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BY COURIER

February 21, 2019

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

Dear Ms. Walli:

EB-2018-0257 - Hydro One Networks Inc.'s Section 92 – Côté Lake Mine Connection Project – Submission regarding Procedural Order No. 2

In accordance with Procedural Order No. 2, please find attached the Submission in support of the leave to construct sought by Hydro One to complete the Côté Lake Mine facility connection Project (The“Project”) to supply mine facilities owned by IAMGOLD.

An electronic copy of this Submission has been filed through the Ontario Energy Board's Regulatory Electronic Submission System (RESS). Hard copies will be couriered shortly.

Sincerely,

ORIGINAL SIGNED BY JOANNE RICHARDSON

Joanne Richardson

Attach.

Hydro One Submission

Hydro One makes the following submission to the Board in response to Procedural Order No.2 (dated February 14, 2019). This Order specifically requests Hydro One to provide a cost estimate for only the T2R Project scope of work, and to compare that scope and cost against other comparable projects.

T2R Project Cost

The total cost of the T2R Project, which Hydro One is seeking leave to construct approval from the Board, is estimated to be \$56.3 million. The estimated capital cost associated with the Project, including overheads and capitalized interest, is shown **Table 1** below.

Table 1: T2R Project Work Costs

	Estimated Cost (\$000's)
Materials	10,660
Labour	20,425
Equipment Rental & Contractor Costs	11,988
Sundry	1,328
Contingencies	4,420
Overhead ¹	5,300
Allowance for Funds Used During Construction ²	2,200
Total Line Work	56,320

¹ Overhead costs allocated to the project are for corporate services costs. These costs are charged to capital projects through a standard overhead capitalization rate. As such they are considered "Indirect Overheads". Hydro One does not allocate any project activity to "Direct Overheads" but rather charges all other costs directly to the project.

² Capitalized interest (or AFUDC) is calculated using the Board's approved interest rate methodology (EB-2006-0117) to the projects' forecast monthly cash flow and carrying forward closing balance from the preceding month.

1 The station related work estimate for T2R is \$2.7 million, and the balance of the total
2 project cost is attributable to the line work, i.e. \$53.6 million. This does not impact
3 IAMGOLD's project capital contribution as provided in **Exhibit B, Tab 9, Schedule 1**.

4
5 The total project cost as provided in the prefiled evidence included the bundling of the
6 T2R circuit upgrade and re-energization, and the subsequent refurbishment of the
7 adjacent T61S circuit (both circuits are carried on the same towers). That total project
8 scope cost is estimated to be \$71.8M, as per **Exhibit B, Tab 7, Schedule 1**. It was
9 prepared under the assumption of a budgetary estimate with Association for the
10 Advancement of Cost Engineering ("AACE") Class 4 (-30% / +50%) level of accuracy and
11 was completed prior to Hydro One's leave to construct application to the Board. Due to
12 the time constraints for responding to the request in the Board's Procedural Order No. 2
13 to prepare a cost estimate for only T2R, the cost estimate available is an AACE Class 5 (-
14 50% / +100%) level of accuracy. Hydro One has not prepared an AACE Class 4 estimate
15 for the lines separately, but only for the combined project. As the construction project
16 scope was to complete both the T61S and T2R work together, a cost estimate was
17 prepared only for the construction of both lines together including the T2R related
18 station work. To have prepared separate estimates for the three different scopes of
19 work (Project 1 - T2R, Project 2 - T61S and Project 3 – Combined T2R/T61S) would not
20 have demonstrated an efficient process and would not have been an optimal use of
21 Hydro One's resources and time. In order to produce an AACE Class 4 estimate for T2R,
22 the AACE process requires scope isolation for only the T2R Project. After establishing
23 project scope the appropriate estimating process can then begin. The relevant costs for
24 the T2R only scope of work cannot be simply extracted from the AACE Class 4 estimate
25 for the T2R/T61S bundled Project. Estimating three individual scopes of work, of which
26 only one would have been executed on, would also have added materially unnecessary
27 cost to the actual T2R/T61S combined project. No separate AACE Class 4 (-30% / +50%)
28 estimate for T2R only was requested by, or charged to, the customer.

2.0 COSTS OF COMPARABLE PROJECTS

For lines cost comparison projects, **Table 2** compares the T2R line refurbishment cost provided above with two line refurbishment projects in Northern and Eastern Rural Ontario.

Table 2: Costs of Comparable Line Projects

Project	D2L – Martin River Jct x Crystal Falls SS Line Refurbishment (South Section)	C25H – Chats Falls SS x Havelock TS Line Refurbishment	T2R Timmins TS x Shingtree DS Line Refurbishment
Technical	Double 115 kV circuit steel towers	Single 230kV circuit steel towers	Double 115 kV circuit steel towers, 411kcmil
Length (circuit km)	34	170	115
Project Surroundings (ex. Rural?)	Northern Ontario Rural	Eastern Ontario Rural	Northern Ontario Rural
Environmental Issues	Multiple crossings, river, railroad and highways	Various water crossings	No major issues expected
In-Service Date	Sep-2016	March -2016	August – 2020
Total Project Cost	\$17.5M (Actuals)	\$70.4M (Actuals)	\$56.3M (Estimate)
Removals	-	-	Station Costs (\$2.74M)
Adjusted Project Costs	\$17.5M (Actuals)	\$70.4M (Actuals)	\$53.6M (Estimate)
Add: Escalation Adjustment (2%/year)	\$1.44M (to 2020)	\$0.66M (to 2020)	-
Total Comparable Project Costs	\$18.94M	\$6.96M	\$53.6NM
Total Cost/Circuit km	\$557k/km	\$451k/km	\$466k/km

1 Two comparable projects have been provided to illustrate the reasonableness of the
2 estimate to complete this Project. The Projects provided are the D2L–Martin River Jct x
3 Crystal Falls SS Line Refurbishment and C25H–Chats Falls SS x Havelock TS Line
4 Refurbishment Project.

5

6 The C25H–Chats Falls SS x Havelock TS Line Refurbishment Project and the T2R
7 Energization Project are of comparable length and cost per km. The D2L–Martin River
8 Jct x Crystal Falls SS Line Refurbishment Project is higher due to the far shorter distance
9 of line included in that project, and as such the longer projects in Table 2 (in excess of
10 100 km each) benefit from economies of scale since design, procurement and other
11 non-field related costs are spread over a far greater distance of line length. The longer
12 the length of the refurbishment, the more cost savings on a per km basis.