



Stephanie Allman
Regulatory Coordinator
Regulatory Affairs

tel 416 495 5499
Stephanie.allman@enbridge.com

Enbridge Gas Distribution
500 Consumers Road
North York, Ontario M2J 1P8
Canada

VIA COURIER

September 25, 2015

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

**Re: Ontario Energy Board File No. EB-2015-0194
Enbridge Gas Distribution Inc. - Canadian Nuclear Laboratories – Leave to
Construct Application – Interrogatory Responses**

In accordance with the Ontario Energy Board's (the "Board") Procedural Order issued for the above noted proceeding, enclosed please find the interrogatory responses of Enbridge.

Further to the above noted submission, contained within the filing is a redacted version of Exhibit I-1-6.

In accordance with the Board's revised Practice Direction on Confidential Filings, effective April 24, 2014, all personal information from Enbridge's filing has been redacted. Confidential copies of this Exhibit will be provided to the Board under separate cover.

Please contact the undersigned if you have any questions.

Yours truly,

(Original Signed)

Stephanie Allman
Regulatory Coordinator

cc: Scott Stoll, Legal Counsel, Aird & Berlis LLP

BOARD STAFF INTERROGATORY #1

INTERROGATORY

Ref: Exhibit C, Tab 2, Schedule 1, Page 1

Preamble:

Total estimated project cost of about \$15.5 million include contingency cost of about \$3.36 million. The contingency costs are over 21% of the total estimated costs of the project.

Question:

Please explain the method, inputs and assumptions of calculating the contingency costs of the project.

RESPONSE

Method

Enbridge's Project Scope and Estimate Level Definition guidelines have been utilized to define the contingency costs associated with this project. These guidelines were informed by the Association for the Advancement of Cost Engineering ("AACE") guidelines, and as such, this project is defined as an Enbridge Class 4 Level project at the Planning stage, which is comparable to an AACE Class 4/Class 3 Estimate.

The contingency percentage of 30% has been established based on these guidelines, the expected accuracy range for the project's definition level, and the unique complexities associated with this project. The overall cost estimate was prepared using a preliminary project definition and schedule, preferred route selection and semi-detailed unit costs. The Project Scope and Estimate Level Definition guidelines are attached.

Input and Assumptions

The inputs and assumptions used to determine the Project Definition Level, and associated contingency value, are itemized in the Class 4 column of the Project Scope and Estimate Level Definition guidelines. The Project has all required inputs for a

Witnesses: B. Balkanci
R. Doyon

Class 4 definition. Partial inputs have been received for Class 3 definition.
Given the additional and unique requirements associated with working on CNL property, a Class 4 estimate contingency level has been deemed suitable.

Contingency Calculation

As indicated earlier, the methodology used is considered a Class 4 estimate with a 30% contingency, based on Enbridge's Project Scope and Estimate Level Definition guidelines. Please note that the contingency calculated is 30% of the net project estimate less winter construction premium, which is not factored into the contingency. The following table is a reproduction of the costs laid out in pre-filed evidence found at Exhibit C, Tab 2, Schedule 1, page 1 with the net total rather than the gross total cost identified.

	Project Estimate (\$)
1.0 Material	1,822,737
2.0 Labour and Construction less Winter Premium	7,612,127
Construction Winter Premium*	853,682
3.0 External (Geotechnical, Environmental, Surveying, External, Engineering, Insurance)	848,500
4.0 Land	96,500
5.0 Internal	814,500
8.0 Net total Cost	12,048,046
Net total less Construction Winter Premium	11,194,364
6.0 Contingency	3,358,309
Contingency/Net total less Winter Premium	30%

*Construction winter premium is not included in the contingency calculation

Witnesses: B. Balkanci
R. Doyon

ENBRIDGE		Project Scope & Estimate Level Definition				
		Class 1				
		Class 2			Class 3	
Project Maturity Level Project Phase	Poor Definition 0% - 2% Screening	Major Deficiencies 1% - 15% Planning			Some Deficiencies 10% - 40% Design & Procurement	
		50% Contingency			25% Contingency	
Base Contingency (Dependent On Project Specifics)	50% Contingency	30% Contingency			20% Contingency	
		10% Contingency			Complete Definition 65% - 100% Construction & Close Out	
Scope	<ul style="list-style-type: none"> - High Level Scope - Pressure Class Known - Network Connection Points - Primary Components (Pipeline, Station) 	<ul style="list-style-type: none"> - Preliminary Scope (30% Third Party Design) - High Level Routing - Pipe Size - Flow Requirements 	<ul style="list-style-type: none"> - Preliminary Scope (60% - 90% Third Party Design) - Route Design - Pipe Size And Material - Station Requirements 	<ul style="list-style-type: none"> - Detailed Scope (EGD) - Detailed Design (HDD, Supporting Details) - Pipe Size And Specifications Selected - Tie-in Design Complete - Station Design Complete - Regulatory And Permit Conditions Included 	<ul style="list-style-type: none"> - Final Scope - Detailed Design (HDD, Supporting Details) - Pipe Size And Specifications Selected - Tie-in Design Complete - Station Design Complete - Regulatory And Permit Conditions Included 	<ul style="list-style-type: none"> - Final Scope - Detailed Design (HDD, Supporting Details) - Pipe Size And Specifications Selected - Tie-in Design Complete - Station Design Complete - Regulatory And Permit Conditions Included
Design	<ul style="list-style-type: none"> - No Drawings Provided - GIS Maps - Aerial Maps 	<ul style="list-style-type: none"> - Topographical Surveys - Third Party Drawings - GIS Maps - Aerial Maps 	<ul style="list-style-type: none"> - Preliminary Drawings (EGD) - Preliminary Profile - SUE, Level B 	<ul style="list-style-type: none"> - Approved Drawings (EGD 100%) - Final Profile - SUE, Level A/B 	<ul style="list-style-type: none"> - Approved Drawings (EGD 100%) - Permitting Comments And Conditions Included - SUE, Level A 	<ul style="list-style-type: none"> - Approved Drawings (EGD 100%) - Permitting Comments And Conditions Included - SUE, Level A
Cost	<ul style="list-style-type: none"> - Historical Projects - Per Meter Costs - Rule of Thumb (ROT) 	<ul style="list-style-type: none"> - Cost Estimating Tool - Unit Rates - Stakeholder Input 	<ul style="list-style-type: none"> - Preliminary HDD Profile - Geotechnical Report - Environmental Report 	<ul style="list-style-type: none"> - Permitting Notes And Conditions - Final Profile - Final Cross Sections - Final HDD Profile 	<ul style="list-style-type: none"> - Supporting Details 	<ul style="list-style-type: none"> - Cost Estimating Tool - Approved Field Estimates
Schedule	<ul style="list-style-type: none"> - High Level Schedule (Fiscal Year) - In Service Target Year 	<ul style="list-style-type: none"> - High Level Schedule (Season) - In Service Target Season - Network Restrictions 	<ul style="list-style-type: none"> - Preliminary Schedule (Fiscal Quarter) - Stakeholder Timelines - Third Party Restrictions (conservation timing windows, gas delivery dates, municipal requirements) 	<ul style="list-style-type: none"> - Detailed Schedule - Third Party / Permit Restrictions - Primary Tasks Identified 	<ul style="list-style-type: none"> - Detailed Task Schedule - Component Tasks Identified 	<ul style="list-style-type: none"> - Material and Service PO's - Competitive Bid (RFP) Process - Finalized Third Party Contracts
Permits	<ul style="list-style-type: none"> - Permit Conditions Unknown - High Level Regulatory Requirements known (LTC, NEB) 	<ul style="list-style-type: none"> - High Level Permit Conditions Known - High Level Permitting Agencies Identified - Regulatory Requirements Known 	<ul style="list-style-type: none"> - Permits And General Conditions For Special Permits Known (MTO, TRCA, CN) 	<ul style="list-style-type: none"> - Permits Granted 	<ul style="list-style-type: none"> - Permits Received And All Special Conditions Incorporated In Project Drawings, Plan And Contracts 	<ul style="list-style-type: none"> - Mitigation Measures In Place (Settlement, Monitoring Plan)
Optional Criteria			<ul style="list-style-type: none"> - LTC Application - NEB Application 	<ul style="list-style-type: none"> - LTC Approved - NEB Approved 		

BOARD STAFF INTERROGATORY #2

INTERROGATORY

Ref: Exhibit B, Tab 1, Schedule 4, Page 1, Paragraph 3

Preamble:

A Stage 2 Archeological Assessment was planned to be completed by the end of August.

Question:

What is the status and the prospect of completing the Stage 2 Archeological Assessment? Please file the report as soon as it is completed.

RESPONSE

Initially, the Stage 2 Archaeology Assessment was planned to be completed by the end of August, as stated in the LTC application. However, the Stage 2 Assessment has been delayed and is anticipated to be completed by October 30, 2015.

The delay has been the result of several factors. First, the access to the CNL facility is heavily regulated and requires specific safety orientation prior to access. CNL's ability to coordinate the required steps was delayed due to staff availability.

Additionally, utility locates within the CNL facility identified a large diameter fibre-optic cable along the proposed pipeline route. However, the fibre optic cable could not be positively located along approximately 450 m of the route. All Stage 2 Archaeological work is complete except the 450m section where the cable could not be located. As of September 18, 2015, CNL had located the fibre optic cable. The remaining Stage 2 Archaeological work is anticipated to begin the week of September 28, 2015. This field work will take a day or less to complete and will be followed by a final report, which will be targeted to be completed by October 30, 2015. The report will be filed as soon as it is completed.

No archaeological resources have been found within the work area assessed to date.

Witness: S. Kingdon-Benson

BOARD STAFF INTERROGATORY #3

INTERROGATORY

Ref: Exhibit C, Tab 1, Schedule 3, Page 2, Paragraph 5

Preamble:

Enbridge stated that although blasting is not anticipated it may be required at certain route segments.

Question:

Please describe the timing and means of landowner notification and details of risk management and safety program Enbridge will implement in the event of blasting.

RESPONSE

A minimum of 15 Business Days prior to blasting, written notice will be provided to Utilities and all owners and tenants of improved property within 500 m of the right-of-way in the vicinity of the blast. The notice shall include a blasting schedule, information about the audible blast warning system, and contact name for questions or other concerns.

Blasting will not be initiated without approval from appropriate governing authorities. To manage risk and safety during blasting, Enbridge will follow the company standards, as outlined in the EGD Construction and Maintenance Manual, Section 8.8 and AECL Standard 145-20000-STD-005 Excavation, Trenching and Backfilling. Both documents are attached.

Witnesses: B. Balkanci
R. Doyon

8.8 Rock Excavation

8.8.1 General

This section covers excavation in solid beds of rock or masses of rock in original formation. This is referred to as “solid rock”, which cannot be removed by the trenching machine and must be removed by backhoe, blasting or drilling. This does not include loose stone.

8.8.2 Environmental Considerations

The preferred order of excavating rock is through the use of a hoe-ram, followed by a ripper and lastly rock blasting.

Noise, excessive ground vibration and flyrock damage are the three (3) direct potential impacts of blasting. It is essential that blasting be planned well in advance, notification be given to nearby landowners and documentation of existing conditions (e.g. water wells, foundation integrity, etc.) be completed before blasting. Alternatives to blasting must be investigated.


To reduce the potential for environmental problems related to blasting, the Constructor must undertake the following:

- Use controlled blasting techniques, such as blasting mats, and appropriate dust controls, as directed by the Company; and,
- Monitor wells within 100 m (330 ft.) of the blast site before and following blasting to ensure no permanent adverse effects to the water quantity or quality occur.

8.8.3 Procedures

8.8.3.1 General

Solid rock must be removed to a depth sufficient to provide a minimum of 0.6 m (2 ft.) of cover and 100 mm (4 in.) of earth pad below pipe, or as designated by the Company. The trench must be excavated to a width not less than shown in Table 8-1: Minimum Trench Width.

 **Note:** *Removal of rock from the right-of-way during grading operations is not classified as rock excavation.*

The Constructor must comply with the requirements stated within Section 8.8.3.3 Blasting in the Vicinity of Natural Gas Pipelines and Other Facilities.

8.8.3.2 Blasting- General

Where blasting is necessary, extreme care must be exercised so as not to scatter loose rock over the right-of-way and cultivated fields or cause damage to property. If loose rock is scattered, the Constructor must clean the area to the satisfaction of the landowner and the Company.

The Constructor must not initiate blasting without approval of the Company and appropriate governing authority. The Constructor must post warning signs at blasting sites a minimum of 48 hours before blasting activity. A contact card with the appropriate Company representative's name must be given to local residents to communicate any complaints they may have during construction.

The Constructor is required to obtain necessary permits for, and must comply with, requirements in connection with the use, storage and transportation of explosives, including but not limited to the Canadian Explosives Act.

The Constructor must protect the construction crew and the public from any injury or harm which can arise due to drilling dust and the use of explosives. Only workers licensed in the use of explosives must be permitted to supervise, handle, transport or detonate explosives.

CAUTION:

Detonating caps must not be stored with explosives under any circumstances. Caps must be stored in a separate place. Explosives must not be primed or fused until immediately before their use. Under no circumstances are fused holes to be left overnight or unattended.

Wherever possible, a large charge must be subdivided into a series of smaller charges (decking) through the use of time delay blasting caps. This process can reduce the overall impact proportional to the individual charge weights rather than total charge weight.

There must be no blasting or drilling in, or adjacent to, the watercourse beds during fish migration, spawning or egg incubation unless approved by the regulatory authorities. Whenever possible, blasting must be scheduled for periods when fish are not in the area of influence of the blast. As many fish as possible must be removed from the proposed blast area and their access must be restricted by air curtains, where possible.

Additional restrictions can be imposed by the regulatory authorities during sensitive spawning, breeding or nesting periods.


The Company's pipelines must not be excavated before blasting. If excavation is unavoidable, then the pipeline must be properly supported according to current Company requirements. The Constructor must take suitable precautions to protect the exposed pipeline from fly-rock. Blasting mats must be used to minimize the risk of fly-rock.

Explosives must be of a type, which must not propagate between holes or be desensitized due to compression pressures.

Since most common explosives have approximately the same strength to weight ratio, the term 'Charge Weight per Delay' can be used to indicate the relative strength of a detonation. Table 8-3: Safe Blasting Distance for Polyethylene and Steel Pipelines indicates the maximum charge weight per delay, which can be detonated in the vicinity of Company pipelines, facilities owned by other utilities, or structures owned by third parties. The Constructor is responsible for acquiring similar information for other facilities. Charge weights detonated in excess of those specified can create high stresses on these facilities and can cause damage, resulting in serious risk to property, workers and to the general public.

Table 8-3: Safe Blasting Distance for Polyethylene and Steel Pipelines

Stand-Off Distance From Pipeline (m)	Stand-Off Distance From Pipeline (ft.)	Maximum Allowable Explosive Charge Weight Per Delay (kg)	Maximum Allowable Explosive Charge Weight Per Delay (lb)
3	10	0.18	0.40
4	13	0.33	0.73
5	16	0.51	1.12
6	20	0.73	1.61
7	23	1.00	2.20
8	26	1.31	2.90
9	30	1.65	3.64
10	33	2.04	4.50
12	39	2.94	6.48
14	46	4.00	8.82
16	53	5.22	11.51
18	59	6.61	14.57
20	66	8.16	17.99
22	72	9.87	21.76
24	79	11.75	25.90
26	85	13.79	30.40
28	92	16.00	35.27
30	98	18.36	40.48

 **Note:** *The above chart is based on a Peak Particle Velocity of 50 mm/s (2 in/s). No greater velocity must be allowed. Maximum amplitude must be limited to 0.15 mm (0.006 in.).*

8.8.3.3 Blasting in the Vicinity of Natural Gas Pipelines and Other Facilities

For the purpose of this section, "Vicinity" is defined as a horizontal distance of 30 m (100 ft.) or less from any water wells, dwellings, structures, overhead or underground utilities, farm operations or public crossings when referring to surface blasting and a direct (radial) distance of 30 m (100 ft.) or less when referring to tunnel blasting. For blasting situated further than 30 m (100 ft.) away from Company pipelines, facilities owned by other utilities, or structures owned by third parties, the design of blasting patterns must reflect their proximity.

Before the detonation of any explosives in the vicinity of water wells, dwellings, structures, overhead or underground utilities, farm operations or public crossings, a minimum of four (4) weeks notice must be given to the Company.

Before any blasting occurs in the vicinity of a pipeline, its effects to the Company plant must be evaluated to ensure the uninterrupted operation and long term safety of its underground facilities. Responsibility for the design of the blast and any resultant damage is done by the party using the explosives.

A Company representative must ensure that the blaster is aware of the exact location of the pipeline and related facilities in the field. Pipe must not be excavated before blasting. If excavation is unavoidable, the pipeline must be properly supported as outlined in *Section 4.0 of the Enbridge Gas Distribution 'Third Party Requirements In the Vicinity of Natural Gas Facilities' booklet* which is available from the Damage Prevention Group. In addition, the blaster must take suitable precautions to protect the pipeline from flying debris.

To prevent the possibility of damage due to flyrock, air blast or vibration, the Constructor is required to perform "controlled blasting" within 30 m (100 ft.) of water wells, dwellings, structures, overhead or underground utilities, farm operations or public crossings, or any other area identified by the Company.

A recognized independent blasting consultant must perform an evaluation and must submit a validation report of the blast to Engineering approvals for review if one or more of the following situations exist:

- Blasting within 30 m (100 ft.) cast iron and wrought iron mains.
- Blasting involving single or delayed charge weights over 18 kg (40 lb).
- Blasting within 30 m (100 ft.) of regulating stations.
- Blasting within 30 m (100 ft.) of lines where serious corrosion issues have been identified, or where damage has been previously reported.
- Blasting within 30 m (100 ft.) of above and below grade natural gas storage facilities.
- Blasting within 30 m (100 ft.) of NEB regulated pipelines, Vital Mains (as listed in Appendix B - Vital Mains) and pipelines in the Integrity Management Program.
- Blasts using charge weights in excess of the requirements in Table 8-3: Safe Blasting Distance for Polyethylene and Steel Pipelines for the corresponding stand-off distance.
- Blasts within 30 m (100 ft.) or less of cast iron and wrought iron mains.
- Blasts closer than 3 m (10 ft.) from a Company pipeline.
- Any tunnel blasting operation within 30 m (100ft.) of Company facilities.
- Surface blasts less than 10 m (33 ft.) from a Company pipeline where,
 - Excavation depth of the first blast hole is equal to the top of the pipeline and,
 - Subsequent blast hole depths exceed one half the horizontal distance to the closest portion of the pipeline.
- If the Company feels that the integrity of Company facilities can be affected by the blast.



AECL EACL

Standard

EXCAVATION, TRENCHING AND BACKFILLING

145-20000-STD-005

Revision 3

Prepared by
Rédigé par

Schwantz Gary M - Civil Design
Technical Specialist

Reviewed by
Vérifié par

Nagora Terry - Civil
Engineering/Technical Section

Approved by Head
Approuvé par

McCartney David W. -
Manager-Civil Engineering

2014/07/24
AECL - OFFICIAL
USE ONLY

2014/07/24
À L'USAGE EXCLUSIF
D'EACL

©Atomic Energy of
Canada Limited

©Énergie Atomique du
Canada Limitée

Chalk River, Ontario
Canada K0J 1J0

Chalk River (Ontario)
Canada K0J 1J0



Design Standard

Excavation, Trenching and Backfilling

Nuclear Laboratories

145-20000-STD-005

REA # 14304

Revision 3

2014 July

**AECL - OFFICIAL
USE ONLY**

This document and the information contained in it is the property of Atomic Energy of Canada Limited (AECL). No use, disclosure, exploitation or transfer of any information contained herein is permitted in the absence of an agreement with AECL, and the document may not be released without the written consent of AECL.

© Atomic Energy of Canada
Limited

Chalk River, Ontario
Canada K0J 1J0

juillet 2014

**À USAGE
EXCLUSIF - EACL**

Le présent document et l'information qu'il contient sont la propriété d'Énergie atomique du Canada limitée (EACL). Le présent document ne peut être transmis sans l'autorisation écrite d'EACL et les renseignements qu'il contient ne peuvent être utilisés, ni divulgués, ni exploités ni communiqués sans entente à cet effet avec EACL.

© Énergie atomique du
Canada limitée

Chalk River (Ontario)
Canada K0J 1J0



Revision History

Liste de révisions

AECL - OFFICIAL USE ONLY À USAGE EXCLUSIF - EACL

Page 1 of /de 1

CW-511300-FM-168 Rev. 0

Ref. Procedure CW-511300-PRO-161

Document No. / Numéro de document:

145	20000	STD	005
Doc. Collection ID ID de la collection de doc.	SI Répertoire du sujet	Section	Serial No. N° de série
Total no. of pages Nbre total de pages			
18			

Document Details / Détails sur le document

Title

Titre

Excavation, Trenching and Backfilling

For Release Information, refer to the Document Transmittal Sheet accompanying this document. / Pour des renseignements portant sur la diffusion, consultez la feuille de transmission de documents ci-jointe.

Revision History / Liste de révisions

Revision / Révision		Details of Rev. / Détails de la rév.	Prepared by Rédigé par	Reviewed by Examiné par	Approved by Approuvé par
No./N°	Date (yyyy/mm/dd)				
1	2011/03/29	General Revisions Document number and format changed to meet AECL requirements, and resised reference standard number. Document number was A-14304-ST- 023. Issued for use. Issued for Use. Revised OPSS 1010 to OPSS.MUNI 1010.	G. Schwantz	W. Salcedo	D. McCartney
2	2013/03/06		G. Schwantz	T. Nagora	D. McCartney
3	2014/07/24		G. Schwantz	T. Nagora	D. McCartney

AECL - OFFICIAL USE ONLY

145-20000-STD-005 Page i

Rev. 3

TABLE OF CONTENTS

SECTION	PAGE
1. SCOPE	1-1
2. STANDARDIZATION	2-1
3. STANDARDS	3-1
3.1 Work by CRL Forces	3-1
3.2 Work By Other Than CRL Forces	3-1
4. CAUTION	4-1
5. WORK PERMITS	5-1
6. INTERRUPTIONS TO AECL ACTIVITIES	6-1
7. PROTECTION OF EXISTING FEATURES	7-1
8. DUST CONTROL AND CLEAN UP	8-1
9. EXCAVATION	9-1
10. MATERIALS	10-1
11. BACKFILLING	11-1
12. TESTING	12-1
13. GRADING	13-1
14. LOCATION RECORDS AND SURVEYING	14-1

AECL - OFFICIAL USE ONLY

145-20000-STD-005 Page 1-1

Rev. 3

1. SCOPE

This specification provides a standard for Excavation, Trenching and Backfilling to be used at AECL CRL.

It should be noted that in compiling the information presented within this document, extractions from National Master's Specifications and Ontario Standard Specifications were utilized. This document was developed as a guideline for construction and the data specified should only be used as a guide and is presented here as minimum requirement that may be altered by the designer where required.

It is the responsibility of the user of this standard; designer, tradesperson or contractor; to verify as to the applicability of the standard to the work being covered.

Users of this standard are encouraged to bring any recommendations for revisions to the attention of the Manager of the Civil Engineering branch.

AECL - OFFICIAL USE ONLY

145-20000-STD-005 Page 2-1

Rev. 3

2. STANDARDIZATION

Excavation, Trenching and Backfilling are standardized for the following reasons:

1. To ensure a proper level of safety is maintained
2. To provide a suitable level of performance
3. To provide a uniform quality appearance
4. To aid in maintenance by:
 - increasing efficiency through worker knowledge of materials used
 - reducing the need to maintain a large supply of materials

AECL - OFFICIAL USE ONLY

145-20000-STD-005 Page 3-1

Rev. 3

3. STANDARDS

3.1 Work by CRL Forces

Work by CRL forces shall be performed in accordance with:

1. Canada Labour Code and Canada Occupational Safety and Health Regulations
2. CRL Maintenance Procedures
 - a) M-ED-2 Excavation, Installation and Backfilling for Underground Electrical Power Lines
 - b) M-CR-0-00-15 Excavated Trench Shoring
 - c) CRNL Occupational Safety and Health Guides
 - d) CW-510400-PRO-376 Trench Sloping and Shoring
 - e) CRNL Design Documents
 - i. A-13850-TS-1 Steel Sheet Piling - Design, Supply and Installation by Contractor
 - ii. A-13850-SP-1 Supply of Prefabricated Metal Shoring System
 - iii. 145-10000-STD-001 Installation of Directly Buried Piping & Associated Concrete Structures

Where the above referenced documents do not agree the most restrictive and/or conservative clauses of each shall apply.

3.2 Work By Other Than CRL Forces

1. Work by other than CRL forces shall be performed in accordance with:
 - The Occupational Health and Safety Act and Regulations for Construction Projects (Ontario)
 - The Ontario Provincial Standards (Specifications and Drawings)
2. Where the above referenced documents do not agree the most restrictive and/or conservative clauses of each shall apply.

AECL - OFFICIAL USE ONLY

145-20000-STD-005 Page 4-1

Rev. 3

4. CAUTION

1. Field verify buried services prior to any digging or insertion of any item to a depth greater than 20 cm (8 inches) into the ground.
2. Gas, electricity or other services shall be shut off prior to excavation, with notification to the owners of such services and their clients.
3. Forward any discrepancy from that shown to the Project Leader for updating drawings.
4. Stop work upon locating any unrecorded services and proceed only when authorized by the Project Leader.

Refer also to 14.0 Location Records and Surveying.

AECL - OFFICIAL USE ONLY

145-20000-STD-005 Page 5-1

Rev. 3

5. WORK PERMITS

An approved AECL Digging, Drilling and Coring Clearance Form and an authorized Work Permit are required for all work of over 20 cm (8 inch) depth.

AECL - OFFICIAL USE ONLY

145-20000-STD-005 Page 6-1

Rev. 3

6. INTERRUPTIONS TO AECL ACTIVITIES

1. Work shall be scheduled to minimize disruptions to AECL operations. Access for emergency vehicles must be maintained. Any actions which may cause disruption shall be discussed with the AECL Construction Representative and all instructions given shall be followed. Without limiting the above, arrangements shall be made for temporary water, sewer and electric services, water tanks, temporary access and installation of adequate barriers
2. When the temporary service is no longer required it shall be removed and any and all work to restore the site to the pre-construction condition carried out.
3. The cost of this work shall be included in the contract price.

AECL - OFFICIAL USE ONLY

145-20000-STD-005 Page 7-1

Rev. 3

7. PROTECTION OF EXISTING FEATURES

1. All existing services shall be protected and maintained. In the event of damage, all repairs shall be made to the approval of the Construction Representative or Zone Supervisor at no additional cost.
2. All abandoned services shall be capped, plugged or sealed at the limits of the excavation and removed from the areas of construction. The location of terminated lines shall be accurately located on the record (pink) prints.

AECL - OFFICIAL USE ONLY

145-20000-STD-005 Page 8-1

Rev. 3

8. DUST CONTROL AND CLEAN UP

1. Use all means necessary to control dust on and near work including on and near borrow and disposal areas and during transportation.
2. Thoroughly moisten surfaces and/or use tarpaulins.
3. During construction and at the completion of the contract clean all roads used to haul materials, of material dropped on them.

AECL - OFFICIAL USE ONLY

145-20000-STD-005 Page 9-1

Rev. 3

9. EXCAVATION

1. Excavate to lines, grades, elevations and dimensions indicated. Excavation shall not interfere with the 45° angle of repose from any existing footing or foundation.
2. Excavated areas shall be kept free of frost.
3. Remove obstructions encountered during excavation. Remove all frozen or otherwise unsuitable material. Bottoms of excavations to be undisturbed soil, level, free from loose, soft or organic material and free of water while work is in progress.
4. Do not permit material to obstruct flow of surface drainage or to contaminate watercourses or to flow into storm and sanitary drainage systems.
5. Stockpile material in areas designated by Construction Representative. Separately stockpile topsoil.
6. Dispose of waste as directed.
7. Trench excavation shall not exceed 30 m in advance of installation and shall not have more than 15 m left open at the completion of a day's work, unless approved by the engineer.
8. Trench widths not to exceed pipe diameter (+ 300 mm) for precast structures, and pipe diameter (+ 600 mm) for others. If greater space is required (for workers, equipment, etc.), approval by engineer is required.
9. Where excavation exceeds the specified width, the contractor shall repair excess excavation by backfill and compaction (to 95% maximum density) to approval of engineer.
10. Width of trench at its bottom shall not exceed that at its top.
11. For rock removal, (rock is defined as particles greater than 0.4 m in diameter that cannot be removed with heavy machinery) the rock shall be blasted in accordance with OPSS 403, by qualified personnel and must be shattered to 300 mm below required/desired subgrade elevation and sufficient subsurface drainage must be provided from within blasted/excavated area.

AECL - OFFICIAL USE ONLY

145-20000-STD-005 Page 10-1

Rev. 3

10. MATERIALS

1. Materials shall be as follows unless otherwise specified.
2. Site salvaged material shall be suitable excavated material from stockpile free from cementation, large roots or other large pieces of organic material, building waste and other deleterious material.
3. Building waste consisting solely of clean broken concrete and/or masonry materials may be considered for use but shall require approval of the Construction Representative and Design Engineer and will only be permitted if it will be satisfactory for the purpose and is suitably broken and/or crushed.
4. Granular materials shall conform to the Ontario Provincial Standard Specification OPSS.MUNI 1010
5. Topsoil shall conform to Ontario Provincial Standard Specification 570. In addition to OPSS 570, all topsoil shall be screened using 25 mm size screen. This applies to all topsoil whether acquired from the jobsite or imported from offsite. Topsoil shall be defined as fertile, friable loam that is free of roots vegetation or other debris and have an acidity range (pH) of 5.5 to 7.5. The soil shall be free of stones and clods over 25 mm in diameter. Topsoil containing crabgrass or other noxious weeds is not acceptable.

AECL - OFFICIAL USE ONLY

145-20000-STD-005 Page 11-1

Rev. 3

11. BACKFILLING

1. No fill shall be placed against fresh concrete until it has reached 70% of its design strength, unless otherwise approved by the engineer.
2. Place fill of types specified in layers and compact each layer to the specified level.
3. Select layer thickness to suit material, compaction equipment and specified level of compaction.
4. All backfill material shall be free of frozen material and debris.
5. Compaction shall be to ASTM D698 Test Methods for Moisture Density Relations of Soils and Soil Aggregate Mixtures Using 2.5 kg (5.5 lb.) Rammer and 305 mm (12 inch) Drop. Unless otherwise specified the following Standard Proctor Densities shall apply.

<u>Location</u>	<u>Density</u>
Below asphalt pavements	see Standard on Asphaltic Concrete Paving
Backfill <u>below</u> foundations and structural slabs on grade	100%
Backfill <u>around</u> foundations	95%
Below non-structural slabs-on-grade i.e. sidewalks, curbs	98%
Below grassed areas excluding topsoil	95%
Topsoil	Light tamp only
Below gravel surfaced roads	98%
Below precast concrete unit pavers	98%

6. Lifts should not exceed 250 mm (10 in.), though thicker lifts may be specified for large projects or when heavy equipment will be used.
7. Topsoil may be lightly tamped to hold in place but shall not be compacted. A minimum of 150 mm (6 inches) of topsoil is required on sand and other granular surfaces that will receive sod or grass seed. On surfaces to receive sod or grass seed other than sand or granular materials sufficient topsoil shall be added to be equivalent to the above.
8. All over excavation shall be corrected by means of concrete fill.

AECL - OFFICIAL USE ONLY

145-20000-STD-005 Page 12-1

Rev. 3

12. TESTING

1. Compaction testing shall be carried out on all backfill.
2. For projects where a Contractor has been retained to carry out the work he shall submit the proposed testing program to the AECL Construction Representative for acceptance before commencing backfilling. The Contractor shall provide copies of test results to the AECL Construction Representative. AECL reserves the right to carry out independent testing.
3. For projects where CRL forces are carrying out the work AECL will carry out the testing.
4. All compaction testing shall be carried out by means of a Nuclear Density Gauge unless conditions such as high radiation fields make this method unsuitable.

AECL - OFFICIAL USE ONLY

145-20000-STD-005 Page 13-1

Rev. 3

13. GRADING

1. Grade as specified with positive slope away from all buildings for a distance of at least 3 metres (10 feet).
2. Supply and spread topsoil as specified.

AECL - OFFICIAL USE ONLY

145-20000-STD-005 Page 14-1

Rev. 3

14. LOCATION RECORDS AND SURVEYING

1. Request benchmark locations and elevations from Civil Engineering Survey Crew. Immediately advise the Civil Engineering Survey Crew if any benchmarks are required to be removed or if construction activities may have displaced any benchmarks.
2. Ensure that the Civil Engineering Survey Crew is advised of any and all existing services located during excavation work and the extent of all removals.
3. Do not proceed with backfilling until the Civil Engineering Survey Crew has carried out location surveys of all existing and new services and given clearance to proceed.
4. Where survey work is carried out by other than the Civil Engineering Survey Crew copies of complete survey records shall be provided to the Civil Engineering Survey Crew.

BOARD STAFF INTERROGATORY #4

INTERROGATORY

Ref: Exhibit D, Tab 1, Schedule 1, Page 1, Paragraphs 2 and 3

Preamble:

Enbridge will require one easement from a private landowner and one easement agreement with Department of National Defence (DND) to construct the proposed project.

Question:

What are the status and prospects of Enbridge's negotiations with a private landowner and the DND to obtain the requirement easement agreements in time for construction start?

RESPONSE

1. Easement from private landowner:

Enbridge met with the property owner on July 14th, 2015 and discussed the location and requirements of easement and provided the landowner with easement documents. Since Enbridge is proposing the easement within the hydro corridor where the lands are already encumbered, Enbridge does not anticipate any issues from the landowner.

A verbal agreement in principle was reached with the landowner for compensation based on appraised values. The landowner indicated on September 18, 2015 that easement documents are currently with the landowner's lawyer for review and comments. Enbridge will follow up with the landowner's lawyer in early October.

Enbridge will work diligently to finalize the agreement by the end of 2015, in advance of the construction start date of April 2016. In the unlikely event that an agreement cannot be reached, Enbridge will consider its options, including expropriation.

2. Easement from DND:

Witnesses: R. Doyon
C. Lam
C. Meilleur

Enbridge met with DND on July 14, 2015. DND did not seem to have any objections but indicated that they would like to have their own appraisal done on the property. Enbridge provided a copy of our third party appraisal (completed by Usher Capordelis Seguin & Associates Ltd.) for their use as reference.

A title search performed by Enbridge¹ has indicated a discrepancy with the land titles at the registry office. A portion of the lands should identify DND as the landowner, however the title documents indicate that the lands are entirely owned by the Town of Laurentian Hills as original road allowance. DND advised Enbridge on September 22, 2015 that they are currently looking into the process of correcting the title issues. DND expects to resolve the title issues prior to the construction in April 2016.

DND is in agreement, in principle, and has agreed to provide Enbridge with a letter of intent to grant easement. Enbridge expects to have this letter of intent by the beginning of October 2015.

If DND cannot resolve the title issues, Enbridge has the option of approaching the Town of Laurentian Hills and obtain road permits to work in the original road allowance.

¹ Pre-filed evidence Exhibit D Tab 1 Schedule 1

Witnesses: R. Doyon
C. Lam
C. Meilleur

BOARD STAFF INTERROGATORY #5

INTERROGATORY

Ref: Exhibit E, Tab 1, Schedule 1, Page 2, Paragraph 10

Preamble:

Enbridge stated that it arranged for financial assurances to protect Enbridge's ratepayers in the event of CNL default.

Question:

Please summarize the terms of agreements between Enbridge and CNL that protect interest of Enbridge's ratepayers in the event of CNL default during construction and operation of the proposed pipeline.

RESPONSE

Enbridge has executed a Financial Agreement¹ with CNL. The Financial Agreement includes a number of terms and conditions that ensure other ratepayers are protected from subsidizing the cost of constructing the pipeline and risks associated with the cost of construction and the potential for default by CNL. In accordance with the Agreement, Enbridge will be obtaining financial security in the form of an irrevocable standby Letter of Credit from CNL on or before November 1, 2015. Enbridge may draw on the letter of credit in the event of default by CNL.

Further, the Financial Agreement allows for Enbridge to recalculate the feasibility, CIAC, security, and Enbridge Investment under certain circumstances, including:

1. Actual construction costs are different than the estimated construction costs;
2. The customer terminates the agreement with Enbridge;
3. The applicable rate class changes;
4. The actual consumption is materially different than the estimated consumption;
5. The customer fails to start taking the estimated consumption by June 1, 2017;
6. The customer defaults; and
7. The customer ceases to be a customer of Enbridge.

¹ Prefiled evidence Exhibit E, Tab 1, Schedule 2

Witness: A. Chagani

BOARD STAFF INTERROGATORY #6

INTERROGATORY

Ref: Exhibit B, Tab 1, Schedule 3 Environmental Report

Preamble:

Environmental Report (ER) was reviewed by the Ontario Pipeline Coordinating Committee, local municipalities, and First Nations and Metis.

Question:

Please file an updated summary of comments and concerns received to date and Enbridge's responses and planned actions to mitigate each of the issues and address each of the concerns.

RESPONSE

See Table A-1 UPDATED below.

Witnesses: R. Doyon
S. Kingdon-Benson

Table A-1 UPDATED Summary of Consultation

Item#	Name	Organization/Community	Title/Address	Date of Contact	Phone	Fax	Email	Comments	Enbridge Response	Actions
1	April Mitchell	Ministry of Natural Resources and Forestry	Species at Risk Biologist	14-Jan-13	613-732-5568		esa.pembroke@ontario.ca	An information request was sent to the MNR to inquire about any potential species at risk or species at risk habitat or any other information about the project area or areas nearby.	N/A	N/A
2	Tim Sykes	CNL	N/A	5-Feb-15	613-584-3311	N/A	N/A	A planned water line will be constructed from the town of Deep River to CNL site along Balmer Bay Road; may be of interested for Enbridge to construct the same time and in same area as water line. Didn't ask for a follow-up, just wanted us to know as an FYI.	Installation of a new main following Balmer Bay Road would mean servicing CRL from the Deep River Gate Station, approximately 13 km from the facility. This option was evaluated, but ruled out in favour of a shorter route from the Chalk River Gate Station at approximately 9 km.	No further action required.
3	Katherine Kirzati	Ministry of Tourism, Culture and Sport	Heritage Planner	13-Feb-15	416-314-7643	N/A	Katherine.kirzati@ontario.ca	Sent letter response upon receipt of NoC. Document added to the project file.	Enbridge reviewed response from MTCS and is committed to completing a Stage 2 Archaeological Assessment in order to determine Archaeological potential along the pipeline route. The remaining Stage 2 Archaeological work is anticipated to begin the week of September 28, 2015. This field work will take a day or less to complete and will be followed by a final report, which will be targeted to be completed by October 30, 2015. The report will be filed as soon as it is completed.	No further action required.
4	Cindy Anaka	Township of Laurentian Hills	Administrative Assistant	18-Feb-15	613-584-3114	N/A	info@laurentianhills.ca	Wanting a colour version of the NoC image.	Stantec provided a colour version of the map to Cindy on February 18, 2015.	No further action required.
5	Mary Lyons	Ministry of Natural Resources and Forestry	District Planner	19-Feb-15	613-732-5522	613-732-2972	mary.lyons@ontario.ca	Wondering if work is within ROW and if additional clearing/disturbance would be required? Are any additional access routes required (i.e. hydro corridor)? Will the pipeline be above/below ground? What techniques are used to cross waterways? What is a gate station?	Enbridge e-mailed Ms. Lyons back on February 18, 2015 and provided answers to all of her questions.	No further action required.
6	Audrey Bennett	Ministry of Municipal Affairs and Housing	Director	20-Feb-15	416-585-6072	N/A	Audrey.bennett@ontario.ca	Sent a letter response indicating that they have re-directed the NoC to the Eastern Municipal Services Office.	N/A	N/A
7	Anjala Puvananathan	Canadian Environmental Assessment Agency	Director, Ontario Region	20-Feb-15	416-952-1576	N/A	N/A	Provided letter in mail to Stantec stating that the proposed project may meet the requirements of CEAA 2012 but not subject to section 1 of the Regulations. If the project is not subject to CEAA, they would like removed from the distribution list.	Enbridge and Stantec confirmed that the project does not meet the requirements of CEAA 2012 and is not subject to Section 1of the Regulations.	No further action required.
8	Amy Tianyuan Li	Hydro One/Secondary Land Use Transmission Asset Management	N/A	23-Feb-15	416-345-6473	N/A	Tianyuan.Li@HydroOne.com	Hydro One emailed to confirm that they have high voltage transmission facilities within our Study Area and that the corridor may have provisions for future lines or already contain secondary land uses.	Enbridge acknowledged receipt of e-mail on February 25, 2015.	Hydro One will be provided a proposed drawing during circulation for review and approval.
9	Glenn Tunnock	Tunnock Consulting Ltd. (contrat planner for Township of Laurentian Hills)	N/A	3-Mar-15	613 464-8805	N/A	gtunnock@tunnockconsulting.ca	Inquiring whether the specified minimum yield strength will be above 40% for the proposed pipeline.	Enbridge provided a response on March 11, 2015. The maximum operating pressure of this proposed pipeline will produce a hoop stress of less than 30% of the Specified Minimum Yield Strength of the pipe.	No further action required.

Witnesses: R. Doyon
S. Kingdon-Benson

Table A-1 UPDATED Summary of Consultation

Item#	Name	Organization/Community	Title/Address	Date of Contact	Phone	Fax	Email	Comments	Enbridge Response	Actions
10	Julia Predusca/ Lisa Myslicki	Infrastructure Ontario	Environmental Co-op Student/ Environmental Advisor	04-Mar-15	416-327-6921	N/A	Julia.predusca@infras tructureontario.ca	Sent letter response upon receipt of NoC. Document added to the project file.	Enbridge reviewed response from IO and confirmed that our planned pipeline route will not affect lands owned by IO.	No further action required.
11	Gordon Rollins	Township of Laurentian Hills/Tunnock Consulting Ltd.	Chief Building Official/Planning Coordinator	9-Mar-15	613 584-4015	613 584-3285	cbo@laurentianhills.ca	Providing municipal planning and zoning information. Stated that they would prefer Enbridge use the alternative route (hydro corridor) since it would bypass areas of future development potential.	Enbridge acknowledged receipt of e-mail on March 13, 2015. Enbridge has since revised its design to have the pipeline route follow the minor deviation, which is along the hydro corridor and Baggs Road.	No further action required.
12	Karen Dagenais	Aboriginal Affairs and Northern Development Canada	Junior Information Analyst	10-Mar-15	N/A	N/A	Karine.Dagenais@aandnc.gc.ca	Provided information on how to contact First Nations groups in our area. Also provided a link on how to determine if First Nations have submitted claims.	Stantec acknowledged receipt of e-mail on March 10, 2015. Enbridge and Stantec reviewed e-mail and confirmed that appropriate First Nations groups have been contacted.	No further action required.
13	Jeremy K. Jones	Ministry of Natural Resources and Forestry	District Resources Management Supervisor	13-Mar-15	613-732-5580	N/A	jeremy.k.jones@ontario.ca	Stated that they were hopeful that CNL would provide information on SAR on federal lands and that there is likely no habitat for SAR along the remaining municipal and provincial lands of the route.	N/A	Enbridge is consulting with MNRF to confirm permit requirements for Species at Risk for the project.
14	Scott Loos	Township of Laurentian Hills	Public Works Superintendent	16-Mar-15	613-401-5611	N/A	N/A	Looking at re-paving residential portion of Plant Road and was wondering on our timeline and if we were fully committed to running entirely down Plant Road. He is concerned with our machinery ripping up newly paved roadway if we come in after they complete their work.	Spoke to Mr. Loos over the phone and sent follow-up e-mail on September 21, 2015. Proposed route was changed to avoid the public portion of Plant Road following the Public Open House on February 19, 2015. The new proposed route is not in conflict with the planned repaving work.	No further action required.
15	Not Provided	Transport Canada Environmental Assessment Program in Ontario	Environmental Assessment Coordinator	20-Apr-15		416-952-0514	enviroont@tc.gc.ca	Sent letter response upon receipt of NoC. Document added to the project file.	N/A	Enbridge is in the process of reviewing the Acts and Regulations under Transport Canada to ensure that required permits are obtained for the project, where required.
16	Vicki Mitchell	Ministry of Environment and Climate Change	EA Coordinator	21-May-15	613-549-4000	N/A	Vicki.mitchell@ontario.ca	Interested in receiving a final copy of the EA report on CD once it has been finalized and ready for circulation.	Enbridge sent MOECC a digital copy of the full EA report on 2 CDs, as requested.	No further action required.
■	■	■	■	■	■	■	■	■	■	■
18	Oscar Alonso	Technical Standards and Safety Authority (TSSA)	N/A	24-Jun-15	N/A	N/A	oalonso@tssa.org	Stated that the design specifications for the pipeline met their requirements and that the report and additional information submitted has been accepted by the TSSA.	N/A	N/A
19	Caitlin Cafaro	Canadian Environmental Assessment Agency	Environmental Assessment Coordinator	July 10, 2015	416-954-0734	416-952-1573	caitlin.cafaro@ceaa-acee.gc.ca	Provided letter in e-mail to Stantec stating that the proposed project may meet the requirements of CEAA 2012 but not subject to section 1 of the Regulations. If the project is not subject to CEAA, they would like removed from the distribution list.	Enbridge confirmed that the project does not meet the requirements of CEAA 2012 and is not subject to Section 1of the Regulations.	No further action required.

Witnesses: R. Doyon
S. Kingdon-Benson

Table A-1 UPDATED Summary of Consultation

Item#	Name	Organization/Community	Title/Address	Date of Contact	Phone	Fax	Email	Comments	Enbridge Response	Actions
20	Lisa Myslicki	Infrastructure Ontario	Environmental Advisor	24-Jun-15	416-212-3768	N/A	lisa.myslicki@infrastructureontario.ca	Possibility that IO lands are within the study area. Please complete a title search to determine if IO lands are within the study area and contact IO accordingly. If IO lands are not anticipated to be affected, please remove IO from the distribution list.	Enbridge reviewed response from IO and confirmed that our planned pipeline route will not affect lands owned by IO.	No further action required.
21	N/A	Ministry of Municipal Affairs and Housing	N/A	29-Jun-15	416-585-6014	416-585-6870	N/A	Redirected our letter to the appropriate office in Kingston, ON. Future communication should go to this office.	N/A	No further action required.
22	Katherine Kirzati	Ministry of Tourism, Culture and Sport	Heritage Planner	30-Jun-15	416-314-7643	416-314-7175	katherine.kirzati@ontario.ca	MTCS does not have any further comments.	N/A	No further action required.
23	N/A	Transport Canada	Environmental Assessment Coordinator	29-Jul-15	416-952-0154	N/A	EnviroOnt@tc.gc.ca	Request that we determine if our project will be on Federal land and if approval is required under any acts regulated by Transport Canada. If so, continue correspondence with Transport Canada. If not, remove Transport Canada from the distribution list.	N/A	Enbridge is in the process of reviewing the Acts and Regulations under Transport Canada to ensure that required permits are obtained for the project, where required.
24	Paul Kelly	North Renfrew Snowmobile Club	President	30-Jul-15	613-635-3300	N/A	paul.kelly4@sympatico.ca	Phone call to R. Doyon (Project Manager). Called to inform project team of agreement with DND for use of the snowmobile trail along Baggs Road during the winter months. Inquired on construction timelines regarding Baggs Road.	Informed Mr. Kelly that Enbridge, through communication with the DND, is aware of the agreement with the snowmobile club and DND. Enbridge does not plan on starting construction along Baggs Road until the end of winter, based on this agreement.	No further action required.
25	Vicki Mitchell	Ministry of Environment and Climate Change	EA Coordinator	15-Sep-15	613-540-6852	N/A	Vicki.Mitchell@ontario.ca	E-mailed stating she reviewed the Environmental Report and was satisfied that her concerns were addressed and she was also satisfied with the level of information provided in the report. No follow-up required.	Enbridge acknowledged receipt of e-mail on September 17, 2015.	No further action required.
First Nations										
Please see updated Aboriginal Consultation Log provided in I-1-7.										

Witnesses: R. Doyon
S. Kingdon-Benson

BOARD STAFF INTERROGATORY #7

INTERROGATORY

Ref: Exhibit F, Tab 1, Schedule 1, Pages 1-2

Preamble:

Enbridge notified and followed up by phone with First Nations and Metis Nations potentially affected by the project. Enbridge stated no comments or questions were received from the First Nations and Metis organizations at the time of filing the application.

Question:

Please provide an update on Aboriginal consultation undertaken since the application was filed. Identify any concerns raised in the consultation and describe how is Enbridge planning to address the concerns raised by First Nations and Metis affected by the proposed project.

RESPONSE

Since the Application was filed, the Algonquins of Pikwàkanagàn First Nation have contacted Stantec, Enbridge's environmental consultant, via letter on July 30, 2015. The letter can be found in Attachment 1. An updated correspondence log can be found in Attachment 2.

The Algonquins of Pikwàkanagàn First Nation have indicated to Enbridge that:

"pipeline owners and proponents of new lines should be proposing accommodation and compensation to the Algonquins of Pikwàkanagàn when seeking consent for their projects".

Enbridge has requested an in-person meeting with the Algonquins of Pikwàkanagàn in order to understand their concerns. In addition, Enbridge would like to explain the nature of this project and the context in which it operates. The Algonquins of Pikwàkanagàn may not be aware of the fact that Enbridge Gas Distribution is a regulated natural gas distribution utility. As such, the project involves the installation of

Witnesses: B. Balkanci
R. Doyon
S. Kingdon-Benson

a distribution service within the approved regulatory regime and the facilities will form part of the total utility assets. Also, Enbridge must use project economics that follow the Ontario Energy Board's approved guidelines for adding new customers.

At this time, the Algonquins of Pikwàkanagàn have not yet responded to Enbridge's various requests for a meeting¹. Enbridge will continue to communicate with the Algonquins of Pikwàkanagàn to further mutual understanding.

The Algonquins of Pikwàkanagàn and other First Nation or Métis group have not requested to intervene in this proceeding.

¹ Please refer to the correspondence log as well as Attachment 3 - Enbridge's August 26 2015 letter to Chief Whiteduck of the Algonquins of Pikwàkanagàn First Nation, and Attachment 4 -Enbridge's September 16 2015 email to Councilor Kohoko of the Algonquins of Pikwàkanagàn First Nation.

Witnesses: B. Balkanci
R. Doyon
S. Kingdon-Benson



Algonquins of Pikwàkanagàn *First Nation*

July 30, 2015

Mr. Edward Malindzak
Senior Biologist
Stantec Consulting Ltd.
400 – 1331 Clyde Avenue
Ottawa, ON
K2C 3G4

Dear Mr. Malindzak;

Re: Notice of Study Commencement

Thank you for your letter of June 11, 2015 notifying us of the Notice of Study Commencement from Enbridge Gas Distribution Inc. on the Proposed Distribution Pipeline to Serve the Canadian Nuclear Laboratories Chalk River Facility, Township of Laurentian Hills, Ontario. We have reviewed this information and the proposed pipeline is within our traditional territory.

At the current time we are considering what to do about all of the pipelines going through our Traditional Territory. From our perspective, pipeline owners and proponents of new lines should be proposing accommodation and compensation for the Algonquins of Pikwakanagan when seeking our consent for their projects. We are not prepared to consent to your pipeline project at this time.

Sincerely,

Chief Kirby Whiteduck

c.c.: Renfrew County Land Registry

ORGANIZATION	TITLE	DEPARTMENT	FIRST NAME	SURNAME	Form of Contact	Comments	Date	Agent
Algonquins of Ontario	Strategic Communications Coordinator	Consultation Office	Megan	Aikens	Notice of Study Commencement Letter		4-Feb-15	Stantec
Pikawakanagan First Nation	Chief & Council		Kirby	Whiteduck	Notice of Study Commencement Letter		4-Feb-15	Stantec
Metis Nation of Ontario		Head Office			Notice of Study Commencement Letter		4-Feb-15	Stantec
Metis Nation of Ontario	MNO Director of Lands, Resources and Consultations	Metis Consultation Unit	Aly N.	Alibhai	Notice of Study Commencement Letter		4-Feb-15	Stantec
Algonquins of Ontario	Strategic Communications Coordinator	Consultation Office	Megan	Aikens	Phone call to ensure Notice of Study Commencement Letter was received.	Nona Golding was identified as the alternate contact in Megan Aikens absence.	26-Mar-15	Stantec
Pikawakanagan First Nation	Chief & Council		Kirby	Whiteduck	Phone call to ensure Notice of Study Commencement Letter was received.	Stantec left a message on Mr. Whiteduck's voicemail asking for a return call to confirm receipt of Notice of Study Commentment Letter and to share any questions, comments, or requests for further information.	26-Mar-15	Stantec
Metis Nation of Ontario	MNO Director of Lands, Resources and Consultations	Metis Consultation Unit	Aly N.	Alibhai	Phone call to ensure Notice of Study Commencement Letter was received. Left message.	Stantec left a message on Aly Alibhai's voicemail asking for a return call to confirm receipt of Notice of Study Commentment Letter and to share any questions, comments, or requests for further information.	26-Mar-15	Stantec
Algonquins of Ontario	Strategic Communications Coordinator	Consultation Office	Nona	Golding	Notice of Study Commencement Letter	A Notice of Study Commencement Letter was send to Nona Golding.	30-Mar-15	Stantec
Algonquins of Ontario	Strategic Communications Coordinator	Consultation Office	Nona	Golding	Phone call to ensure Notice of Study Commencement Letter was received.	Stantec spoke to Nona Golding who confirmed receiving the Notice of Study Commencement Letter emailed on March 30, 2015. She indicated she had printed a copy of the letter and passed it to her supervisor.	7-Apr-15	Stantec

ORGANIZATION	TITLE	DEPARTMENT	FIRST NAME	SURNAME	Form of Contact	Comments	Date	Agent
Pikawakanagan First Nation	Chief & Council		Kirby	Whiteduck	Phone call to ensure Notice of Study Commencement Letter was received.	Stantec left message with Delores Kohoko, who identified herself as Kirby Whiteduck's assistant. Stantec asked Mr. Whiteduck to return the call to confirm receipt of Notice of Study Commentment Letter and to share any questions, comments, or requests for further information. Ms. Kohoko idicated she would have Mr. Whiteduck return the call. Alanna Hein identified herself as a representative of the Piikwàkanagàn First Nation and returned the follow-up call on April 10, 2015. She , indicating questions and comments would be forwarded within a week of the call.	7-Apr-15	Stantec
					Phone call to ensure Notice of Study Commencement Letter was received.	Stantec left a voicemail message asking for a return call to confirm receipt of Notice of Study Commentment Letter and to share any questions, comments, or requests for further information.	7-Apr-15	Stantec
Metis Nation of Ontario	MNO Director of Lands, Resources and Consultations	Metis Consultation Unit	Aly N.	Alibhai	Phone call to ensure Notice of Study Commencement Letter was received.	Stantec left a message on Aly Alibhai's voicemail asking for a return call to confirm receipt of Notice of Study Commentment Letter and to share any questions, comments, or requests for further information.	7-Apr-15	Stantec
Pikawakanagan First Nation			Alanna	Hein	Follow up phone call regarding comments said to be forth coming by April 17, 2015.	Stantec left a voice message requesting a return call. Alanna Hein returned Stantec's call on June 18, 2015, requesting a duplicate copy of the Project Notification letter. A duplicate of the February 4, 2015, letter addressed to Kirby Whiteduck was sent via email to chief@piikwakanagan.ca on June 19, 2015.	1-Jun-15	Stantec
Metis Nation of Ontario		Head Office			Notice of Study Completion Letter		11-Jun-15	Stantec
Metis Nation of Ontario	MNO Director of Lands, Resources and Consultations	Metis Consultation Unit	Aly N.	Alibhai	Notice of Study Completion Letter		11-Jun-15	Stantec

ORGANIZATION	TITLE	DEPARTMENT	FIRST NAME	SURNAME	Form of Contact	Comments	Date	Agent
Algonquins of Ontario	Strategic Communications Coordinator	Consultation Office	Megan	Aikens	Notice of Study Completion Letter	Janet Stavinga (Executive Director, Consultations Office, Algonquins of Ontario) emailed Stantec on July 15, 2015, requesting digital and hard copies of the Environmental Report, including any archaeological assessments. Enbridge sent the requested items July 17, 2015.	15-Jul-15	Stantec
Pikawakanagan First Nation	Chief & Council		Kirby	Whiteduck	Re: Notice of Study Completion Letter	Stantec received a response letter from Mr. Whiteduck dated July 30, 2015. The letter states that pipeline owners and proponents of new pipelines should be proposing accomodation and compensation for the Algonquins of Pikwakanagan. The letter also states that the Algonquins of Pikwakanagan are not prepared to consent to the pipeline project at this time. (Letter attached.)	30-Jul-15	Stantec
Algonquins of Ontario	Strategic Communications Coordinator	Consultation Office	Megan	Aikens	Notice of Application, and a copy of the Application and Evidence	As per the OEB's Letter of Direction, dated August 11, 2015, the Notice of Application, and a copy of the Application and Evidence were sent out on August 14, 2015.	14-Aug-15	S. Allman (Enbridge)
Metis Nation of Ontario	MNO Director of Lands, Resources and Consultations	Metis Consultation Unit	Aly N.	Alibhai	Notice of Application, and a copy of the Application and Evidence	As per the OEB's Letter of Direction, dated August 11, 2015, the Notice of Application, and a copy of the Application and Evidence were sent out on August 14, 2015.	14-Aug-15	S. Allman (Enbridge)
Pikawakanagan First Nation	Chief & Council		Kirby	Whiteduck	Notice of Application, and a copy of the Application and Evidence	As per the OEB's Letter of Direction, dated August 11, 2015, the Notice of Application, and a copy of the Application and Evidence were sent out on August 14, 2015.	14-Aug-15	S. Allman (Enbridge)
Pikawakanagan First Nation	Chief & Council		Kirby	Whiteduck	Phone Call in response to letter received from Chief Whiteduck.	Spoke with Delores Kohoko, identified as Chief Whiteduck's assistant. Introduced myself as the Project Manager, apologized for delay in response, and left contact information for questions or comments. Also informed Delores that a formal response is being prepared. Delores acknowledged receipt of Application and Evidence binder and CD.	19-Aug-15	R. Doyon (Enbridge)

ORGANIZATION	TITLE	DEPARTMENT	FIRST NAME	SURNAME	Form of Contact	Comments	Date	Agent
Pikawakanagan First Nation	Chief & Council		Kirby	Whiteduck	Letter sent to Chief Whiteduck via e-mail and standard e-mail.	Sent letter in response to letter received from Chief Whiteduck, dated July 30, 2015. Letter was sent via e-mail to chief@pikwakanagan.ca and by standard mail. (Letter attached.)	26-Aug-15	R. Doyon (Enbridge)
Pikawakanagan First Nation	Chief & Council		Kirby	Whiteduck	Follow-up Phone Call regarding letter and e-mail sent on August 26th.	Spoke with Alanna Hein, identified as Chief Whiteduck's assistant. Confirmed receipt of letter from Enbridge dated August 26, 2015. Provided office and cell phone numbers and requested meeting with First Nation to discuss project in more detail. Ms. Hein stated this message will be relayed to Dan Kohoko, a Counsilor for the First Nation.	2-Sep-15	R. Doyon (Enbridge)
Pikawakanagan First Nation	Councillor		Dan	Kohoko	Voicemail received from Dan Kohoko	Voicemail received from Dan Kohoko, identified as a member of council for the First Nation. Stated that he is calling in regards to Enbridge's phone call on September 2nd. Also stated they will be quite willing to meet with us to discuss accomodation, but a meeting for any other purpose is not a priority for them at this time.	8-Sep-15	R. Doyon (Enbridge)
Pikawakanagan First Nation	Councillor		Dan	Kohoko	Phone Call in response to voicemail received from Dan Kohoko	Spoke with Dan Kohoko. Explained that Enbridge would like to meet with the First Nation to better explain the nature of this project and better understand their concerns. Explained that this project is essentially a large gas service for an existing facility within the franchise area and that, as a regulated utility, Enbridge is obligated to provide gas to those requesting service within the franchise area. Mr. Kohoko re-iterated that the First Nation is not in favour of anything happening without accomodation, and stated that any profit as a result of this pipeline should be shared with the First Nation. Mr. Kohoko requested future communication be through: chiefcouncil@pikwakanagan.ca	9-Sep-15	R. Doyon (Enbridge)

ORGANIZATION	TITLE	DEPARTMENT	FIRST NAME	SURNAME	Form of Contact	Comments	Date	Agent
Pikawakanagan First Nation	Councillor		Dan	Kohoko	E-mail follow-up to Dan Kohoko at chiefcouncil@pikwakanagan.ca	Sent follow-up e-mail to Dan Kohoko at chiefcouncil@pikwakanagan.ca (Email attached.)	16-Sep-15	R. Doyon (Enbridge)
Pikawakanagan First Nation	Councillor		Dan	Kohoko	Phone call follow-up to Dan Kohoko at 613-633-7635	Spoke to Dan Kohoko as follow-up to e-mail from September 16, 2015. Mr. Kohoko confirmed they have received the e-mail and they will discuss their response at their next council meeting at the end of the month.	21-Sep-15	R. Doyon (Enbridge)



Roger Doyon
Project Manager
Planning & Design
Eastern Region

tel 613 748 6859
cell 613 715 3585
fax 613 748 6869
roger.doyon@enbridge.com

Enbridge Gas Distribution
400 Coventry Road
Ottawa, Ontario K1K 2C7
Canada

Filed: 2015-09-25
EB-2015-0194
Exhibit I
Tab 1
Schedule 7
Attachment 3
Page 1 of 1

August 26, 2015

Chief Kirby Whiteduck
Algonquins of Pikwàkanagàn First Nation
1657A Mishòmis Inamo
Pikwàkanagàn
Golden Lake, Ontario
K0J 1X0

By E-Mail and Regular Mail

Dear Chief Whiteduck,

RE: Proposed Pipeline to Serve the Canadian Nuclear Laboratories ("CNL"), Chalk River Facility (the "Project")

I am writing in response to your letter dated July 30, 2015 addressed to Edward Malindzak regarding the Project. First, allow me to introduce myself, my name is Roger Doyon and I am the Project Manager. Second, I apologize for the delay in responding. Unfortunately your letter was received while Mr. Malindzak was out of the office and was not discovered until his return in mid-August.

As you are aware, Enbridge Gas Distribution Inc. ("Enbridge") is proposing to construct a distribution pipeline to provide natural gas service to the existing CNL Facility, in the Town of Laurentian Hills. The proposed pipeline is approximately 8.9 kilometres ("km") in length and has an outside diameter of 6 inches (Nominal Pipe Size 6). The majority of the pipeline will be installed within CNL Facility boundaries, following existing roads, with the exception of 1.8 km of the route, which follows an existing Hydro One easement for approximately 0.5 km and an existing untraveled road allowance for approximately 1.3km between the hydro easement and Plant Road. The Project is required to enable Enbridge to provide natural gas supply to the CNL Chalk River Facility. Further information regarding the Project, including the supporting evidence can be found on the Project website: <http://www.enbridgegas.com/cnl-chalkriver>

On August 14, 2015 (before we were aware of your July 30th letter) Enbridge sent a copy of our Project Application and Evidence to the Algonquins of Pikwàkanagàn First Nation. Included in that correspondence was a copy of Enbridge's leave to construct application filed with the Ontario Energy Board ("OEB") and instructions on how the Algonquins of Pikwàkanagàn First Nation can participate in the OEB hearing process.

We would welcome an opportunity to meet with representatives of the Algonquins of Pikwàkanagàn First Nation to discuss the Project and answer any questions that you might have. Please feel free to contact me directly to arrange a meeting.

Sincerely,

Roger Doyon
Project Manager
CNL Chalk River Project

Roger Doyon

From: Roger Doyon
Sent: Wednesday, September 16, 2015 4:56 PM
To: 'chiefcouncil@pikwakanagan.ca'
Subject: RE: Proposed Pipeline to Service the Canadian Nuclear Laboratories Chalk River Facility

Dear Councillor Kohoko,

Thank you for taking the time to speak with me on September 9, 2015 regarding our project to provide natural gas service to the Canadian Nuclear Laboratories Facility in the Town of Laurentian Hills. I appreciate your time in discussing this project with me.

Further to our telephone discussion, we would appreciate an opportunity to meet in person to provide you with project specifics and to better explore your interests and concerns. Through these discussions, we will be able to identify specific areas of concern so we can better understand the Algonquins of Pikwàkanagàn First Nation's position.

On behalf of Enbridge Gas Distribution, I would like to reinforce that we are committed to working collaboratively with the Algonquins of Pikwàkanagàn First Nation to develop a mutually agreeable and beneficial path forward.

Sincerely,

Roger Doyon

Project Manager, Planning & Design, Eastern Region

ENBRIDGE GAS DISTRIBUTION

TEL: 613-748-6859 | FAX: 613-748-6869 | CELL: 613-715-3585
 400 Coventry Road Ottawa, Ontario K1K 2C7

enbridgegas.com

Integrity. Safety. Respect.

BOARD STAFF INTERROGATORY #8

INTERROGATORY

Ref: Application page 1, paragraph 1

Preamble:

Enbridge applied for OEB order for leave to construct facilities-under section 90(1) of the OEB Act.

Question:

Please comment on the attached Board staff proposed draft conditions of approval. Please note that these conditions are draft version subject to additions or changes.

RESPONSE

Enbridge has reviewed the Board staff proposed draft conditions of approval and does not have any concerns or comments. All conditions as set out by the Ontario Energy Board will be adhered to by Enbridge.

Witnesses: B. Balkanci
R. Doyon
S. Kingdon-Benson