noted that given Hydro One Remote's regulatory structure and break-even status, ratepayers were the ultimate beneficiaries of these savings as the RRRPVA balance was reduced by the $224k.

b) Please see the responses in part a).

c) The work and costs that Remotes would incur to support the Hydel would largely be the same. As shown in the Application on page 10 Table 1, prior to the WPLP connection, the historical 10-year average annual cost related to the Hydel was $458k ($184k + $37k + $237k) compared to the $547k of cost that will be needed going forward. This variance of $89k per year reflects a small cost escalation relative to the 10-year average.

OEB STAFF INTERROGATORY - 08

Reference:

1. Page 12
2. REB-2022-0041 / Exhibit D-01-07, Page 1
3. EB-2022-0041 / Exhibit D-01-07, Attachment 1

Preamble:

Reference 2 stated, "The cost of Power OM&A is forecasted based on the grid power purchased rates charged Pikangikum" and was forecast in reference 3 to be $0.13/kWh. The data prepared in the case EB-2022-0041 was prepared the filing date of August 31, 2022.

This application continues to use a cost of power of $0.13/kWh as shown in reference 1.

Interrogatory:

a) Hydro One Remotes now has historic costs of grid power for all of 2022, 2023, and part of 2024, as well as many more connection points, to forecast the cost of power from the grid connected communities. Was this additional information used to validate the $0.13/kWh rate?
   a) If yes, please provide the calculations. Please provide the calculations used to calculate the cost of power.

   b) If Hydro One has not validated the $0.13/kWh rate, please provide updated cost of power calculations based on recent data.

b) Please explain if the global adjustment is included in the cost of power calculations, and why or why not.

Response:

a) The $0.13/kWh rate was based on the May 2024 IESO invoice to Hydro One Remotes for the grid connected communities supplied by Hydro One Remotes. When Hydro One Remotes calculates the actual annual payment for power to Deer Lake, Hydro One Remotes will update the cost of power based on a 12-month period of IESO invoices aligned with a specific time period of renewable energy production.
   a) The calculation for the $0.13/kWh cost of power used in the Application is provided below. As it was based on only the May 2024 IESO invoice it was rounded up to the nearest cent.

Table 1 - Cost of Power Calculation based on the May 2024 IESO invoice

Remotes COP Cost Summary (Rodan)		Invoiced
610702	Energy Cost	$ 177,336.71
610721	Tx Network	$ 65,382.52
610731	WMS Costs (incl. RRRP Adder)	$ 9,480.43
610743	Global Adjustment Class B	$ 494,942.27
Total COP Cost		**$ 747,141.93**
Volume Kwh (Non-Uplifted)		
Bearskin Lake		335,142.00
Big Trout Lake		693,790.00
Deer Lake		335,058.00
Kasabonika		543,001.00
Kingfisher Lake		335,804.00
Pikangikum		862,399.00
Sachigo		376,056.00
Sandy Lake		1,199,484.00
Wapekeka		259,367.00
Wawakapewin		28,073.00
Weagamow		612,052.00
Wunnumin		432,422.00
Total kWh		**6,012,648.00**
Cost per kWh		**$ 0.1243**

b) Hydro One Remotes has validated that the cost of power used in the application is approximately $0.13/kWh.

b) Yes, the global adjustment is included in the cost of power calculation.

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OEB STAFF INTERROGATORY - 09

Reference:

Table 1, Page 10

Interrogatory:

a) Please confirm that the proposal is to treat the costs for capital work at the Shoulderblade Falls generating station as expenses. Please explain.

Response:

b) Confirmed. The intent is to depreciate the capital cost of the rebuild over the useful life of the asset before the next rebuild, or the contract term, whichever comes first. This depreciation is approximately $75k annually.

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OEB STAFF INTERROGATORY - 10

Reference:

Table 1, Page 6

Interrogatory:

a) Hydro One Remotes pays for transmission services provided by WPLP. Please confirm that if this application is approved, there will be no reduction to the transmission services charges.

Response:

a) Not confirmed. Hydro One Remotes will pay slightly less to the IESO for transmission services charges for Deer Lake. As shown in Interrogatory I-01-08, Deer Lake's portion of consumption and transmission services charges are a small fraction of total remittances to the IESO.

With respect to the WPLP impact due to this reduction, there are many additional factors that influence the recovery of costs by WPLP. Uniform Transmission Rates will also adjust to ensure WPLP recovers its approved Revenue Requirement based on the actual net demand of all the communities connected to WPLP.

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OEB STAFF INTERROGATORY - 11

Reference:

1. Table 1, Page 10
2. Table 2, Page 12
3. Retail Settlement Code, Page 21, Appendix A

Preamble:

Hydro One Remotes is proposing to pay Deer Lake avoided the same cost for energy produced by the generating station as the IESO Power Costs for energy, forecast at $204k per year.

Hydro One Remotes is further proposing to fund the generating station annual costs estimated at OM&A of $190k, capital of $75k and road maintenance of $78k, for a total of $343k.

The Retail Settlement Code (RSC) states:

> A distributor shall purchase energy from an embedded retail generator within its service area where such embedded retail generator has indicated that it intends to generate electricity for delivery and sale directly to the distributor….. The price at which such energy sales shall be settled will be the competitive electricity price as described in Appendix “A” to the Code.

Interrogatory:

a) Please explain the basis for Hydro One Remotes paying for the energy from the Shoulderblade Falls generating station at the same rate as it pays the IESO for energy, while also paying for the ongoing operating, maintenance and capital costs for the generation site.

b) Is Hydro One Remotes proposing an exemption from the RSC in respect of payments related to the Shoulderblade Falls generating station? Please explain.

c) To what extent has Hydro One Remotes discussed alternative financial terms, to what has been proposed in this application, with Deer Lake? Please provide details of those discussions.

Response:

a) The energy provided by Shoulderblade Falls should be compared against the full cost of the energy delivered by WPLP Transmission project including the RRRP subsidies, not just the IESO energy rate. Using this comparison, it is reasonable that on-going operation, maintenance, and capital costs are recovered.

b) Hydro One Remotes is already exempt from the Retail Settlement Code (RSC), as per its Electricity Distribution Licence ED-2003-0037.

c) To date, Hydro One Remotes has not had substantive discussions with Deer Lake on alternative financial terms.