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BY EMAIL AND RESS

October 2, 2023

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

Dear Ms. Marconi,

EB-2023-0061 – Hydro One Sault Ste. Marie Limited Partnership Leave to Construct Application – Sault #3 Transmission Line Refurbishment Project – Interrogatory Responses

In accordance with OEB's letter - Interrogatory Filing Extension, issued September 22, 2023, please find attached an electronic copy of responses provided by Hydro One Sault Ste. Marie Limited Partnership ("HOSSM") to interrogatory questions posed by intervenors and Ontario Energy Board ("OEB") Staff.

Intervenor interrogatory response have been assigned Exhibit I and have been addressed in the following Exhibit order:

Exhibit	Tab	Intervenor
I	1	OEB Staff
I	2	Algoma Power Inc.
I	3	Perimeter Forest Limited Partnership
I	4	Batchewana First Nation

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

Sincerely,

Joanne Richardson

c/ Intervenors of record in EB-2023-0061

OEB STAFF INTERROGATORY - 01

Reference:

1. Exhibit B-7-1, Page 1, Table 1
2. Exhibit B-7-1, Page 2, Table 2
3. Exhibit B-7-1, Page 3

Preamble:

Reference 1 and 2 states that the total estimated project cost of $68.8 million includes a contingency cost estimate of $6.463 million and $0.534 million for the line and station portions of the project, respectively. This contingency cost estimate represents approximately 10.2% of the pre-contingency estimate.

Reference 3 outlines project risks, including HOSSM's estimated top four project risks: outage constraints, adverse weather, scope additions, and approvals and permits.

Interrogatory:

a) Please describe the basis for the contingency cost estimate for the project and why it is appropriate.

b) Please describe how the contingency cost estimate for the Sault #3 Project compares to contingency cost estimates developed for the comparator projects.

c) How did HOSSM develop its estimates for project material, labour, equipment rental and contractor costs?

d) How would HOSSM characterize the confidence of the cost estimate for the Sault #3 Project? What method did HOSSM use to estimate its confidence?

e) Please explain the methods HOSSM used to assess project risks for the Sault #3 Project and please clarify how HOSSM's contingency estimate relates to that analysis.

Response:

a) The main project risks were identified in Exhibit B-7-1 Section 1.0. The contingency amount was determined based on an estimated cost impact and the probability that each risk would incur a significant incremental cost from the base estimate.

b) The contingency cost estimate for the Sault #3 Project is in line with the contingency cost estimates developed for comparator projects. The contingency amounts for the comparator projects as a percentage of base project costs are as follows:

D2L Line Refurbishment (Dymond TS x Upper Notch Junction)	A6P Line Refurbishment (Alexander SS x Reserve Junction)	H9K Line Reinforcement (Carmichael Falls Junction x Spruce Falls Junction)	Sault #3 Refurbishment
NA[1]	15%	9%	10%

[1]No specific contingency amount was provided as the D2L project was released under the Lines Program - budgetary estimate with an accuracy range of +/- 50%.

c) Project estimates for the lines portion of the work were obtained through a competitive bidding process. Project estimates for the Station portion of the work were developed by HOSSM based on project scope at the activity or task level.

d) As described in Exhibit B, Tab 7, Schedule 1, the total estimated project cost of $68.8 million was developed based on an Association for the Advancement Cost Engineering (AACE) Class 3 estimate with an accuracy range of +30% to -20% ($89.4M - $55.0M accuracy range).

e) Both common and specific project risks are identified and assessed by the project stakeholders during risk workshops. The risks identified are documented in a Risk Register outlining the type, source and expected level of impact to project cost and schedule. A probability assessment of the identified risks is performed to calculate the expected contingency value. The total Project contingency is the sum of the expected contingency values of all risks.

OEB STAFF INTERROGATORY - 02

Reference:

1. Exhibit E-1-1, Attachment 1
2. Exhibit E-1-2, Attachment 2
3. Exhibit E-1-3, Attachment 3

Preamble:

HOSSM has applied for approval of the forms of the agreement offered or to be offered to affected landowners pursuant to s.97 of the OEB Act, if temporary construction rights for access or staging areas are required for the duration of the construction period. HOSSM states that its proposed land agreements were approved by the OEB as part of Hydro One Network Inc.'s Ansonville by Kirkland Lake Refurbishment Project under docket EB-2021-0107.

The three references above contain the forms for the land right agreements that HOSSM proposes to use to obtain any identified land rights for the Sault #3 Project:

1. Temporary Access and Temporary Access Road (for off-corridor access)
2. Temporary Rights Agreement (for construction staging)
3. Full and Final Release form (used as the basis for construction-related compensation, including crop or property damage)

Interrogatory:

a) Please confirm which forms approved under the Ansonville by Kirkland Lake Refurbishment Project correspond to the forms at reference 1, 2 and 3 above.

b) Please advise whether there are any substantive differences between the previously OEB approved forms referenced above and the forms that HOSSM requests approval of as part of the Sault #3 Project.

c) Please confirm that all impacted landowners will have the option to receive independent legal advice regarding the proposed land agreements.

d) Please clarify whether HOSSM has committed to or will commit to reimbursing landowners for reasonably incurred legal fees associated with the review and completion of the necessary land rights agreements.

Response:

a) Further details relating to forms 1, 2 and 3 as noted in the above proceeding are as follows;

1. Temporary Access and Temporary Access Road (for off-corridor access the agreement in EB-2023-0061 Exhibit E-1-1 Attachment 1 has been submitted and approved by the OEB in other projects (Chatham x Lakeshore: EB-2022-0140 Exhibit E-1-1 Attachment 8).

2. Temporary Rights Agreement (for construction staging); EB-2021-0107 Exhibit E-1-1 Attachment 2.

3. Full and Final Release form (used as the basis for construction-related compensation, including crop or property damage); The agreement used for Ansonville by Kirkland Lake is slightly different then the agreement used for Sault 3. However, the agreement used for Sault 3 was submitted and approved for Hawthorne x Merivale as: EB-2020-0265 Exhibit E-1-1 Attachment 4.

b) There are no substantial differences in any of forms included in this application that have not previously been reviewed and approved by the OEB.

c) Confirmed. All impacted landowners will have the option to receive independent legal advice regarding the proposed land rights agreements.

d) Confirmed. HOSSM will reimburse landowners for reasonably incurred legal fees associated with the review and completion of the necessary land rights agreements.

OEB STAFF INTERROGATORY - 03

Preamble:

HOSSM has applied for leave to construct approval pursuant to s.92 of the OEB Act.

The OEB typically imposes a set of standard conditions of approval (Schedule 1) as part of its leave to construct approvals. As stated in the OEB's Filing Requirements for Electricity Transmission leave to construct applications, applicants should expect to meet those standard conditions. If an applicant believes that a condition should be modified, the applicant must request any proposed changes and provide supporting rationale in its application.

Interrogatory:

a) Please comment on the OEB's standard conditions of approval for electricity transmission leave to construct applications noted above. If HOSSM does not agree with any of the specific draft conditions of approval noted below, please identify the specific conditions that HOSSM disagrees with and explain why. For conditions in respect of which HOSSM would like to recommend changes, please provide the proposed changes.

Response:

a) HOSSM agrees to the standard OEB conditions of approval listed above.

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OEB STAFF INTERROGATORY - 04

Reference:

1. Exhibit B-7-1, Page 5, Table 3
2. Exhibit B-7-1, Page 6

Preamble:

In relation to the line work, HOSSM cited three recent single circuit 115 kV wood pole line refurbishment projects in Northern Ontario: the D2L Line Refurbishment, the A7L/R1LB/A6P Line Refurbishment, and the Kapuskasing Area Reinforcement projects.

HOSSM estimates that the Sault #3 Project will cost $655K per circuit km, while the total project costs per circuit km of the comparator projects were between $410K and $488K. The Sault #3 Project is estimated to cost between 25% and 37% higher than the comparator projects.

HOSSM states that the higher cost per km forecasted for the Sault #3 Project relative to the three comparators is due to price increases for essential commodities used in the project (i.e., copper, aluminum, wood, and steel) and global supply chain issues. At reference 1, the “Escalation Adjustment” inflates costs for future years consistent with the OEB’s inflation parameters. HOSSM states that the OEB inflation parameters were used for the escalation adjustment and noted that although these parameters are based on historical data and do not reflect true inflation, the OEB inflation parameters were used to maintain a conservative escalation adjustment.

HOSSM states that the price of essential commodities has a significant impact on project costs. Equipment purchased to construct transmission lines (e.g., conductors and wood poles) is heavily impacted by certain raw material indices. Essential commodities such as copper, aluminum, wood, and steel have undergone price increases and supply shortages. As such, the difference in the per kilometer costs of the comparable projects to the Sault #3 Project does not reflect the true escalation costs for specific Project elements.

Interrogatory:

a) Please provide the detailed calculations for the derivation of the “Escalation Adjustment” and the “Total Comparable Project Costs” for all three comparator projects.

b) Please confirm that details in Table 1 below regarding the three comparator projects and the Sault #3 Project are correct, otherwise, please clarify:

Table 1 - Length of Line Being Reconductored in Comparable Line Projects

	D2L Line Refurbishment	A6P Refurbishment	H9K Reinforcement	Sault #3 Project
Total Length of Line Reconductored (km)	43	15	32	69.3
Total Length of Line used in Line Unit Cost Analysis (km)	43	15	32	90.5

c) For the Sault #3 Project, please separate the line cost into two portions: 1) 69.3 km of line being reconductored, and 2) the 21.2 km of line not being reconductored.

d) Using the answer from part c) above, please develop a weighted average of the line unit cost for the Sault #3 Project. Please provide detailed calculations for the derivation of the weighted average line unit cost.

e) At reference 1, for the Sault #3 Project, the $655K/km of line was calculated by dividing the OEB-approved cost estimate of $59,304K by the total transmission line length of 90.5 km. However, only 69.3 km of line in the Sault #3 Project is being reconductored. Please explain why it is appropriate to use the entire 90.5 km of line to calculate the line unit cost of the Sault #3 Project rather than completing a weighted calculation similar to the one proposed in part d) above.

f) Please provide a revised estimate for the project costs for the line portion of the project using true inflation instead of the OEB's inflation factors. Please provide detailed calculations for the derivation of the revised cost estimate.

Response:

a) The details of the Escalation Adjustment can be found in the tables below.

Table 1 - D2L (pre-filed)

D2L-prefiled				
End Period	Cost	Months	Interest	Cost
30-Jun-20	14.51	Elapsed	Rate	Escalation
y-end 2020	14.66	6	2.00%	0.15
y-end 2021	14.95	12	2.00%	0.29
y-end 2022	15.32	12	2.50%	0.37
y-end 2023	15.90	12	3.80%	0.58
y-end 2024	16.51	12	3.80%	0.60
y-end 2025	17.14	12	3.80%	0.63
Sep-26	17.62	9	3.80%	0.49
				3.11
Opening Cost	14.51			
Inflation increase	3.11			
Closing Cost	**17.62**			
line (Kms)	43.00			
average Cost/Km	0.41			

While reviewing the Escalation Adjustment for D2L it was identified that an error was made regarding D2L's in service date referenced in Exhibit B, Tab 7, Schedule 1, Page 5, Table 3 as well as the Escalation Adjustment. A typing error was made and referenced 2014 as the In-Service year rather than 2017 in Exhibit B, Tab 7, Schedule 1, Page 5, Table 3. Additionally, there was an error with the Escalation Adjustment for D2L and has been correct to adjust from June 30, 2020, as filed, to the actual in-service date of August 30, 2017. Table 2 below adjusts for that correction.

Table 2 - D2L (corrected)

D2L - corrected				
End Period	Cost	Months	Interest	Cost
30-Aug-17	14.51	Elapsed	Rate	Escalation
y-end 2017	14.61	4	2.00%	0.10
y-end 2018	14.90	12	2.00%	0.29
y-end 2019	15.20	12	2.00%	0.30
y-end 2020	15.35	6	2.00%	0.15
y-end 2021	15.66	12	2.00%	0.31
y-end 2022	16.05	12	2.50%	0.39
y-end 2023	16.66	12	3.80%	0.61
y-end 2024	17.29	12	3.80%	0.63
y-end 2025	17.95	12	3.80%	0.66
Sep-26	18.46	9	3.80%	0.51
				3.26
Opening Cost	14.51			
Inflation increase	3.95			
Closing Cost	**18.46**			
line (Kms)	43.00			
average Cost/Km	0.43			

Table 3 - A6P

A6P				
End Period	Cost	Months	Interest	Cost
30-Jun-20	6.03	Elapsed	Rate	Escalation
y-end 2020	6.09	6	2.00%	0.06
y-end 2021	6.21	12	2.00%	0.12
y-end 2022	6.37	12	2.50%	0.16
y-end 2023	6.61	12	3.80%	0.24
y-end 2024	6.86	12	3.80%	0.25
y-end 2025	7.12	12	3.80%	0.26
Sep-26	7.32	9	3.80%	0.20
				1.29
Opening Cost	6.03			
Inflation increase	1.29			
Closing Cost	**7.32**			
line (Kms)	15			
average Cost/Km	$ 0.49	(000s)		

Table 4 - H9K

H9K				
End Period	Cost	Months	Interest	Cost
30-Mar-20	11.94	Elapsed	Rate	Escalation
y-end 2020	12.12	9	2.00%	0.18
y-end 2021	12.36	12	2.00%	0.24
y-end 2022	12.67	12	2.50%	0.31
y-end 2023	13.15	12	3.80%	0.48
y-end 2024	13.65	12	3.80%	0.50
y-end 2025	14.17	12	3.80%	0.52
Sep-26	14.57	9	3.80%	0.40
				2.63
Opening Cost	11.94			
Inflation increase	2.63			
Closing Cost	14.57			
line (Kms)	32.00			
average Cost/Km	0.46			

b) Details in Table 1 regarding the three comparator projects and the Sault #3 Project are correct with a slight rounding modification to the Sault #3 Project, the total length of line reconductored is 69.4km.

c) The total cost of the Project is estimated to be $68.8M, including overheads, capitalized interest and $5.3M in removals. As described in Exhibit B, Tab7, Schedule 1, the total line capital work is estimated to be $59.3M (excluding $4.9M in removals) and the total station capital work is estimated to be $4.2M (excluding $0.33M in removals). As requested, the total line capital work can be further broken down as follows:

Line Section	Length (km)	Project Costs ($000's)	Unit Cost ($000's/km)
Third Line TS to Str 129	21.1	$ 13,442	$ 637.1
Str 129 to Mackay TS	69.4	$ 45,863	$ 660.8
TOTAL	90.5	$ 59,304	$ 655.3

d) The unit costs for two portions based on c) are $637.1K and $660.8K respectively, therefore the weighted unit cost is ($637.1K x 21.1/90.5 + $660.8K x 69.4/90.5) = $655.3K.

e) HOSSM agrees that the weighted average cost could be obtained by completing the calculation as shown in part d.

However, the weighted average cost can be calculated more simply by dividing the total costs by the 90.5km length of the line as submitted in evidence by HOSSM. This is explained as follows:

$$\text{Total Line Cost} = \text{(Weighted Average cost/km) x (Total Length in km)}$$

$$\text{Weighted Average cost/km} = \text{(Total Line Cost)/(Total Length in km)}$$

Thus, there is no need to derive the weighted cost from the cost of the individual line sections. The answer will always be the same.

f) The cost estimate, both lines and stations, as provided by HOSSM in Exhibit B, Tab 7, Schedule 1, represents a AACE Class 3 (+30/-20%) cost estimate for the Project assuming an in-service date of September 2026[1]. The Project's cost estimate does not represent forecast Project costs in today's (i.e., 2023) dollars. Therefore, the

[1] As per the Project's in-service forecast date in the Project Schedule included in Exhibit B, Tab 11, Schedule 1.

Project cost estimate does not require re-estimation for any inflationary cost escalation adjustment.

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OEB STAFF INTERROGATORY - 05

Reference:

Exhibit B-7-1, Page 3

Preamble:

In its pre-filed evidence, HOSSM includes a detailed 50-year Net Present Value (NPV) analysis using a 5.65% discount rate and a NPV sensitivity analysis using varying values for the price of energy. The results of the NPV energy price sensitivity analysis is provided in Table 2.

HOSSM notes that losses calculated based on 2022 average Hourly Ontario Energy Price (HOEP) of $47.3/MWH. HOSSM states that it does not have any basis to deviate from the HOEP and it is the only current settlement mechanism to recover transmission line loss costs.

Table 2 - NPV Energy Price Sensitivity Analysis

Refurbishment Options[1]	Alt 1	Alt 2 (preferred)	Alt 3	Alt 4	Alt 5
Capital cost ($M)	68.72	68.81	69.43	69.56	74.57
Annual Losses (MWh)	5,031.5	4,476.4	4,848.4	4,179	3,287.7

Energy Price $/MWHR	Alt 1	Alt 2 (preferred)	Alt 3	Alt 4	Alt 5
47.30	-63.18	-62.63	-63.58	-62.92	-66.15
89.00	-68.22	-67.11	-68.43	-67.11	-69.44
120.00	-71.96	-70.44	-72.04	-70.21	-71.88

[1] Cost estimates for alternatives are Association for the Advancement of Cost Engineering Class 3 estimates.

Interrogatory:

a) Please confirm why it is appropriate to use HOEP to conduct the NPV sensitivity analysis opposed to including Global Adjustment in addition to HOEP.

Response:

a) The costs associated with system-wide transmission line losses are recovered by the IESO under the Net Energy Market Settlement Uplift. The charge covers the difference between the amount paid to suppliers for the commodity and the amount paid by buyers in a given hour. The IESO uses the HOEP within the Net Energy Market Settlement Uplift charge to recover the cost of line losses.

OEB STAFF INTERROGATORY - 06

Reference:

Exhibit B-5-1, Pages 1-3

Preamble:

When describing the alternatives for the refurbishment between Third Line TS and Mackay TS, HOSSM notes that under Alternative 2, the existing 336 kcmil conductor between Third Line TS and Goulais Bay TS is retained but the 266.8 kcmil conductor between Goulais Bay TS and Mackay TS is replaced with a new 477 kcmil conductor.
The conductor section from Third Line TS to Goulais Bay TS was replaced in 1991 with the 336 kcmil conductor that is currently in place.

Alternative 4 is described to be similar to Alternative 2, with the exception that the conductor on the entire line is replaced with the new 477 kcmil conductor.

Table 1 notes Total Annual Cost under Alternative 2 to be $5.65 million and under Alternative 4 to be $5.68 million. Alternative 2 is noted to be HOSSM's preferred option.

Interrogatory:

a) Please elaborate on HOSSM's rationale for preferring Alternative 2 over Alternative 4, given the small difference in Total Annual Cost.

b) As part of the cost analysis for Alternative 2, to what extent has HOSSM factored in the future replacement cost of the conductor between Third line TS and Goulais Bay TS when it reaches its end of life. This would be in reference to Alternative 4, where such a replacement would likely occur at a much later time.

Response:

a) HOSSM preference for Alternative 2 versus Alternative 4 is based on the total capital cost of the project. The total cost of Alternative 2 is $750,000 less than that of Alternative 4 ($68.81M versus $69.56M). As Table 2 of Exhibit B-5-1 indicates Alternative 2 is more economical over the NPV study period of 50 Years. Alternative 4 would be economically neutral to the rate payer only if the average increase to HOEP is about $42 higher than the $47.30 HOEP for the entire 50 years used in the analysis.

b) HOSSM did not factor in the cost of the replacement of the 336 kcmil conductor between Third Line TS and Goulais Bay TS in the NPV analysis. Assuming a 90-year life of the conductor, the conductor replacement would happen in 2081 which is beyond the 50-year period used for the NPV analysis.

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ALGOMA POWER INC. (API) INTERROGATORY - 01

Reference:
Exhibit B-5-1

Preamble:
The Sault #3 line between Third Line TS and Mackay TS was put into service in 1929 with a 266.8 kcmil ACSR conductor. In 1991, conductor on the line section between Third Line TS X Structure 129 (1 km south of Goulais Bay TS), was replaced with a 336 kcmil ACSR conductor. All components of the neti reline such as wood pole structures, shield wires, insulators, hardware, conductor etc. are required to be replaced except for the 336 kcmil ACSR conductor which was replaced in 1991.

HOSSM considered five alternatives for the refurbishment of the line between Third Line TS to Mackay TS.

Interrogatory:
In the five alternatives considered for the refurbishment of the line, was there any additional reliability improvement identified or considered that would further reinforce the resiliency of this line (e.g., improving overvoltage and surge/lightning protection)?

Response:
Any line reinforcement and/or improvement in terms of safety, reliability and resilience are addressed through engineering design and construction. All five alternatives, identified in Exhibit B, Tab 5, Schedule 1, provide the same reliability and resiliency benefits. The referenced exhibit only focuses on capital cost and line loss saving comparisons (i.e., not reliability).

Please see below for how all alternatives address reliability improvements.

1. Mechanical strength design for Sault #3 – The loading criteria which has been applied includes high wind, heavy ice, wind and ice, and other construction related loads. The loading criteria are above the original line design criteria which only included wind and ice. This loading criteria will improve the physical safety and reliability of the line and increase the resilience to more severe weather events expected to occur due to climate change.

2. The structures used for this project will have better shielding angle which will improve the operation reliability and surge/lightning protection to conductors.

3. The shield wires used for this project are Alumoweld (aluminum welded steel wire) and OPGW which both have better conductivity compared to existing galvanized steel wire which will improve protection from lightning and fault.

4. Removing third party owned ADSS and replacing with OPGW is a superior solution that will provide more reliable communication between stations and eliminate the possible interruption from third party facilities/systems during both normal operation and maintenance.

ALGOMA POWER INC. (API) INTERROGATORY - 02

Reference:
Exhibit B-7-1, Page 7 of 8

Preamble:
The remainder of the scope of work for the station-related component for Sault #3 affects Third Line TS, Goulais TS, and Batchawana TS. As a condition of the SIA approval, the IESO has requested Remedial Action Scheme ("RAS") modifications and upgrades at Third Line TS. SCADA communications will be transferred from ADSS fiber to wireless communication at Batchawana TS and Goulais TS as a result of the ADSS fiber removal. This activity is needed to maintain existing communication channels at both Batchawana TS and Goulais.

Interrogatory:
Based on noted scope of work within the three stations (Third Line TS, Goulais TS and Batchawana TS), it does not appear that the scope of the refurbishment (replacement of conductor, poles and hardware) includes assets within these stations. Please confirm whether conductor, pole and hardware asset are planned to be replaced within these stations as part of this project.

Response:
At Batchawana TS the scope of the refurbishment includes replacement of conductor, pole #233, hardware and associated line taps located within the existing Batchawana TS fence boundary.

At Goulais TS the scope of the refurbishment includes replacement of conductor, hardware and associated line taps located with the Goulais TS fence boundary. There are no Sault #3 (as defined in the Application) poles located within the existing Goulais TS fence boundary.

At Third Line TS there are no Sault #3 poles located within the existing Third Line TS fence boundary. The delineation point for the conductor replacement is the line entrance structure located within the existing Third Line TS fence boundary.

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ALGOMA POWER INC. (API) INTERROGATORY - 03

Reference:
Exhibit B-11-1 and Exhibit G-1-1, Attachment 1

Preamble:
Project Schedule

Preliminary Outage Impact Assessment

To perform this refurbishment, outages on circuits Sault # 3 will be taken in a manner that results in minimal impact to HOSSM's customers supplied by circuit Sault # 3. Outage schedule will be made available during the execution phase of the Proposed Project and will be established in consultation with area customers. The outage duration, if any, will be minimized and risk managed with proper outage planning and co-ordination.

Interrogatory:
Based on the proposed construction schedule (34 months – November 2023 to August 2026), how is HOSSM proposing to manage the outage impact and overall reliability of the Sault #3 line during construction?

Response:
As per Figure 1 in Exhibit G-1-1, Attachment 1, the Sault #3 transmission line is supplied from Mackay TS and Third Line TS. As such, customers will be supplied from one of the two sides when one of the three line sections are being refurbished. HOSSM will make an effort to work with customers to try to minimize outage impact. Outage restriction windows based on current information have been provided to the external contractor selected for the procurement and construction of the project. A detailed outage plan will be developed in collaboration with the selected external contractor and project stakeholders prior to construction mobilization.

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PERIMETER FOREST LIMITED PARTNERSHIP
INTERROGATORY - 01

Reference:

Reference our letter to Carla Molina – Hydro One Networks Inc., Senior Regulatory Coordinator dated August 23, 2023.

Preamble:

Perimeter Forest Limited Partnership (PFLP), by its general partner, Perimeter Forest GP Inc. owns and manages 147,882 (+/-) acres of forest property including the Townships of Larson (part of), Loach (part of), Home (part of), Raaflaub, Tolmonen, Tronsen, Vibert, Davieaux and Desbiens (part of). The Sault #3 transmission line refurbishment project under consideration traverses the PFLP property, specifically through the Townships of Home, Tolmonen and Tronsen.

The PFLP property is operated under an improved forest management protocol with the intension to foster forest growth thereby promo□ng carbon sequestration and biodiversity. In addition, our property is pursuing and will be under Forest Stewardship Council (FSC) certification.

In 2016, prior to PFLP's ownership, the then-owner Algoma Timberlakes Corpora□on granted Great Lakes Power Holding Corp. an easement (Easement) into perpetuity allowing for the use and maintenance of the electricity transmission line corridor. Through a name change and establishment of partnership the grantee is now Hydro One Sault Ste. Marie LP (HOSSM). The Easement does not grant HOSSM rights to natural resources within the Easement, these remain the property of PFLP.

PFLP maintains an extensive network of roads throughout the property and is concerned that construction traffic will cause damage to the road infrastructure thereby inflicting unexpected and excessive costs to PFLP. Additionally, PFLP hosts some 240 lessees with recreational camps throughout the property. Road safety and fire mitigation during construction execution of the refurbishment project are paramount.

Interrogatory:

a) Cutting or brushing could negatively impact PFLP's property, business model, and FSC compliance. Will HOSSM be needing to do any brushing beyond reasonable normal transmission line maintenance activities?

b) PFLP has several natural gravel pits local to the project that may be of interest to HOSSM. PFLP is amenable to discussing the project's needs, perhaps mitigating costs for gravel haulage from more distant sources of gravel and thereby reducing wear and tear on PFLP's road infrastructure. Will HOSSM have a need for gravel resources from within the Easement or within the PFLP property boundary?

c) PFLP continues to expend significant financial resources on maintenance of its road infrastructure. Without the benefit of understanding HOSSM's construction execution plan but with consideration of the topography and natural water features within the Easement area, it seems reasonable that HOSSM will require use of PFLP's roads. Would HOSSM describe the extent to which it will need use of PFLP's road network?

d) Will modifications to PFLP's roads be necessary to accommodate the project, and if so, would HOSSM identify the location of these modifications and HOSSM's intention to refurbish post construction?

e) PFLP hosts some 240 lessees with recreational camps throughout the property. Road safety during the planning and execution stages of the refurbishment project is paramount. Assuming HOSSM will need to use our road network, would HOSSM please describe safety protocols that will be implemented and maintained during the transmission line refurbishment project?

f) Given the nature of PFLP's business and inherent need to protect our forest assets and lessees, would HOSSM describe its fire safety protocol including emergency preparedness?

g) PFLP will require indemnification from any and all liabilities associated with the transmission line refurbishment project. Would HOSSM acknowledge and confirm?

Response:

a) HOSSM does not anticipate requiring any more brushing than what is typically required for normal transmission line maintenance activities.

b) HOSSM will only be using materials from approved Hydro One quarries. Should HOSSM require the use of gravel from within the PFLP lands it will comply with the terms of the easement registered as instrument no. AL166482 (the "Easement").

c) The Project is for all intents and purposes, a sustainment project as documented in Exhibit B, Tab 1, Schedule 1. Consequently, HOSSM will utilize existing roads to access the right-of-way corridor during construction in accordance with the Easement.

d) Please refer to part c).

e) The safety protocols that will be implemented will include assigning kilometer markers, curve signs, and any applicable hazard signs and speed limit signs to the existing roads that are planned to be used to access the right-of-way corridor during construction.

f) Fire mitigation measures and emergency preparedness protocols for the Project include, but are not limited to, the following:

- Maintain construction equipment in good working condition and free of the accumulation of flammable material.
- Maintain an adequate supply of fire-fighting equipment on hand as regulated by provincial regulations and government agencies.
- Each vehicle will carry the fire-fighting equipment (e.g., fully charged fire extinguisher, shovel) required by the Fire Protection and Prevention Act,1997 (Ontario).
- Turn-off engines prior to refueling of equipment.

g) The Easement includes an indemnification clause at paragraph 14 related to the use, work and activities granted in the Easement.

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BATCHEWANA FIRST NATION ("BFN") INTERROGATORY - 01

Reference:

Exhibit B-3-1, Page 1 of 2

Preamble:

> ... there is no need to upgrade the circuit in terms of either line voltage and/or ampacity. HOSSM's minimum standard transmission line conductor of 411 kcmil ACSR is sufficient to meet the future anticipated ampacity needs of the circuit.

Interrogatory:

1. Does Hydro One Sault Ste. Marie Limited Partnership ("HOSSM") agree with the Independent Electricity System Operator's ("IESO") contention that there is no need for a line voltage upgrade?

2. Did HOSSM and the IESO discuss the potential of a 230kv upgrade?

3. What are the future anticipated ampacity needs of the circuit?

4. When does HOSSM intend to upgrade the Sault #3 line to 230kv?

5. The IESO is proposing major upgrades that would include new assets connecting South Porcupine and Wawa as well as Hamner and Sault Ste. Marie. Does the development of these projects provide any impetus to reexamine transmission capacity from Wawa to Sault Ste. Marie?

Response:

1. Yes, HOSSM agrees with IESO's analysis that a voltage upgrade on the Sault No.3 circuit would not be cost effective for meeting identified Regional or Bulk needs driven by reliability criteria.

2. Yes, HOSSM and IESO, as members of the East Lake Superior regional planning Technical Working Group, discussed the 230 kV upgrade option. Please refer to Exhibit B, Tab 3, Schedule 1, Attachment 1 in HOSSM's application for details of this option.

3. The ampacity of the refurbished line is sufficient to meet the load forecast in the area based on the most recent information available, which is presented in the East Lake Superior Integrated Regional Resource Plan (IRRP). Future ampacity needs driven by

electricity demand growth are not anticipated since the load forecast received for Batchewana TS and Goulais TS, the stations supplied via Sault No.3, is flat.

4. HOSSM does not currently have a plan to upgrade Sault #3 to 230 kV.

5. In the IESO's *Need for Northeast Bulk System Reinforcement* ("Northeast Bulk Plan"), several options to address identified needs were considered, including an option to reinforce the corridor between Wawa and Sault Ste. Marie. The Northeast Bulk Plan showed that reinforcements between South Porcupine and Wawa and between Hanmer and Sault Ste. Marie were the most cost-effective means of meeting the identified needs. The development of these projects does not provide an impetus to re-examine transmission capacity between Wawa and Sault Ste. Marie because the plan already considered and rejected this option in its analysis.

BATCHEWANA FIRST NATION ("BFN") INTERROGATORY - 02

Reference:

1. Exhibit B-3-1, Page 1 of 2
2. Exhibit B-5-1, Page 1 of 4

Preamble:

HOSSM has considered ratepayer benefits, economical line loss considerations, and reliability when assessing the alternatives to refurbish the Sault #3 line to reinforce the transmission system in the Sault Ste. Marie region.

HOSSM considered five alternatives for the refurbishment of the line between Third Line TS to Mackay TS.

Interrogatory:

1. Did HOSSM explore a 230kv upgrade alternative and if not, provide reasons.

2. What is the estimated cost differential between the proposed solution and a 230kv upgrade?

3. Electricity demand is forecast to grow rapidly in Northeastern Ontario over the next decade due to new mines and major industrial electrification initiatives, such as Algoma Steel' s planned conversion to electric steelmaking. What consideration did HOSSM give to the need for clean, green, zero-emissions electricity?

4. Was the economic impact on Batchewana First Nation ("BFN") or other power generation companies in the region considered when reviewing alternatives? Does the proposed refurbishment adequately consider BFN's long-term energy plans?

5. What benefits are being derived from the rebuild that will support growth within the electricity sector within BFN's Original Reserve?

6. How much consultation has HOSSM had with stakeholders who are not intervenors in this matter?

7. How will the Project benefit the system from a development perspective?

Response:

1. Please refer to the answer at Exhibit I, Tab 4, Schedule 1, Part 2.

2. The 230kV upgrade option would drive substantial additional costs. Apart from the higher cost of the 230kV line itself, the project would require extensive work at both Third Line TS and Mackay TS to connect the upgraded line at these two stations. Both Batchewana TS and Goulais TS would need to be converted to 230kV stations. Further, the re-termination of the Sault No.3 circuit on the 230 kV bus at Third Line TS would remove Sault No.3 as a supply to the 115 kV system at Third Line. This would advance the need, identified in the East Lake Superior IRRP, for additional auto-transformer capacity at Third Line.

3. HOSSM transmission line assets are used to support Ontario's aim to have a clean, green, zero-emission electricity system.

   Electricity system planning recommends cost-effective solutions to address needs, which are identified based on planning criteria that assess the ability of the electricity system to supply forecast electricity demand while maintaining reliability and quality of service. This is consistent with the criteria established by the OEB for assessing potential new transmission projects through the LTC process (see section 4.2.3 of the OEB's *Filing Requirements for Electricity Transmission Applications: Chapter 4, Leave to Construct and Related Matters under Part VI of the Ontario Energy Board Act*). The bulk and regional plans developed for this area considered forecast demand growth and provided recommendations to address identified supply and reliability needs. While non-emitting supply can be considered in the context of a regional or bulk plan, it would be considered as an option to meet identified needs, not as a need itself. Non-emitting supply would be evaluated against other alternatives based on technical feasibility and cost.

4. Sault #3 is a refurbishment project which focuses on restoring the aging 115kV line. The economic impact of a planning recommendation on specific parties is not within scope of the regional or bulk planning processes in Ontario. The IRRP process does include consideration of energy plans and initiatives in the region known at the time of the planning cycle. Please refer to the answer to Exhibit I, Tab 4, Schedule 2, Part 3 for a discussion of the criteria and objectives of the planning process. Both the East Lake Superior IRRP and the Northeast Bulk Plan considered non-wires alternatives and found that transmission was more cost-effective at meeting the identified needs

5. The Sault #3 project is driven by the need to refurbish the existing 115kV circuit, however, the rebuild of Sault #3 will provide for increased capacity (growth) and reliability to Batchewana TS and Goulais TS, that help supply parts of BFN's Original Reserve. The rebuild will also provide for increased capacity and reliability as the network path for (1) generation connected within the Mackay area (within the BFN's Original Reserve), and (2) 115 kV connected load supplied from Third Line TS (within the BFN's Original Reserve).

6. A Full Class Environmental Assessment has been completed for this project, initiated in June 2022, which included consultation with stakeholders. A complete list of stakeholders consulted on this Project is outlined in the Final Environmental Study Report in Appendix A-1, which can be viewed on the Project website located in the link provided below.
   Sault-3-Transmission-Line-Refurbishment-Project-Final-ESR.pdf (hydroone.com)

7. Please refer to Exhibit I, Tab 4, Schedule 2, Part 5 for a discussion of the criteria and objectives of the planning process.

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BATCHEWANA FIRST NATION ("BFN") INTERROGATORY - 03

Reference:

Exhibit B-1-1, Page 1 of 6

Preamble:

HOSSM hereby applies to the Ontario Energy Board (the "Board" or "OEB") pursuant to s. 92 of the Act for an Order or Orders granting leave to refurbish approximately 90.5 kilometers of 115 kilovolt ("kV") single circuit transmission line named Sault #3 line between Third Line TS and Mackay TS. This line refurbishment is required to ensure that the area continues to receive a safe and reliable supply of electricity.

Interrogatory:

1. Other than ensuring the "area continues to receive a safe and reliable supply of electricity" what else will be gained from the refurbishment over the long term? Will the completed Project be able to respond to future needs or issues regarding latent demand in the area?

Response:

1. Please refer to Exhibit I, Tab 4, Schedules 1, Part’s 3.

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BATCHEWANA FIRST NATION ("BFN") INTERROGATORY - 04

Reference:

Exhibit E-1-1, Page 1 of 4

Preamble:

HOSSM will be utilizing its existing land rights, as described in the above paragraphs, for the Sault #3 Project. Should any updates of crossing permits be required, HOSSM will work with the authority under the transmission lines to appropriately update the existing crossing permits.

Interrogatory:

1. When will HOSSM negotiate the permit required by BFN for entry and use of land on BFN's Original Reserve?

2. Aside from the Notice of Application, did HOSSM provide BFN with notice of the Project?

3. If so, when was BFN first engaged?

4. Has HOSSM spent any time with the members of BFN to effectively determine any impacts the Project could have impact BFN's rights and interests, including traditional uses of the land by its members? Please outline the meeting dates and outcomes of interactions with the membership.

Response:

1. HOSSM has obtained the necessary land rights from the applicable land owner(s)_ for its Sault #3 transmission line to allow for the work to proceed.

2. Yes, the Notice of Commencement (NOC) for the Full Class Environmental Assessment was issued on June 30, 2022.

3. NOC was sent to BFN's Chief, Chief Executive Officer and Director of Lands on June 30, 2022. Subsequently, HOSSM and BFN entered into a Capacity Funding Agreement on July 28, 2022, which included the Sault #3 Project.

4. Consultation with BFN as part of the Full Class Environmental Assessment is outlined in the Environmental Study Report in Section 3.2.1.3 (pg. 3-9 to 3-11) which can be viewed on the Project website (Sault-3-Transmission-Line-Refurbishment-Project-Final-ESR.pdf (hydroone.com).

BATCHEWANA FIRST NATION ("BFN") INTERROGATORY - 05

Reference:

Exhibit E-2-1, Page 1 of 4

Preamble:

HOSSM owns and operates the Sault #3 transmission line, a 115 kV single circuit that runs between Third Line TS and Mackay TS, connecting the Montreal River area with the Sault Ste Marie area. Sault #3 is a wood pole line, approximately 90.5 km in length and runs parallel to an existing 230 kV circuit, known as K24G, along its entire route. The Sault #3 line is the only supply 5ource for two stations, Goulais Bay TS and Batchewana TS.

Interrogatory:

1. In your consultations with stakeholders, have you been able to determine how many power generation projects exists along the Sault#3 line?

2. If yes, can you provide a detailed list of all of the potential projects that you have been made privy to?

Response:

1. During consultations with stakeholders, no power generation projects were mentioned.

2. Please refer to Exhibit I, Tab 4, Schedule 2, Parts 3 and 4, as this response addresses bulk and regional planning, and considers how generation is considered.

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BATCHEWANA FIRST NATION ("BFN") INTERROGATORY - 06

Reference:

Exhibit B-5-1, Page 3 of 4

Preamble:

HOSSM therefore conducted a detailed 50-year Net Present Value (NPV) analysis using a 5.65% discount rate, to evaluate which conductor alternative provided the best NPV result. A NPV sensitivity analysis was also done using varying values for the price of energy.

Interrogatory:

1. Provide an explanation as to the discount rate value chosen. Is it prescribed or did an economic and/or financial review take place to determine the discount rate?

Response:

1. The discount rate of 5.65% was used as per the Decision on Settlement Proposal and Order on Rates, Revenue Requirement and Charge Determinants for 2023-2027 (EB-2021-0110).

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