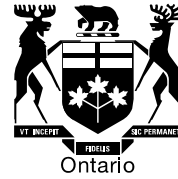


**Ontario Energy
Board**
P.O. Box 2319
27th. Floor
2300 Yonge Street
Toronto ON M4P 1E4
Telephone: 416- 481-1967
Facsimile: 416- 440-7656
Toll free: 1-888-632-6273

**Commission de l'énergie
de l'Ontario**
C.P. 2319
27e étage
2300, rue Yonge
Toronto ON M4P 1E4
Téléphone; 416- 481-1967
Télécopieur: 416- 440-7656
Numéro sans frais: 1-888-632-6273



BY E-MAIL

May 13, 2010

Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
27th Floor
2300 Yonge Street
Toronto ON M4P 1E4

Dear Ms. Walli,

**Re: Northgate Mineral Corporation
Application for leave to construct Transmission Facilities
Application Board File Number EB-2010-0150**

Please find attached the Board staff's Interrogatories with respect to the above proceeding.

Yours truly,

Original signed by

Nabih Mikhail
Project Advisor
Electricity Facilities and Infrastructure

Attachments

Board Staff Interrogatories
Leave to Construct Transmission Facilities

Northgate Minerals Corporation
EB-2010-0150

May 13, 2010

ALTERNATIVES

Interrogatory 1

Note: This interrogatory requires that the Applicant, in cases where it cannot answer because it does not have the data, to make a request to Hydro One to respond to all questions, clarifications and requests included below before the deadline.

Reference:

- 1.(1) Exh. B/Tab 4/Sch. 1/p. 1/lines 2-5
- 1.(2) Exh. B/Tab 1/Sch. 1/p.1
- 1.(3) Exh. B/Tab 3/Sch. 1/p. 1/paragraph 2.

Preamble:

- (1) The Applicant stated in part in Reference 1.(1) that:
Northgate is not a rate regulated utility and intends to turn the Transmission Line over to Hydro One Networks after construction in accordance with the terms of the Transmission System Code. As such, Northgate is not providing cost information regarding the Project.
- (2) The evidence shows that the Applicant will transfer the new transmission line to Hydro One Networks Inc. ("Hydro One"). Any price impacts of the Project, therefore, will appear to consumers through Hydro One and the transmission portion of the bill. This is due to the fact that a portion of the costs of the constructed line will be added to Hydro One's Transmission Rate Base, subject to the economic evaluation required by the Transmission System Code ("TSC"). For this reason, Board staff believes that having information from Hydro One will assist the Board in considering this application.
It should be noted that economic evaluation, would determine what capital contribution is required. What goes into Rate Base is the amount financed through the pool via the transmission rates (either Line Connection Pool rate, or Transformation Connection Pool rate or both (but separately evaluated), depending on what is included (Reference the TSC, section 6.3.1).
- (3) It is important to note that reinforcement of the transmission system (refurbishment of the 47.5 kilometres of the Hydro One line) and expansion of the transmission line (7 km) are subject to the cost responsibility rules of the TSC, and would therefore impact the transmission system customers.
- (4) The applicant stated in Reference 1.(2) that:
The current advanced mineral exploration activities at the Young-Davidson Project site are supplied by a 44 kV transmission line connected to the provincial electrical grid. The line is heavily loaded and the forecasted 17.3 MW peak load of the new mine would exceed the design capacity of the existing 44 kV transmission line.
- (5) The Applicant stated in part in Reference 1.(3) that:
Obtaining power from the provincial electrical grid will require construction of a 115 kV transmission line, as the existing 44 kV transmission cannot meet the technical requirements. A higher voltage line (such as 230 kV) is not required to meet the technical requirements of the Young-Davidson Project.

Questions/Requests:

- (i) Please provide a description of the existing 44 kV line including:
 - (a) the name of the supplying Transformer Station;
 - (b) the distance from that Transformer Station to the Mine site;
 - (c) age of the line;
 - (d) existing load points and size of each;
- (ii) In regard to Reference 1.(3), please provide a detailed description of the technical requirement of the 17 MW load at the mine that a 44 kV line cannot meet.
- (iii) Indicate whether an alternative was explored to construct another 44 kV circuit on the existing pole line or not? If not provide the reasons why such an alternative was not explored.
- (iv) If construction of a second 44 kV circuit on the same pole is feasible, please provide the cost of such an alternative, which may include possible extension to the pole i.e., over-build the line, or perhaps it can be constructed below the existing circuit.
- (v) If construction of a second 44 kV circuit is feasible, provide a response to whether a second 44 kV circuit would meet the technical requirement of the 17 MW at the mine site? If not, provide the reasons for that and to also discuss what remedies are needed to meet these technical requirements such as larger conductor sizes, use of Shunt Capacitors and SVCs...etc.

Interrogatory 2

Note: This interrogatory requires that the Applicant, in cases where it cannot answer because it does not have the data, to make a request to Hydro One to respond to all questions, clarifications and requests included below before the deadline.

Reference:

2.(1) Exh. B/Tab 3/Sch. 1/p.1/paragraph 4.

Preamble:

- (1) Exploring the costs of the alternatives and the rationale for selecting the preferred alternative is important because it is related to the cost responsibility aspects covered by the TSC, which is a condition of the Transmission Licence of Hydro One Transmission Network Inc. In other words, the chosen alternative does impact the costs to consumers.
- (2) The Applicant stated in Reference 2.(1) that:
"Northgate considered a number of alternative routes for the proposed transmission facilities, see Exhibit B, Tab 3, Schedule 1, page 3 and Route C was chosen as the preferred alternative."

Questions/Requests:

- (i) Please provide the costs of all the alternatives considered in Reference 2.(1) and restated in Preamble (2), and the criteria used to select the preferred alternative
 - (c). In providing the costs for the alternatives, please break them down, where appropriate, as follows:
 - (a) Materials, by major component
 - (b) Labour
 - (c) Land acquisition
 - (d) Engineering

- (e) Other, identify major components
- (f) Commissioning
- (g) Contingencies
- (h) Overheads
- (k) AFUDC

COST RESPONSIBILITY FOR THE PROPOSED TRANSMISSION LINES [ECONOMIC EVALUATION AND CONTESTABILITY PROTOCOL]

Interrogatory 3

Note: This interrogatory requires that the Applicant, in cases where it cannot answer because it does not have the data, to make a request to Hydro One to respond to all questions, clarifications and requests included below before the deadline.

Reference:

- 3.(1) Exh. A/Tab 3/Sch. 1/p. 1/lines 7-10
- 3.(2) Exh. B/Tab 2/Sch. 1/p. 1/lines 4-7
- 3.(3) Transmission System Code /section 6.5 - Economic Evaluation of New and Modified Connections & section 6.6 - Contestability

Preamble:

- (1) In Reference 3.(1) the Applicant stated that:
"In order for the project to be completed Hydro One Networks Inc. ("Hydro One") will be refurbishing 47.5km of 115kV transmission line from Macassa Shaft No. 3 to Matachewan Junction. Northgate has been informed by Hydro One that the upgrade does not require leave to construct."
- (2) In Reference 3.(2) the Applicant stated in part that:

"A decommissioned 47.5 km section of 115 kV circuit K4 will be upgraded from Macassa Shaft No.3 to Matachewan Junction, and another 7 km of new 115 kV line will be constructed to complete the electrical connection. The substation will supply power to the Young-Davidson gold mine."

It should be noted that Section 92 creates the obligation on any person to seek leave of the Board for transmission construction or reinforcement if it is above 50 kV and is 2 km or longer in length. The evidence indicated that the line was idle for 10 years and that there was an increase in Capacity. Various sections of the TSC deal with various conditions such as: (1) for modifications (see section 6.3.2 of the TSC); (2) for replacement upon retirement of a connection facility, no capital contribution is required, (see Section 6.7.2 of TSC).

Questions/Clarifications:

- (i) Provide information regarding the refurbishing project for the 47.5 km of line between from Macassa Shaft No. 3 to Matachewan indicating:
 - (a) Is the capacity of the line increased over and above the capacity of the decommissioned line? If so indicate the original capacity level and the upgraded capacity level in MW;
 - (b) Describe in detail the reinforcements undertaken in terms of system element replacements...etc;
 - (c) What section of the TSC and/or *the Ontario Energy Board Act, 1998* did Hydro One rely on as justification for not requiring leave to construct?;

- (d) Did Hydro One perform an economic evaluation in regard to the reinforcement of the 47.5 km section in order to establish the capital contribution that would be required at Reference 3.(3) and in particular per section 6.5 of the TSC? If not please explain the reasons for not performing such an economic evaluation;
- (e) Did Hydro One perform an economic evaluation in regard to constructing the 7 km of new transmission line in order to establish the capital contribution that would be required at Reference 3.(3) and in particular per section 6.5 of the TSC? If yes please provide the information regarding the line cost and summary of the results of the economic evaluation indicating the key input parameters such as study horizon, the discount rate used in the capital contribution calculation, the estimated cost of the project...etc, as well as the printout of the economic evaluation study itself.
- (f) If the response to question (e) above is negative, please explain how would Hydro One implement subsection 6.6.2 (h) of the TSC, where it is indicated that it is an *"obligation on the transmitter to pay a transfer price that is the lower of the cost to the load customer (read Northgate Minerals Corporation) or the transmitter's reasonable cost to do the same work..."*

IMPACT ON RELIABILITY AND QUALITY OF ELECTRICITY SERVICE

Interrogatory 4

Note: This interrogatory requires that the Applicant, in cases where it cannot answer because it does not have the data, to make a request to Hydro One to respond to all questions, clarifications and requests included below before the deadline.

Reference:

4.(1) Exh. A/Tab 3/Sch. 1/p.2/line 6

Preamble:

(1) In Reference 4.(1), it is stated in part that:

The Project will have a positive impact on the reliability and quality of electricity service.

Questions/Requests:

- (i) Please identify the customers that are expected to experience improved reliability or quality of electricity service attributed to the proposed project.
- (ii) Please describe the measurable parameters that define reliability and quality of electricity service to these customers.
- (iii) For each customer identified, please provide quantitative results of the parameters identified in (ii) above, prior to the project implementation as well as projection of those parameters' results to reflect the effect of the proposed project on them.

EXPECTED TIMELINE FOR BOARD DECISION

Interrogatory 5

Reference:

- 5.(1) Exh. B/Tab 5/Sch. 1
- 5.(2) Exh. A/Tab 2/Sch. 1/paragraph 7
- 5.(3) Procedural Order No. 1, dated May 4, 2010

Preamble:

- (1) In Reference 5.(1), the Project Schedule indicates that the Applicant expects to start construction by August, 2010.
- (2) In Reference 5.(2), the Applicant expects commissioning to occur in December 2010, and January 2011.
- (2) In Procedural Order No. 1, the Board stated in part that:
"If the proceeding does not encounter unusual circumstances, it is expected that a decision would be rendered on or about July 13, 2010."

Question/Request:

- (i) Please elaborate on steps the Applicant may take to address delays to the expected Project commissioning, planned in December, 2010 and January 2011, should unusual circumstances delay a Board Decision as stated in Reference 5.(3).

STATUS OF CUSTOMER IMPACT ASSESSMENT (TSC REQUIREMENT)

Interrogatory 6

Reference:

- 6.(1) Exh. B/Tab 4/Sch. 1/p. 1/lines 7-8

Question/Request:

- (i) Please provide an estimate of when the final Customer Impact Assessment is expected to be issued by Hydro One.

STATUS OF THE ENVIRONMENTAL ASSESSMENT

Interrogatory 7.

Reference:

7.(1) Exh. B/Tab 6/Sch. 1/p. 1

Questions/Requests:

- (ii) Please indicate whether there were comments or requests received to elevate the project to an individual environmental assessment since the date of publishing the Environmental Screening Report in January 2010.
- (iii) Please provide an estimate of when the final Environmental Assessment approval is expected;
- (iii) Please confirm that the federal-provincial Memorandum of Understanding with Ontario, which combines the federal screening with the provincial environmental review, is applicable to this Project

STATUS OF OTHER REQUIRED APPROVALS

Interrogatory 8

Reference:

8.(1) Exh. B/Tab 6/Sch. 1/p. 2

Questions/Requests:

- (i) At Reference 8.(1), please provide a status update where relevant to any or all of the four items listed under "Provincial Environmental Approvals".