EB-2011-0394

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15, Schedule B;

AND IN THE MATTER OF an application by McLean's Mountain Wind LP for an Order granting leave to construct a new transmission line and associated facilities.

MCLEAN'S MOUNTAIN WIND LIMITED PARTNERSHIP
RESPONSES TO BOARD STAFF INTERROGATORIES

DELIVERED MARCH 30, 2012

Interrogatory #1

Reference(s):

a) Exhibit B, Tab 1, Schedule 1, page 1, paragraph 6

Exhibit E, Tab 1, Schedule 1, page 4

b) Exhibit B, Tab 2, Schedule 1, page 1

Exhibit D, Tab 2, Schedule 1, page 2

Preamble:.

References a) suggest that the connections switching station will be owned and operated by McLean. The references c) and d) indicate experience with the ownership and operation of generating facilities, but do not specifically mention transmission facilities.

Query/Request:

1) References a) Please confirm that McLean will be the owner and operator of the Connection /Switching Station

Response:

McLean's Mountain Wind Limited Partnership ("McLean") confirms that it will be the owner and operator of the Connection/Switching Station.

2) What is the Applicant's experience in building, owning and operating a transmission line, transformer station and switching facilities such as is planned for this application? Please provide examples of such projects undertaken.

Response:

Northland Power Inc. ("Northland") is a 50% partner in McLean. Northland, under a management agreement with McLean, will be responsible for the development, construction and operation of the facility. The following projects, all of which include a transmission line, transformer station and switching station were built and are still owned and operated by Northland.

Ref	Facility	Size [MW]	Voltage [kV]	Length of Tx Line [M]	Operated Since
1	Cochrane Power Corporation	35.8	115	6,000	1989
2	Kirkland Lake Power Corp.	102	115	4,000	1990
3	Iroquois Falls Power Corporation	30	230	8,000	1996
4	Thorold CoGen L.P.	305	230	600	2010

Additional information on the above facilities can be found in Exhibit B, Tab 2, Sch. 1 of the Application.

3) References b) From what remote location will the switching station and other facilities be monitored and controlled?

Response:

The switching station and other facilities will be monitored and controlled from the project office on Manitoulin Island and monitored remotely from Northland Power Inc.'s Renewable Resource Monitoring Centre in Kingston Ontario.

4) Does McLean have, or plan to have, an Operating Agreement with Hydro One and the IESO for control and monitoring?

Response:

No. Control and monitoring will be done by Northland Power Inc. under a management agreement with McLean.

5) Please indicate whether the company intends to make use of contractors. Please identify what the capabilities of any contractors are or would be and provide a summary of the experience of each contractor.

Response:

As stated in 4) McLean will contract with Northland Power for the monitoring and control of the facility. Please see McLean's response to question (2) above with respect to Northland's capabilities and experience with projects of this kind.

Interrogatory #2

Reference(s):

None

Preamble:.

The proposed line would be privately owned and located in areas where other renewable generation facilities could be sited, and that may wish to connect to the line.

Query/Request:

1) As a privately owned line, does McLean see the possibility of accommodating requests for other generators to connect to the proposed line?

Response:

This line will not be subject to open access, and McLean is not constructing this line with the intention of providing access to other parties. The line is sized for approximately 100 MW. Currently McLean is contracted for 60 MW, but has applied for an additional 40 MW of FIT contracts. Should these additional contracts never be realized McLean is open to consideration of allowing others to connect.

2) On what basis would McLean expect to address such requests and facilitate such connections?

Response:

In the event that capacity were available in the future and requests were made for connection to the proposed line, McLean would consider such requests in the context of the regulatory environment at that time and the commercial terms being offered by requesting party (for example, an agreement to cover the costs related to transmission infrastructure upgrades). McLean would attempt to cooperate with Hydro One and any third party to determine an appropriate arrangement. Beyond this, McLean has not considered the basis on which it would facilitate such connections.

Interrogatory #3

Reference(s):

Exhibit B Tab 1, Schedule 1, paragraph 4.

Preamble:.

Board staff requests information about other utilities that may be affected by the proposed transmission line.

Query/Request:

1) Please identify all local authorities, operators and owners of electrical distribution and transmission existing facilities, non electrical facilities, such as water pipes, railway lines etc along the route of the proposed transmission line.

Response:

Please refer to Attachment 3.

2) Does the proposed transmission line cross or run parallel in a right of way or road allowance with any other distribution or transmission or other utility facilities?

Response:

Yes. Please see Attachment 3 accompanying these responses.

3) For each of the instances identified in part 2) above please provide

a) the name of the distribution or transmission authority

b) the nature of the utility

c) the location of the crossing or parallel section

d) the distance for which the other distribution or transmission route runs parallel, or is within 25 metres of the proposed transmission line.

Response:

Please see Attachment 3.

4) Please identify any proposed approaches to avoid possible disruption or interference for such facilities.

Response:

Please see Attachment 3.

Interrogatory #4

Reference(s):

Exhibit B, Tab 1, Schedule 1, page 3 and 4

Preamble:

There were numerous reports provided as part of the REA process, listed on pages 3 and 4 of the reference. The Applicant planned to post the Final REA Application Submission once it is available on the Ministry of Energy's website. The Board will likely be examining the specific routing of the transmission line and a Leave to Construct usually is subject to the granting of the REA certification. Therefore Board staff seeks information to enable verification that the REA accurately reflects the line for which Leave to Construct has been provided.

Query/Request:

Please:

1) Advise of the posting of the Final REA Application;

Response:

The REA Application was posted on the Environmental Bill of Rights web site November 24, 2011 and taken down from this website on January 27, 2012. It is also posted on the project website at the following address:

http://mcleansmountain.northlandpower.ca/

2) Provide a CD or DVD copy of the reports for the record

Response:

A CD copy of the reports accompanies these responses.

3) Identify the location within those reports in which the routing of the transmission line is identified and can be confirmed as identical.

Response:

The location of the transmission line can be found in the following reports which form part of the REA Application:

a) Consultation Report, Appendix C-1 and C-3

b) Project Description Report, Appendix A

c) Construction Plan Report, Appendix A.

In all of the above reports the routing of the overhead portion of the transmission line is identified and can be confirmed as identical to the routing shown in this Leave to Construct Application. For the underground and submarine portion of the transmission system the route is essentially the same. However, recent developments in the negotiations of the lease agreement for Goat Island and the movement of the Transition Station further inland have resulted in a slightly modified and improved route. This modified route can be found in the drawing shown in Attachment 1 to this reply.

4) Indicate if there are any differences between the routing of the line as reflected in the REA and in the current application.

Response:

There are slight differences between the routing of the line as reflected in the REA and in the current Application. Please see the Applicant's reply to Interrogatory No. 4(3) above and Attachment 1 hereto.

Interrogatory #5

Reference(s):

a) Exhibit K, Tab 1, Schedule 1

b) Exhibit K, Tab 1, Schedule 2

Preamble:

Permits and Approvals for the project are required.

Query/Request:

1) Regarding reference a) Please provide an updated list of required permits and approvals for completion of the Facility and include the current status and the timeline for obtaining each permit and approval.

Response:

Please see the following table:

Approval Agency	Permit Description	Status
Department of Fisheries and Oceans	*Fisheries Act* subsection 35(2) Authorization for watercourse crossing (or Letter of Advice if determined to be no HADD)	Application previously submitted – DFO requested additional details regarding construction – Application to be resubmitted
Transport Canada	*Navigable Waters Protection Act* (underground cable)	Previously submitted with draft alignment. Application to be submitted with final alignment
Ministry of Natural Resources	Approval and Permitting Requirements under REA (Clearance Letter Obtained)	MNR sign-off was obtained
	Species at Risk Permit	Draft application has been submitted to MNR as part of application for larger wind farm project

	Water Crossings Work Permit under Regulation 453/96 of the *Lakes and Rivers Improvement Act*	Application submitted – pending SAR permit review
	Work Permit for Watercourse Crossings under The *Public Lands Act.*	Application submitted – pending SAR permit review
Ministry of Culture	Clearance under the *Heritage Act*	MTC Clearance provided
Ministry of Transportation	Compliance with *Highway Traffic Act* and Road Safety	Need for permit for works in proximity to Hwy 6 to be confirmed
Ontario Energy Board	Leave to Construct Transmission Facilities under Section 92 of the *OEC Act*	Application under review
Independent Electricity Market Operator	System Impact Assessment - Integration of project with Hydro One's transmission and distribution infrastructure	Obtained
	Customer Impact Assessment - Integration of project within Hydro One and effects to customers	Obtained
	Capital Cost Recovery Agreement	Ready for signing
	Registration of Metering Service	To be finalized at commissioning
Electrical Safety Authority	Connection Authorization	To be finalized at commissioning
Manitoulin and the Islands	Road User Agreement	Obtained

2) Regarding reference b) Please indicate if "tenure" for the submarine cable has been granted.

Response:

Tenure for the submarine cable has not yet been granted. However, in Exhibit K, Tab 1, Schedule 2 to the Application, McLean has provided a copy of correspondence from the MNR stating that tenure would be granted "Upon approval of the work permit and completion of the installation of the submarine cable...."

Interrogatory #6

Reference(s):

Exhibit D, Tab 2, Schedule 2 Figure A-2 "Project Components Site Plan**".**

Preamble:.

The referenced drawing is a plan view of the transmission line and various items in the area.

Query/Request:

Please explain what are "noise receptors", and their purpose.

Response:

Noise receptors are permanent dwellings or spots on accessible vacant lots where a permanent dwelling might reasonably be built. As part of the REA process McLean is required to model the noise emissions from the components of the wind farm to ensure that the levels at all the noise receptors do not exceed the provincial standard.

Interrogatory #7

Reference(s):

a) Exhibit E, Tab 1, Schedule 2, "Single Line Diagram" No. E-03".

b) Exhibit E, Tab 1, Schedule 3, "115kV-34.5kV Substation Relay Protection Single Line Diagram" No. P09052-EPT-D1-200 "marked "Preliminary for Proposal Use Only"

Preamble:

Board staff request clarification of information in the above drawings.

On the drawing reference a), in note 4 it is stated that "It is proposed that 115kV line from windfarm to HONI S2B will arrive at 90° and the connection point will be at S2B line tower. The tower will be selected later." This suggests that the location of the termination is not known. This drawing is not marked "preliminary".

Query/Request:

a) Regarding reference a) if the location of the switching station was not known at the time the drawing was produced, as is suggested, has it since been fixed?

Response:

CP and the Applicant are continuing their discussions in this regard, however, at this time, the proposed location of the switching station is as set out in the drawing titled "Goat Island Proposed Easement", accompanying these responses as Attachment 2.

b) If the location of the switching station has not been fixed, is the route of the line to be modified in any way?

Response:

Please see the Applicant's comments in response to Interrogatory No. 7(a) above. This combined with a modified proposed route for the buried cable on Goat Island has resulted in a slightly modified proposed route as shown on Attachment 1.

c) Regarding reference b) are there any local sources of power at the Grid switching station for charging of the batteries and auxiliary power?

Response:

Yes. Station services at the switching station are supplied directly off the 115 kV connection through a single phase to ground auxiliary transformer.

d) The reference b) drawing indicates a single connection to the local utility. Are there any sources of power at the generating and switching end transformer station for black start purposes? Are they required for safely restoring the line to service following an extended outage?

Response:

An emergency diesel generator connection is provided to supply auxiliary loads at the switching station and transformer substation to enable black start following extended outages. Such emergency power sources are required for safely restoring the line to service following an extended outage.

Interrogatory #8

Reference(s):

a) Exhibit E, Tab 1, Schedule 4, Typical Sections and Cable Details, Drawing Nos. MM-02 through MM-05

b) Exhibit E, Tab 1, Schedule 5,"115kV Transmission Overhead Line, Typical Right of Way Detail", Drawing No.1106-P003.

c) Exhibit D Tab 2, Schedule 1

Preamble:

The drawings of reference a) indicate that a section of the cable lies on the lake bottom and is not enclosed in a trench. Reference c) suggests that the cable at the shorelines will be buried in a trench with a minimum cover of 865mm.

Reference b) shows that where there is no easement the electrical clearance extends over the property line.

Query/Request:

1) Reference a) does not indicate how the section of the cable that lies on the bottom of the lake and that is not in a trench will be stabilized. Is there any ballast or other method provided to ensure the cable is fixed in position?

Response:

Yes. The submarine cable will be anchored by a ballast system.

2) With regard to reference b) please confirm that it is permissible for the electrical clearance line to extend over property for which there is no Private Right of Way Easement.

Response:

Where the Applicant does not have a Private Right of Way Easement, it will ensure that the line is sited such that the electrical clearance line falls within the municipal road allowance. For these locations McLean would use a pole structure as shown in Attachment 4.

Interrogatory #9

Reference(s):

Exhibit G, Tab 1, Schedule 1

Preamble:.

The reference page deals with Land Matters and indicates, at the bottom of the page, that a resolution is expected by the end of December 2011.

Query/Request:

a) Was an easement for Goat Island resolved by the end of December 2011?

Response:

No.

b) Please provide an update on the negotiations with CPR for easements on Goat Island.

Response:

Confidential negotiations are proceeding between McLean and CPR.

Interrogatory #10

Reference(s):

Exhibit H, Tab 1, Schedule 2

Preamble:.

Over the period during which there were Project Notifications, Public Information Sessions, and the environmental hearings and publications, the project may have changed.

Query/Request:

a) Please indicate whether in all cases the as-applied-for routing of the transmission line was presented?

Response:

Please see the Applicant's response to Board Staff Interrogatory No. 4(3), above.

b) If not, please indicate what changes have occurred and when they occurred, and how the information was provided to the public and affected parties.

Response:

Please see the Applicant's response to Board Staff Interrogatory No. 4(3), above.

The location of the transmission line across Goat Island has been slightly modified as a result of negotiations the Applicant had with CP on March 16, 2012. The point of exit from the North Channel has moved approximately 150m to the east. This minor modification was made March 16, 2012, and a letter is currently being prepared to notify the public and affected parties of this change.

c) Please confirm that all directly affected parties were served with the Notice of the Application.

Response:

Yes. All directly affected parties were served with the Notice of the Application.

Interrogatory #11

Reference(s):

Exhibit B Tab 1, Schedule 1, page 4

Preamble:.

The list of reports indicates a Decommissioning Report. Board staff wishes to clarify issues around decommissioning.

Query/Request:

a) Please submit the Decommissioning report or provide a reference where it is publicly available electronically.

Response:

A copy of the Decommissioning report has been included on the CD that accompanies these responses..

b) Please acknowledge the Applicant's responsibility for removing transmission and related facilities if the Facility construction does not proceed or is interrupted due to unforeseen events such as the inability to acquire or secure rights over the necessary lands or a force majeure event?

Response:

The Applicant acknowledges its responsibility for removing transmission and related facilities if the Facility construction does not proceed or is interrupted due to unforeseen events such as the inability to acquire or secure rights over the necessary lands or a force majeure event.

c) Are funds for this purpose set aside, or guaranteed by any means? Please provide details.

Response:

There are no funds specifically put aside for decommissioning the transmission line. Proper accounting rules obliged McLean to account for and record liabilities for future decommissioning.

d) Please confirm that decommissioning costs are the responsibility of the Applicant.

Response:

The Applicant confirms that decommissioning costs are its responsibility.

Interrogatory #12

Reference(s):

Exhibit I, Tab 1, Schedule 5

Preamble:.

The IESO System Impact Assessment of March 15, 2011 indicates Connection Applicant Requirements of a specific and general nature. Fulfillment of these requirements is usually a condition of approval attached to granting of a leave to construct.

Query/Request:

1) Please indicate, for each of the requirements 1 through 20 listed at pages 3 and 4 of the referenced document, McLean's commitment to fulfill these requirements or alternatively why a requirement is not required to be met or an alternative method of satisfying the requirement.

Response:

McLean confirms that it will comply with each of these requirements.

2) At page 3 of the referenced document, there is a Transmitter Requirement for incorporation of the subject project. Please advise of any coordination or agreement between the Transmitter and the Applicant to ensure completion of this requirement, and if this will be done at the expense of the Applicant.

Response:

This work will be completed by Hydro One, with compensation from McLean as detailed in the Capital Cost Recovery Agreement ("CCRA") currently under negotiation with Hydro One.

Interrogatory #13

Reference(s):

a) Exhibit I, Tab 1, Schedule 4**,** page 10

b) Exhibit I, Tab 1, Schedule 6

Preamble:.

The Hydro One Customer Impact Assessment ("CIA") of March 15, 2011 (reference b)) was reviewed due to change of generator type, and confirms the validity of the original CIA of October 22, 2010 (reference a)). The CIA at reference a) indicates in its Conclusions and Recommendations sections certain requirements. Fulfillment of these requirements is usually a condition of approval attached to granting of a leave to construct.

Query/Request:

1) Please indicate what mitigation measures are required regarding the increased short circuit levels on Martindale TS 44kV bus are required, and what arrangements are in place for the Applicant to contribute to the cost.

Response:

As part of McLean's CCRA with Hydro One, Hydro One will install current limiting reactors on the 44 kV bus at Martindale TS in order to limit short circuit levels to limits set by the Transmission System Code. McLean's will pay its portion of the cost of this mitigation according to the terms of the CCRA.

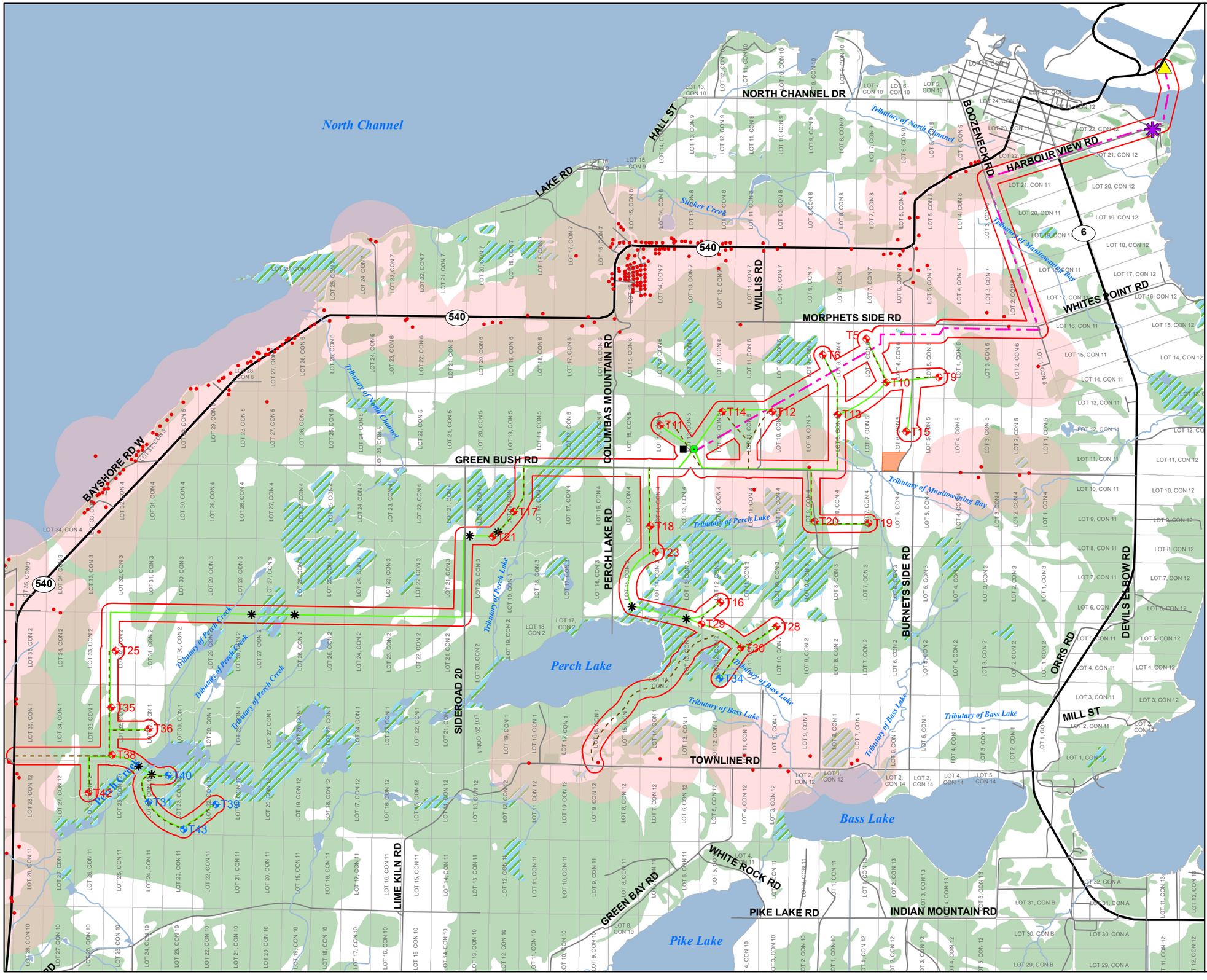
2) Please indicate what arrangements have been made to have "potentially impacted customers" review the adequacy of their equipment. This will likely require communication with Hydro One.

Response:

The current limiting reactors referred to in 1) above will improve the short circuit capabilities on the Martindale 44 kV bus. As such the Hydro One customers on this circuit will see a positive change and therefore will not need to review the adequacy of their equipment.

ATTACHMENT 1

REVISED PROJECT COMPONENTS SITE PLAN



NORTHLAND POWER

McLean's Mountain Wind Farm
Figure A-2: Project Components Site Plan

Legend

- Noise Receptor
- Local Roads
- Highway
- 120 m Project Component Setback
- Lots/Concessions
- Water Body
- Watercourse
- Woodland
- Unevaluated Wetland
- 550m Noise Receptor Setback

Project Components

- 24 Wind Turbine Locations
- Five Extra Permitted Sites
- Substation
- Overhead to Underground Transition Station (Location is 20 m East of the Coast along Harbour View Road)
- Connection/Switching Station
- Operations Building
- Horizontal Directional Drilling Access/Exit Pit
- Access Road
- Feeder Lines
- Transmission Line
- Construction Staging Area

N W E S

1:50,000

0 1 2 3

Created By: SFG
Checked By: DM
Date Created: May 27, 2008
Date Modified: October 3, 2011
File Path: I:\GIS\091983 - Northland Power\Mapping\Design and Operations Report\Figure 4-2 Project Components Site Plan .mxd

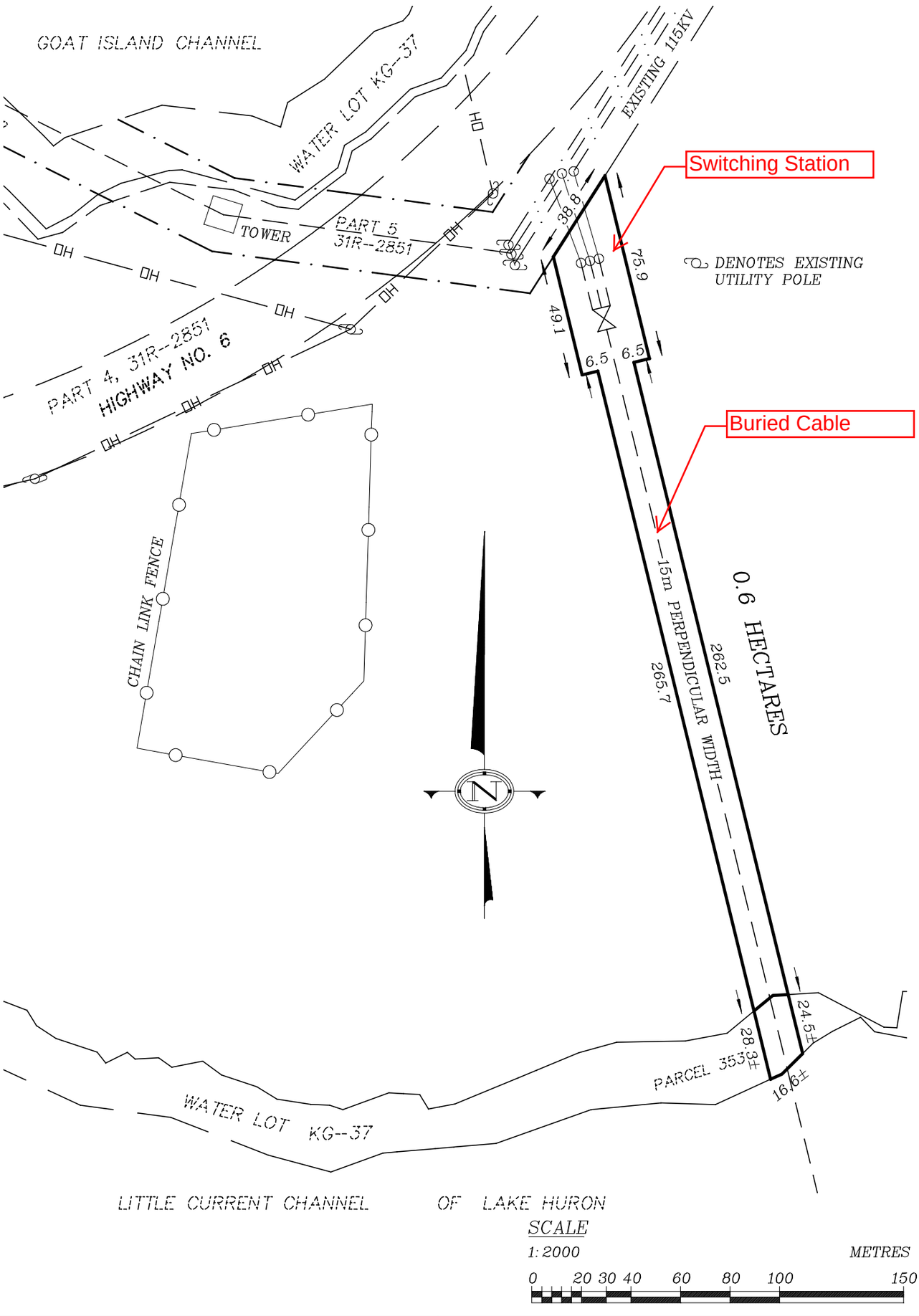
DILLON CONSULTING

ATTACHMENT 2

GOAT ISLAND PROPOSED EASEMENT

SKETCH ILLUSTRATING PROPOSED EASEMENT

PART OF GOAT ISLAND
TOWN OF NORTHEASTERN MANITOULIN & THE ISLANDS
DISTRICT OF MANITOULIN



SCALE

1:2000

METRES

0 20 30 40 60 80 100 150

CAUTION

THIS IS NOT A PLAN OF SURVEY AND SHALL NOT BE USED FOR TRANSACTION OR MORTGAGE PURPOSES

DATE: MARCH 20, 2012

SCALE = 1:2,000

FILE: GOAT-NL/SKETCH 2012 03 20.DWG

KEATLEY SURVEYING LTD.

ONTARIO LAND SURVEYOR

P.O. BOX 578

LITTLE CURRENT, ONTARIO

ATTACHMENT 3

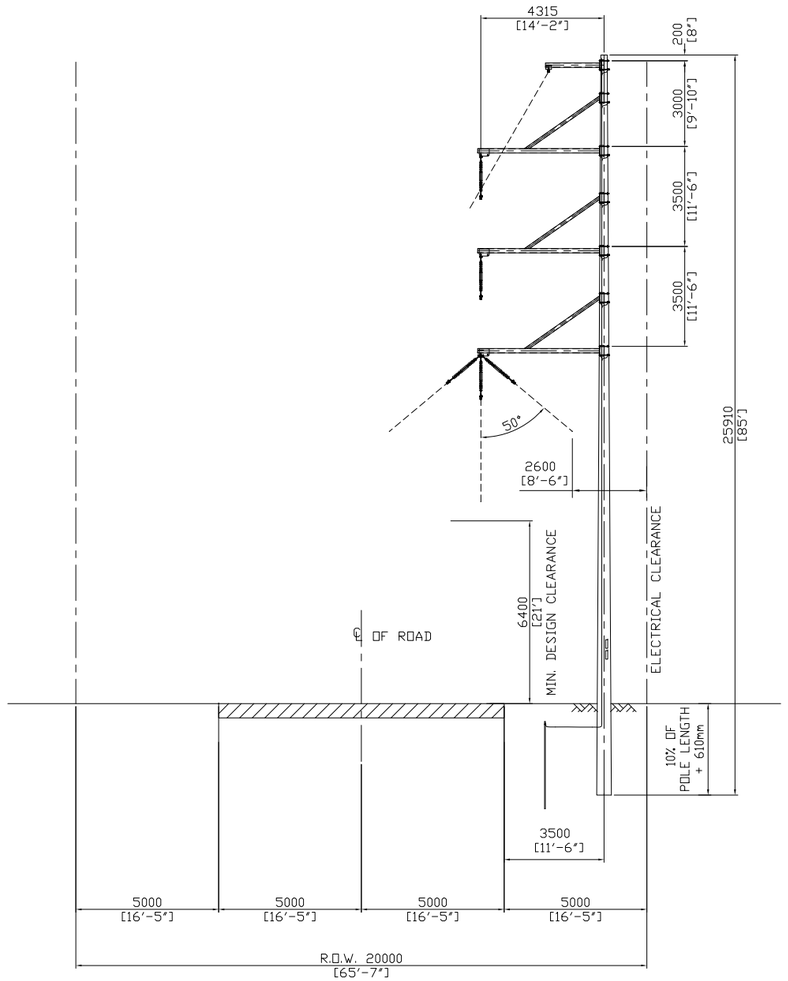
TABLE OF LOCAL AUTHORITIES, OPERATORS AND OWNERS OF ELECTRICAL DISTRIBUTION AND TRANSMISSION EXISTING FACILITIES, AND NON-ELECTRICAL FACILITIES ALONG THE PROPOSED TRANSMISSION LINE

Section	Description of Route	Power	Telephone	Water	Design Notes
		Hydro One Distribution (HONI)	**Bell**	**NEMI**	
1	Transmission Line runs initially in private R.O.W. North-East (Distance of approximately 2762m) from substation to Morphets Side Rd. (approximately 807m west of Macleans Mountain Rd.).				
2	Transmission Line then runs in private R.O.W. eastward on south side adjacent to Morphets Side Rd. for distance of 1620m.				
3	Transmission line will cross Morphets Side Rd. and run on the north side of the road allowance to Windover Sideroad for a distance of approximately 880m	HONI line runs along south side of Morphets Side Rd. (in private) from location east of transmission line road crossing to Windover Sideroad.			The proposed transmission line is on opposite side of the existing overhead LDC pole line, and conductor stringing is proposed to be tension stringing to minimize service disruption. Final construction methodology and schedule will be determined with LDC during final design stage.
4	Transmission line will run along Windover Sideroad road allowance from Morphets Side Rd. to Harbour View Rd. for a distance of approximately 2030m.			Along the northernmost 250m of this stretch, there is a municipal sanitary sewer force-main that carries (under low pressure) the Town of Little Current sanitary sewage to the lagoons to the west of this road allowance.	Force-main location to be determined during detailed design to ensure no damage.
5	Transmission line will then run along Harbour View Rd. on south side road allowance to the transition station for distance of approximately 2335m. The transmission line will have an overhead crossing at Highway 6 along Harbour View Rd.	1. Single Phase HONI line start approximately 300m along on north side of Harbour View Rd. west of Highway 6. 2. 3 Phase HONI 44kV Circuit with 3 phase 13.8kV Circuit on north side of Harbour View Rd. from Highway 6 to end of Harbour View Rd.	Communication pole line on south side of Harbour View Rd. from Highway 6 to end of Harbour View Rd.	1. Municipal watermain runs in the area between the entrance to the Town of NEMI public works garage and Highway 6 on the	1. There will be several overhead crossing of LDC service taps along Harbour View Rd. east of Highway 6. 2. The proposed transmission line is on opposite side of the existing overhead LDC pole line, and

Section	Description of Route	Power	Telephone	Water	Design Notes
				north side approximately 135m west of Highway 6. 2. Municipal storm sewer runs along south side of Harbourview Road from intersection of Highway 6 & Harbourview easterly for approximately 60m emptying into roadside ditch	conductor stringing is proposed to be tension stringing to minimize service disruption. Final construction methodology and schedule will be determined with LDC during final design stage. 3. Detailed design to ensure no interference with the municipal water main and the sewer system.
6	From the transition station the transmission line will continue to run along Harbour View Road underground on the south side road allowance for 135 M until it reaches the shore road allowance.				
7	From the end of the Harbour View Rd. the transmission line will turn north across the shore road allowance on Manitoulin Island then under water across the North Channel for approximately 400 M to Goat Island				
8	The transmission line will then continue north underground across the shore road allowance on Goat island and across Goat Island for 325 M until it reaches the switching station.				

ATTACHMENT 4

PROPOSED STRUCTURE FOR 115 KV TRANSMISSION OVERHEAD LINE



115kV STRUCTURE TYPICAL RIGHT OF WAY DETAIL
(TANGENT VERTICAL SUSPENSION STRUCTURE – EXTENDED DAVIT ARM)

REV	D/M/Y	REVISION	M.H.	E.K.				
			DR	CHK	APP	APP	APP	APP
A	20/03/12	CONCEPTUAL ISSUED						

ISS	D/M/Y	ISSUED FOR	APP
A	20/03/12	CONCEPTUAL ISSUED	

REF	NUMBER	TITLE

REFERENCES

STAMP/SEAL

APPROVED FOR CONSTRUCTION

CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.

PROJECT PHASE

PROJECT NO. | ACTIVITY NO. | PACKAGE CODE

SCALE

	BY	D/M/Y
DSN.	E.KWONG	19/03/12
DRN.	M.HUANG	19/03/12

AREA: MCLEAN MOUNTAIN WIND FARM

SUBJECT: 115kV TRANSMISSION OVERHEAD LINE TYPICAL RIGHT OF WAY DETAIL (TANGENT VERTICAL SUSPENSION)

CLIENT DWG. NO.

DRAWING NO. 1106-P005 | REV. A

CADD FILE ADDRESS 1106-P005-A

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