



Stephanie Allman  
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Regulatory Affairs

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

**VIA RESS, EMAIL AND COURIER**

June 30, 2015

Ms. Kirsten Walli  
Ontario Energy Board  
P.O. Box 2319  
2300 Yonge Street, 26th Floor  
Toronto, ON M4P 1E4

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

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Enbridge is proposing to construct a Natural Gas Pipeline to serve the Canadian Nuclear Laboratories ("CNL") Chalk River Facility, Township of Laurentian Hills, Ontario.

Enclosed please find two copies of the application and evidence for the above noted proceeding.

Further to the above noted submission, contained within the filing are the following redacted versions of the following Exhibits:

- Exhibit A, Tab 2, Schedule 3
- Exhibit D, Tab 1, Schedule 2
- Exhibit D, Tab 1, Schedule 4

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 the application and evidence will be provided to the Board under separate cover.

To view the redacted application and evidence, including the environmental report, please visit the Enbridge website at [www.enbridgegas.com/cnl-chalkriver](http://www.enbridgegas.com/cnl-chalkriver).

Please contact the undersigned if you have any questions.

Sincerely,

(Original Signed)

Stephanie Allman  
Regulatory Coordinator

Exhibit List

A – GENERAL

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	<u>Description</u>
A	1	1	Table of Contents
	2	1	Application
		2	OPCC Distribution List
		3	List of Interested Parties
	3	1	Purpose, Need, Proposed Facilities and Timing
			Attachment 1 - Letter of Support from Canadian Nuclear Laboratories

B – ROUTING AND ENVIRONMENTAL

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	<u>Description</u>
B	1	1	Route selection
			Attachment 1 – Map of Final Preferred Route
		2	Environmental Implementation Plan
		3	Environmental Report
		4	Archaeological Assessment

C – FACILITIES AND PROJECT COSTS

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	<u>Contents</u>
C	1	1	Design Specifications
		2	Hydrostatic Test Procedures
		3	Construction Details
	2	1	Costs

D – LAND ISSUES

D	1	1	Land Requirements
		2	Permits Required
		3	Negotiations to Date Attachment 1 Agreement to Grant Easement Attachment 2 Standard Easement Agreement Attachment 3 Working Area Agreement
		4	Affidavit Search of Title

E – ECONOMIC FEASIBILITY

E	1	1	Economic Feasibility
		2	Financial Agreement Attachment 1 20141219 Agreement Attachment 2 20150617 Amendment

F- OTHER MATTERS

F      1      1      Aboriginal Consultation

## ONTARIO ENERGY BOARD

**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 Enbridge Gas Distribution Inc. under section 90 of the Act for an order or orders granting leave to construct an NPS 6 natural gas distribution pipelines and ancillary facilities in Chalk River, Town of Laurentian Hills in the County of Renfrew;

### **LEAVE TO CONSTRUCT APPLICATION: CANADIAN NUCLEAR LABORATORIES PIPELINE**

1. The Applicant, Enbridge Gas Distribution Inc. ("**EGD**" or "**Enbridge**"), is an Ontario corporation with its head office in the City of Toronto. It carries on the business of selling, distributing, transmitting, and storing natural gas within Ontario.
2. Canadian Nuclear Laboratories has requested natural gas distribution service for its facilities in Chalk River (the "**CNL Facility**") be provided by October 2016.
3. Enbridge hereby applies to the Board for leave to construct approximately 8.9 km section of Nominal Pipe Size ("**NPS**") 6 steel pipeline plus ancillary facilities (the "**Facilities**") to service the CNL facility in Chalk River. A map showing the proposed pipeline route can be found in Exhibit B, Tab 1, Schedule 1, Attachment 1.
4. The proposed pipeline is approximately 8.9 km in length and would originate at the Enbridge Chalk River Gate Station located at 30855 Highway 17, approximately

1 kilometre (“km”) southeast of the Village of Chalk River in the Town of Laurentian Hills.

The proposed pipeline would travel northeast along an existing Hydro One easement, traverse north on Baggs Road (which is a trail) and northeast along Plant Road to the CNL Facility and terminate at the CNL Power Plant within the existing CNL property limits near Chalk River.

5. Ancillary facilities include approximately 1.3 km of NPS 6 intermediate pressure polyethylene pipe and upgrades to the existing Chalk River Gate Station.
6. The route and location for the proposed pipeline were selected by Stantec Consulting Ltd. (“**Stantec**”), an independent environmental consultant, through the process outlined in the Ontario Energy Board’s *“Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines in Ontario” (Sixth Edition, 2011)*. Input from the public and area stakeholders and First Nations was sought during the route selection process and was incorporated into the final alignment decision. Details on the route selection and the Environmental and Socio-Economic Impact Assessment (“**ER**”) of the proposed facility are included at Exhibit A, Tab 3, Schedule 1. The proposed measures outlined in the ER, will be used to mitigate any potential environmental impacts.
7. Enbridge has included draft agreements at Exhibit D, Tab 1, Schedule 3 that will be offered to affected landowners where the need for an easement arises.
8. Construction is scheduled to commence no later than January 2016. Exhibit C, Tab 1, Schedule 3 indicates the proposed construction schedule. The proposed in-service date for the project is October 2016.

9. A list of interested parties and permitting authorities is provided at Exhibit A, Tab 2, Schedule 3.
10. Enbridge requests this Application proceed by way of written hearing in English.
11. Enbridge requests the Ontario Energy Board (“OEB”) issue:
  - (i) pursuant to section 90 of the *Ontario Energy Board Act, 1998*, S.O. 1998, c-15, Schedule B, an Order granting leave to construct the Facilities; and
  - (ii) pursuant to section 97 of the *Ontario Energy Board Act, 1998*, S.O. 1998, c-15, Schedule B, an Order approving the form of easement agreements found at Exhibit D, Tab 1, Schedule 3.
12. Enbridge requests that copies of all documents filed with the Board in connection with this proceeding be served on it and on its counsel, as follows:
  - (a) The Applicant:

Regulatory Affairs	
Enbridge Gas Distribution Inc.	
Address for personal service:	500 Consumers Road
	Toronto, ON M2J 1P8
Mailing Address:	P. O. Box 650
	Scarborough, ON M1K 5E3
Telephone:	(416) 495-5499
Fax:	(416) 495-6072
E-Mail:	EGDRegulatoryProceedings@enbridge.com
  - (b) The Applicant's counsel:

Scott Stoll
Aird & Berlis LLP



Address for personal service and mailing address: Suite 1800, Box 754  
Brookfield Place, 181 Bay Street  
Toronto, Ontario  
M5J 2T9

Telephone: (416) 865-4703  
Fax: (416) 863-1515  
E-Mail: [sstoll@airdberlis.com](mailto:sstoll@airdberlis.com)

DATED June 30, 2015, at Toronto, Ontario.

**ENBRIDGE GAS DISTRIBUTION INC.**  
By its counsel

**AIRD & BERLIS LLP**

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Scott Stoll

OPCC<sup>1</sup> DISTRIBUTION LIST

Zora Crnojacki  
Ontario Energy Board

Linda Pim  
Ministry of Agriculture and Food, Ministry of Rural Affairs

Chris Schiller  
Ministry of Culture

Tony Difabio  
Ministry of Transportation

Oscar Alonso  
Technical Standards and Safety Authority

Sally Renwick  
Ministry of Natural Resources

Goran Ciric  
Ministry of Municipal Affairs and Housing

Peter Taylor (in place of Ruth Orwin)  
Vicki Mitchell (Regional EA Coordinator)  
Ministry of Environment (Eastern Regional Contact)

David Martin (First Nation and Metis Policy and Partnerships Office)  
Marlo Spence Lair (Regulatory and Agency Policy Unit)  
Ministry of Energy

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<sup>1</sup> Ontario Pipeline Coordinating Committee

Interested Parties

SURNAME	FIRST NAME	ORGANIZATION	DEPARTMENT	TITLE	ADDRESS	TOWN	POSTAL CODE	TELEPHONE	FAX	E-Mail
Gallant	Cheryl	Constituency Office	Renfrew-Nipissing-Pembroke	MP	84 Isabella Street, First Floor	Pembroke, ON	K8A 5S5	613-732-4404	613-732-4697	cheryl.gallant@parl.gc.ca
Yakabuski	John	Constituency Office	Renfrew-Nipissing-Pembroke	MPP	84 Isabella Street, First Floor	Pembroke, ON	K8A 5S5	613-735-6627	613-735-6692	john.yakabuski@pc.ola.org
<b>FEDERAL AGENCIES</b>										
		Canadian Nuclear Safety Commission			280 Slater Street	Ottawa, ON	K1P5S9	1-800-668-5284	613-995-5086	info@cnscc-ccsn.gc.ca
Knox	Louise	Canadian Environmental Assessment Agency	Ontario Region	Regional Director	55 St. Clair Ave East, 9th Floor, Room 907	Toronto, ON	M4T 1M2	416-952-1575	416-952-1573	Louise.Knox@ceaa-acee.gc.ca
Dobos	Rob	Environment Canada	EA Section	Manager	PO Box 5050, 867 Lakeshore Rd	Burlington, ON	L7R 4A6	905-336-4953	905-336-8901	rob.dobos@ec.gc.ca
Allan	Sheila	Environment Canada	EA Section	Senior Environmental Assessment Officer	PO Box 5050, 867 Lakeshore Rd	Burlington, ON	L7R 4A6	905-336-4948	905-336-8901	Sheila.Allan@ec.gc.ca
Ma	Kitty	Health Canada	Ontario Region	Regional Environmental Assessment Coordinator	180 Queen Street West, 10th Floor	Toronto, ON	M5V 3L7	416-954-2206	416-952-4444	kitty_ma@hc-sc.gc.ca
Environmental Assessment Coordinator		Transport Canada	Ontario Region	Environment & Engineering (PHE)	4900 Yonge Street, 4th Floor	Toronto, ON	M2N 6A5			EnviroOnt@tc.gc.ca
Wallace	Deborah	Industry Canada	Ontario Region	Acting Regional Executive Director	151 Yonge Street	Toronto, ON	M5C 2W7	416-973-5001	416-954-6646	
Ferguson	Mark	Fisheries and Oceans Canada	Eastern Ontario District	Senior Habitat Biologist, Fish Habitat Management Ontario Great Lakes Area	401 King Street West	Prescott, ON	K0E 1T0	613-925-2865 ext. 145	613-925-2245	mark.ferguson@dfo-mpo.gc.ca
<b>ONTARIO PIPELINE COORDINATING COMMITTEE</b>										
Schiller	Chris	Ministry of Tourism, Culture and Sport	Manager, Culture Services Unit	Ontario Pipeline Coordinating Committee	400 University Avenue, 4th floor	Toronto, ON	M7A 2R9	416-314-7144	416-314-7175	chris.schiller@ontario.ca
Difabio	Tony	Ministry of Transportation		Ontario Pipeline Coordinating Committee	301 St. Paul Street, 2nd floor	St. Catharines, ON	L2R 7R4	905-704-2916	905-704-2481	tony.difabio@mto.gov.on.ca
Alonso	Oscar	Technical Standards and Safety Authority		Ontario Pipeline Coordinating Committee	3300 Bloor St. W., 14th Floor, Centre Tower	Toronto, ON	M8X 2K4	416-734-3353	416-231-7525	oalonso@tssa.org
Renwick	Sally	Ministry of Natural Resources	District Planner, North Bay	Ontario Pipeline Coordinating Committee	3301 Trout Lake Road, N	North Bay, ON	P1A 4L7	705-475-5533	705-475-5500	sally.renwick@mnr.gov.on.ca
Crnjacki	Zora	Ontario Energy Board		Ontario Pipeline Coordinating Committee	2300 Yonge Street, 26th Floor, P.O. Box 2319	Toronto, ON	M4P 1E4	416-440-8104	416-440-7656	Zora.Crnjacki@ontarioenergyboard.ca
Mundie	Donna	Ministry of Agriculture, Food and Rural Affairs		Ontario Pipeline Coordinating Committee	1 Stone Road West	Guelph, ON	N1G 4Y2	519-826-3120	519-826-3109	donna.mundie@omafra.gov.on.ca
Panko	Dan	Ministry of the Environment - Central Region	Supervisor, APEP	Ontario Pipeline Coordinating Committee	5775 Yonge Street, 8th Floor	North York, ON	M2M 4J1	416-326-4835	416-325-6345	Dan.Panko@ontario.ca
Ciric	Goran	Ministry of Municipal Affairs and Housing	Planning Innovation Section	Ontario Pipeline Coordinating Committee	College Park, 777 Bay St., 14th Floor	Toronto, ON	M5G 2E5	416-585-6246	416-585-6870	goran.ciric@ontario.ca
Orwin	Ruth	Ministry of the Environment - Eastern Region	Supervisor, APEP	Ontario Pipeline Coordinating Committee	P.O. Box 2203	Kingston, ON	K7M 8S5	613-549-4000 ext. 2624	613-548-6908	ruth.orwin@ontario.ca
Taylor	Peter	Ministry of the Environment - Eastern Region	Manager, Technical Support	Ontario Pipeline Coordinating Committee	P.O. Box 2204	Kingston, ON	K7M 8S6	613-549-4000	613-548-6909	peter.taylor@ontario.ca
Dobrin	Dan	Ministry of the Environment - Southwestern Region	Supervisor, Water Resources	Technical Support Section	733 Exeter Rd	London, ON	N6E 1L3	519-873-5041		Dan.Dobrin@ontario.ca
Allen	Paula	Ministry of the Environment	Supervisor, APEP	Ontario Pipeline Coordinating Committee	199 Larch Street, Suite 1101	Sudbury, ON	P3E 5P9	705-564-3247	705-564-4180	paula.allen@ontario.ca
Duffey	Barry	Ministry of the Environment	Supervisor, APEP	Ontario Pipeline Coordinating Committee	119 King St. West, 12th Floor	Hamilton, ON	L8P 4Y7	905-521-7705	905-521-7820	barry.duffey@ontario.ca
<b>PROVINCIAL AGENCIES</b>										
Garcia-Wright	Agatha	Ministry of the Environment	Environmental Assessment and Approval	Acting Director, Environmental Assessment	2 St. Clair Avenue West Floor 12A	Toronto, ON	M4V 1L5	416-314-7288	416-314-8452	agatha.garciawright@ontario.ca
Karlos	George	Ministry of the Environment		Manager (Acting) Environmental Assessment Services	2 St. Clair Ave W, Flr 12A	Toronto	M4V 1L5	416-314-7967		george.karlos@ontario.ca
Moszynski	Dorothy	Ministry of the Environment		EA Coordinator	5775 Yonge St, 8th Flr	Toronto	M2M 4J1	416-326-3469		dorothy.moszynski@ontario.ca
Parrott	Ian	Ministry of the Environment		Manager - Approval Services	2 St. Clair Ave W, Flr 12A	Toronto	M4V 1L5	416-314-3636		ian.parrott@ontario.ca
Burns	Steve	Ministry of the Environment		District Manager, Ottawa District Office	2430 Don Reid Drive	Ottawa, ON	K1H 1E1	613-521-3450 ext. 224	613-521-5437	steve.burns@ontario.ca
Mitchell	Vicki	Ministry of the Environment		EA Coordinator	1259 Gardiners Road	Kingston, ON	K7P 3J6	613-540-6852		Vicki.Mitchell@ontario.ca
Gaweda	Joanna	Ministry of Natural Resources		District Planner, Pembroke District	31 Riverside Drive	Pembroke, ON	K8A 8R6	613-732-5522	613-732-2972	joanna.gaweda@ontario.ca
Kruschenske	Lauren	Ministry of Natural Resources		Biodiversity Species At Risk Biologist, Pembroke District	31 Riverside Drive	Pembroke, ON	K8A 8R6	613-732-5568	613-732-2972	lauren.kruschenske@ontario.ca
Cooper	David	Ministry of Agriculture Food and Rural Affairs	Environmental and Land Use Policy	Manager	3rd Flr, 1 Stone Rd W	Guelph, ON	N1G 4Y2	519-826-3117	519-826-3109	david.cooper@ontario.ca
Gagnon	Suzanne	Ministry of Community and Social Services	Eastern Region - Ottawa	Regional Director	347 Preston Street, 2nd and 3rd Floor	Ottawa, ON	K1S 2T7	613-787-3962	613-788-2382	suzanne.gagnon@ontario.ca
Doyle	Victor	Ministry of Municipal Affairs and Housing	Central Municipal Services Office	Manager, Community Planning and Development	2nd Floor, 777 Bay Street	Toronto, ON	M5G 2E5	416-585-6109	416-585-6882	victor.doyle@ontario.ca
Springman	Hartley	Ministry of Energy	Strategic Policy Branch	Sr. Policy Advisor	2nd Floor, 880 Bay Street	Toronto, ON	M7A 2C1	416-327-7276	416-327-7204	hartley.springman@ontario.ca
Jenkins	Allan	Ministry of Energy	Energy Supply and Competition Branch	Sr. Policy Specialist	880 Bay Street, 3rd Floor	Toronto, ON	M7A 2C1	416-325-6926	416-325-6972	allan.jenkins@ontario.ca
Austin	Jamie	Ministry of Infrastructure	Ontario Growth Secretariat	Manager, Growth Policy	777 Bay Street, 4th Floor, Suite 425	Toronto, ON	M5G 2E5	416-325-5794	416-325-7403	jamie.austin@ontario.ca
Wijesooriya	Anil	Ministry of Infrastructure		General Manager, Planning, Survey and Appraisal Professional Services, Ontario Realty Corporation	1 Dundas St. West, Suite 2000	Toronto	M5G 2L5	416-212-6183		anil.wijesooriya@ontariorealty.ca
Barboza	Karla	Ministry of Tourism, Culture and Sport	Culture Services Unit	Heritage Advisor	401 Bay Street, Suite 1700	Toronto, ON	M7A 0A7	416-314-7137	416-212-1802	Karla.Barboza@ontario.ca
Kulpa	Paula	Ministry of Tourism, Culture and Sport	Culture Services Unit	Team Lead-L & Use Planning (Acting)	401 Bay Street, Suite 1700	Toronto, ON	M7A 0A7	416-314-7137	416-212-1802	paula.kulpa@ontario.ca
Leclair	Rosemarie	Ontario Energy Board	Chair's Office	Chair	2300 Yonge Street, 26th Floor, Suite 2700	Toronto, ON	M4P 1E4			
Chrzan	Tom	Ministry of Citizenship & Immigration	Central Region	Manager	Suite 502, 180 Dundas St W	Toronto, ON	M7A 2R9	416-314-6682	416-314-2024	Tom.Chrzan@ontario.ca
Brown	Paula	Ontario Provincial Police	Operational Policy and Strategic Planning Bureau		777 Memorial Ave., 3rd Floor	Orillia, ON	L3V 7V3	705-329-6903	705-329-7596	paula.brown@ontario.ca
<b>GOVERNMENT REVIEW TEAM FOR ABORIGINAL INFORMATION</b>										
Leveque	Heather	Ministry of Aboriginal Affairs	Consultation Unit, Aboriginal Relations	Manager	9th Floor, 160 Bloor Street East	Toronto, ON	M7A 2E6	416-325-4044	416-326-1066	heather.leveque@ontario.ca
Johnson	Ashley	Ministry of Aboriginal Affairs	Strategic Policy and Planning Division	Advisor	9th Floor, 160 Bloor Street East	Toronto, ON	M7A 2E6	416-326-6313	416-326-1066	ashley.johnson@ontario.ca
General Contact		Aboriginal Affairs and Northern Development Canada	Environment & Natural Resources Land	Environmental Unit	25 St. Clair Avenue East, 8th Floor	Toronto, ON	M4T 1M2			Eacoordination_ON@inac-ainc.gc.ca
Boswell	Don	Aboriginal Affairs and Northern Development Canada	Specific Claims Branch	Senior Claims Analyst, Ontario Research Team	10 Wellington St., Room 1310	Gatineau, QU	K1A 0H4	819-953-1940	819-997-9873	boswelld@inac.gc.ca
Berman	Allison	Aboriginal Affairs and Northern Development Canada	Consultation & Accommodation Unit	Program Officer	300 Sparks Street	Ottawa, ON	K1A 0A4	613-943-5488		allison.berman@inac-ainc.gc.ca
O'Meara	Bryan	Aboriginal Affairs and Northern Development Canada	Litigation Management and Resolution	Litigation Case Manager	25 Eddy Street, Room 1430	Gatineau, QU	K1A 0H4	819-994-8647	819-953-6143	
Betker	Jeffrey	Aboriginal Affairs and Northern Development Canada	Office of the Federal Interlocutor for M	Senior Policy Analyst	66 Slater Street, Room 1218	Ottawa, ON	K1A 0H4	613-992-7037	613-996-1737	jeffrey.betker@inac.gc.ca

Interested Parties

SURNAME	FIRST NAME	ORGANIZATION	DEPARTMENT	TITLE	ADDRESS	TOWN	POSTAL CODE	TELEPHONE	FAX	E-Mail
<b>TOWN OF LAURENTIAN HILLS</b>										
Anne	Giardini	Town of Laurentian Hills	Council	Deputy Mayor	34465 Highway 17, R.R. #1	Deep River, Ontario	K0J 1P0	613-584-3114		ward2@laurentianhills.ca
Boucher	Bruce	Town of Laurentian Hills	Council	Councillor - Ward 1	24465 Highway 17, R.R. #1	Deep River, Ontario	K0J 1P0	613-584-3114		ward1@laurentianhills.ca
Blimkie	Brenda	Town of Laurentian Hills	Council	Councillor - Ward 3	34465 Highway 17, R.R. #1	Deep River, Ontario	K0J 1P0	613-584-3114		ward3@laurentianhills.ca
Hyde	Dennis	Town of Laurentian Hills	Council	Councillor - Ward 4	34465 Highway 17, R.R. #1	Deep River, Ontario	K0J 1P0	613-584-3114		ward4@laurentianhills.ca
Batten	Sherry	Town of Laurentian Hills	Office of the Chief Administrative Officer	Chief Administrative Officer/Clerk	34465 Highway 17, R.R. #1	Deep River, Ontario	K0J 1P0	613-584-3114		cao@laurentianhills.ca
Rollins	Gordon	Town of Laurentian Hills	Planning Department	Chief Building Official	34465 Highway 17, R.R. #1	Deep River, Ontario	K0J 1P0	613-584-3114		cho@laurentianhills.ca
Reinwald	John	Town of Laurentian Hills	Council	Mayor	34465 Highway 17, R.R. #1	Deep River, Ontario	K0J 1P0	613-584-3114	613-584-3285	mayor@laurentianhills.ca
Loos	Scott	Town of Laurentian Hills	Public Works Department	Public Works Superintendent	34465 Highway 17, R.R. #1	Deep River, Ontario	K0J 1P0	613-584-3114		publicworks@laurentianhills.ca
<b>TOWN OF DEEP RIVER</b>										
Lougheed	Joan	Town of Deep River	Council	Mayor	100 Deep River Road, P.O. Box 400	Deep River, Ontario	K0J 1P0	613-584-2000	613-584-3237	jlougheed@deepriver.ca
Doncaster	Glenn	Town of Deep River	Council	Reeve	100 Deep River Road, P.O. Box 400	Deep River, Ontario	K0J 1P0	613-584-2000	613-584-3237	gdoncaster@deepriver.ca
Aikens	Megan	Town of Deep River	Council	Councillor	100 Deep River Road, P.O. Box 400	Deep River, Ontario	K0J 1P0	613-584-2000	613-584-3237	maikens@deepriver.ca
Desrochers	Ron	Town of Deep River	Council	Councillor	100 Deep River Road, P.O. Box 400	Deep River, Ontario	K0J 1P0	613-584-2000	613-584-3237	rdesrochers@deepriver.ca
McAuley	Jason	Town of Deep River	Council	Councillor	100 Deep River Road, P.O. Box 400	Deep River, Ontario	K0J 1P0	613-584-2000	613-584-3237	jmcauley@deepriver.ca
McLaren	Robert	Town of Deep River	Council	Councillor	100 Deep River Road, P.O. Box 400	Deep River, Ontario	K0J 1P0	613-584-2000	613-584-3237	bmclaren@deepriver.ca
Myers	Terry	Town of Deep River	Council	Councillor	100 Deep River Road, P.O. Box 400	Deep River, Ontario	K0J 1P0	613-584-2000	613-584-3237	tmyers@deepriver.ca
McGee	Rick	Town of Deep River	Staff	CAO/Clerk	100 Deep River Road, P.O. Box 400	Deep River, Ontario	K0J 1P0	613-584-2000 Ext. 126	613-584-3237	rmcgee@deepriver.ca
Labre	Robert	Town of Deep River	Staff	Chief Building Official/By-law Officer	100 Deep River Road, P.O. Box 400	Deep River, Ontario	K0J 1P0	613-584-2000 Ext. 106	613-584-3237	rlabre@deepriver.ca
Patterson	Sean	Town of Deep River	Staff	Director of Public Works	100 Deep River Road, P.O. Box 400	Deep River, Ontario	K0J 1P0	613-584-2000 Ext. 108	613-584-3237	spatterson@deepriver.ca
<b>COUNTY OF RENFREW</b>										
Hutton	Jim	County of Renfrew	Clerks Department	CAO/Clerk	9 International Drive	Pembroke, ON	K8A 6W5	613-735-7288	613-735-2081	
Moreau	Paul	County of Renfrew	Planning Services	Director of Development & Property	9 International Drive	Pembroke, ON	K8A 6W5	613-735-7288	613-735-2081	
Cheesman	Charles	County of Renfrew	Planning Services	Manager of Planning	9 International Drive	Pembroke, ON	K8A 6W5	613-735-7288	613-735-2081	
<b>FIRST NATIONS</b>										
Aikens	Megan	Algonquins of Ontario	Consultation Office	Strategic Communications Coordinator	31 Riverside Drive, Suite 101	Pembroke, ON	K8A 8R6	613-735-3759	613-735-6307	algonquins@nrtco.net
Whiteduck	Kirby	Pikwakanagan First Nation	Chief & Council	Chief & Council	Pembroke, ON K8A 8R6	Pikwakanagan, Golden Lake ON	K0J 1X0	613-625-2800	613-625-2332	chief@pikwakanagan.ca
		Metis Nation of Ontario	Head Office		500 Old St. Patrick St, Unit 3	Ottawa, ON	K1N 9G4	613-798-1488	613-722-4225	
Alibhai	Aly N.	Metis Nation of Ontario	Metis Consultation Unit	MNO Director of Lands, Resources and Consultations	75 Sherbourne St., Suite 311	Toronto, ON	M5A 2P9	416-977-9881		alya@metisnation.org
<b>INTERESTED PARTIES</b>										
Yandt	Barry	Ministry of Transportation	Bancroft Area Office	Corridor Management Officer	50 Monck Street	Bancroft, ON	K0L 1C0	1-800-554-0487 Ext 224		barry.yandt@ontario.ca
		Canadian Nuclear Association			130 Albert Street, Suite 1610	Ottawa, ON	K1P 5G4	613-237-4262	613-237-0989	
Yaraskavitch	Garry	Atomic Energy of Canada Limited (AECL)	Head Office	Senior Director; Infrastructure, Plant Operations, and Chief Sec	Building 508, 286 Plant Road, Chalk River Laboratories	Chalk River, ON	K0J 1J0	613-584-3311 Ext 44240		garry.yaraskavitch@cnl.ca
Behnke	Joan	Department of National Defence - CFB Garrison Petawawa	Headquarters	Realty Asset Manager	Building S-1111, 101 Menin Road, P.O. Box 9999, Stn Main	Petawawa, ON	K8H 2X3	613-687-5511 Ext 5586	613-588-6291	Joan.Behnke@forces.gc.ca
Lickiss	Alisia	Trans Canada Pipeline	Crossings		450 - 1st Street S.W	Calgary, AB	T2P 5H1	403-920-2129		crossings@transcanada.com
Dorfman	Roman	Hydro One Networks Inc.	Real Estate Management	Senior Real Estate Coordinator	185 Clegg Road, PO BOX 4300 L6G 1B7	Markham, ON	L6G 1B7	905-946-6243		roman.dorfman@hydroone.com
Rollins	Gordon	Town of Laurentian Hills	Planning Department	Chief Building Official	34465 Highway 17, R.R. #1	Deep River, Ontario	K0J 1P0	613-584-3114		cho@laurentianhills.ca
Cadoreth	Krista	Town of Deep River	Public Works Department	Administrative Assisstant - Public Works	100 Deep River Road, P.O. Box 400	Deep River, ON	K0J 1P0	613-584-2000 Ext. 107	613-584-3237	krista.cadoreth@deepriver.ca
		CFB Petawawa			101 Menin Road, P.O. Box 9999, Stn Main	Petawawa, ON	K8H 2X3	613-687-5511		petawawapublicaffairs@forces.gc.ca
<b>UTILITY COMPANIES</b>										
Kloostra	Walter	Hydro One Networks Inc.	Lines Information Systems and Program	Transmission Lines Sustainment Manager	483 Bay Street, North Tower, 15th Floor	Toronto, ON	M5G 2P5	416-345-5338	416-345-5443	walter.kloostra@hydroone.com
McKay	Rob	Bell	Access Network	Regional Manager	469 Coventry Rd.; PO Box 8239	Ottawa, ON	K1K 2C5	613-742-1002		Robert.Mckay@Bell.ca

### PURPOSE, NEED, PROPOSED FACILITIES & TIMING

1. Canadian Nuclear Laboratories (“CNL”), formerly known as Atomic Energy of Canada (“AECL”), currently uses Bunker C fuel oil, propane, and electricity for heating and steam generation. CNL is proposing to replace its Bunker C fuel oil, propane, and electric heat with natural gas. The fuel replacement will enable CNL to reduce operating costs and reduce its environmental footprint.
2. CNL has provided Enbridge with a letter of support on the proposed facilities. Please refer to Exhibit A, Tab 3, Schedule 1 Attachment 1. CNL and Enbridge have entered into a financial agreement for the construction of the project should the Board grant leave to construct. Please refer to Exhibit E, Tab 1, Schedule 2.

#### Proposed Facilities

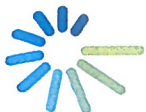
3. To provide distribution services to the CNL Facility, network analysis has shown that a new natural gas pipeline from the Chalk River Gate Station to the CNL Facility is required. The proposed facilities consist of approximately 8.9 km of new Nominal Pipe Size (“NPS”) 6 inch steel natural gas pipeline in the Town of Laurentian Hills.
4. Ancillary facilities include approximately 1.3 km of NPS 6 intermediate pressure polyethylene pipe and upgrades to the existing Chalk River Gate Station and other service and meter installations at CNL.
5. The route and location for the proposed facility associated with Canadian Nuclear laboratories Pipeline (“CNL Pipeline”) were selected by an independent environmental consultant through the process outlined in the Ontario Energy

Board's "*Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario*" (6th Edition, 2011). Input from public was sought during the route selection process and was incorporated into the final route decision.

6. A map of the final preferred route can be found in Exhibit B, Tab 1, Schedule 1 Attachment 1. Details on the route selection and the Environmental and Socio-Economic Impact Assessment of the proposed facility can be found in Exhibit B, Tab 1, Schedule 3. The Environmental Implementation Plan found in Exhibit B, Tab 1, Schedule 2 will incorporate recommended mitigation measures for the environmental issues and concerns associated with the proposed activities.

#### Timing

7. CNL has indicated that natural gas is required to be in-service for October 2016. Environmentally sensitive habitat has been identified along the route. To mitigate environmental impacts, construction in the sensitive area will avoid the months of April to September. Please see the Environmental Report (Exhibit B, Tab 1, Schedule 3, p. 107). To meet the in-service date, Enbridge must therefore commence construction in January 2016.
8. In order to meet the project timelines, Enbridge respectfully requests the approval of the application as soon as possible or no later than mid-November, 2015.



April 13, 2015

**Abbas Chagani, CFA**

**Strategic Accounts Manager | Key Customer Contract Management**

**Enbridge Gas Distribution Inc.**

Tel: 416-753-6665

Cell: 647-632-3279

500 Consumers road North York, Ontario M2J 1P8

[www.Enbridge.com](http://www.Enbridge.com)

Dear Mr. Chagani:

RE: Delivery of Natural Gas to the Canadian Nuclear Laboratories, Chalk River site

This letter is to provide Enbridge Gas Distribution Inc. (EGDI) support in its application to the Ontario Energy Board (OEB) for leave-to-construct approval for the installation of a natural gas pipeline and distribution system to the Canadian Nuclear Laboratories, Chalk Rive site.

Canadian Nuclear Laboratories (CNL) is Canada's premier nuclear science and technology organization. CNL has been a world leader in developing peaceful and innovative applications from nuclear technology through its expertise in physics, metallurgy, chemistry, biology and engineering. CNL is owned and operated by Atomic Energy of Canada Limited (AECL) a Crown corporation. The CNL property located in Chalk River Ontario is a 3,700 hectare site, approximately 200 km northwest of Ottawa on the southwesterly shore of the Ottawa River. The CNL site consists of a total of over 200 buildings with a population of approximately 3200 employees.

CNL is undertaking a project to have Enbridge provide a supply of natural gas to the site with the intent to discontinue the use of #6 bunker C fuel oil, propane and electricity for process and space heating. Based on current estimates this project will reduce energy costs to CNL by approximately \$6.4M annually and provide an annual reduction of greenhouse gas emissions by weight of over 8,700 tonnes.

The estimated annual volume of natural gas demand is approximately 14,000,000 m3. Please advise if any further information is required to assist EGDI in the OEB approval process.

Todd Tallon, Project Leader

Canadian Nuclear Laboratories

Canadian Nuclear Laboratories

Chalk River Laboratories  
286 Plant Road  
Chalk River, Ontario  
Canada K0J 1J0  
Telephone: 613-584-3311  
Toll Free: 1-866-513-2325

Laboratoires Nucléaires Canadiens

Laboratoires de Chalk River  
286, rue Plant  
Chalk River (Ontario)  
Canada K0J 1J0  
Téléphone: 613-584-3311  
Sans frais: 1-866-513-2325

## ROUTE SELECTION

1. Stantec Consulting Ltd (“Stantec”) was retained by Enbridge to propose a route for a pipeline which would originate at the Enbridge Chalk River Gate Station located at 30855 Highway 17, approximately 1 kilometre (“km”) southeast of the Village of Chalk River, and terminate at the CNL Power Plant within the existing CNL property limits near Chalk River, Ontario.
2. Stantec originally proposed two route options: the Preliminary Preferred Route and Alternate Route. After receiving comments from the public open house, a minor deviation of the Preliminary Preferred Route was proposed. This Preliminary Preferred Route, with the minor deviation, became the Final Preferred Route. The location of the Preliminary Preferred, Final Preferred, and Alternate Route can be found in Figure 1 of the Environmental Report (“ER”) in Exhibit B, Tab 1, Schedule 3. Details of the route selection can be found in Chapter 5 of the Environmental Report.
3. The Preliminary Preferred Route would traverse northwest along Highway 17 to Plant Road where it would turn northeast to the CNL Facility. The length of the Preliminary Preferred Route is 10.0<sup>1</sup> km. The Alternate Route would traverse northeast along the existing Hydro One easement to the CNL Facility. The length of the Alternate Route is 7.0<sup>1</sup> km. The Preliminary Preferred Route was the preferable of these two routes.
4. In selecting the Preliminary Preferred Route, Stantec assessed potential routing alternatives for the study area, in which the Preliminary Preferred Route followed

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<sup>1</sup> This refers to the length of the steel mains. In addition there is 1.3 km of plastic ancillary service network.



existing road allowances and therefore, avoided major environmental and socio-economic constraints. The Preliminary Preferred Route has fewer watercourse crossings, does not cross Areas of Natural and Scientific Interest, and also traverses a smaller distance of potentially contaminated lands and wetlands.

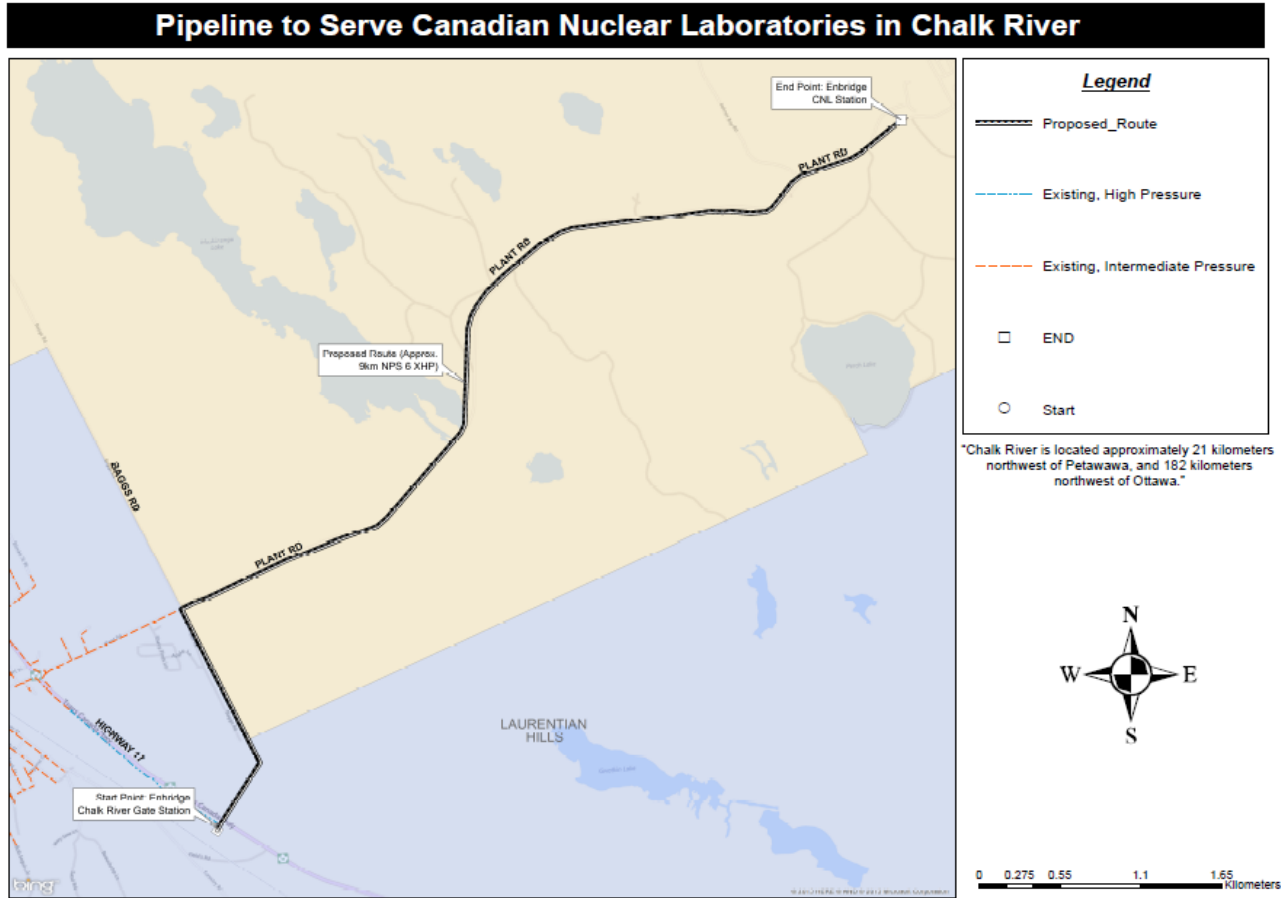
5. The Final Preferred Route has a minor deviation from the Preliminary Preferred Route and was identified after receiving comments from the public open house. The Final Preferred Route would traverse northeast along an existing Hydro One easement, traverse north on Baggs Road (which is a trail), and northeast along Plant Road to the CNL Facility. The length of the Final Preferred Route is 8.9<sup>2</sup> km. A portion of the Final Preferred Route may require an easement for installation of the pipeline.
6. This minor deviation of the Preliminary Preferred Route proposed at the open house alleviated concerns brought forward by stakeholders, including concerns regarding proposed resurfacing of Plant Road as well as traffic congestion around Highway 17 and Plant Road. For these reasons, the Preliminary Preferred Route with the minor deviation became the Final Preferred Route. The location of the Final Preferred Route can be found in Attachment 1 of this document.
7. Enbridge supports and adopts the findings made by Stantec and has accordingly approved the Final Preferred Route as the Preferred route.
8. The Pipeline will follow the Preferred Route and will be installed within the existing road allowance and obtained easements, in coordination with the following entities:

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<sup>2</sup> This refers to the length of the steel mains. In addition there is 1.3 km of plastic ancillary service network.

- Ministry of the Environment and Climate Change
- Ministry of Natural Resources and Forestry
- Ministry of Transportation
- Ministry of Infrastructure
- Ministry of Tourism, Culture and Sport
- Environment Canada
- Transport Canada
- Industry Canada
- Fisheries and Oceans Canada
- Town of Laurentian Hills
- Town of Deep River
- County of Renfrew
- Buried and overhead pipeline and utility owners
- Department of National Defense
- Private Landowners, if applicable
- Canadian Nuclear Laboratories
- Atomic Energy of Canada Ltd.

MAP OF FINAL PREFERRED ROUTE



For other details, please refer to Section 3 and Section 5 of the Environmental Report (Exhibit B, Tab 1, Schedule 3).

## ENVIRONMENTAL IMPLEMENTATION PLAN

1. Construction will be conducted in accordance with Enbridge Gas Distributions Inc.'s ("Enbridge") Construction and Maintenance Manual and the recommendations in the Environmental Report entitled Pipeline to Serve the Canadian Nuclear Laboratories, Chalk River Facility dated May 26, 2015.
2. The Environmental Implementation Plan will incorporate recommended mitigation measures for the environmental issues associated with the proposed works and will be communicated to the construction contractor prior to the start of construction. A qualified Environmental Inspector will be available to assist the Project Manager in ensuring that environmental conditions contained in the OEB's Conditions of Approval are followed and that commitments made to the public, landowners, and agencies are honoured. The Environmental Inspector and Project Manager will also ensure that in the event any unforeseen environmental circumstances arise before or during construction they are appropriately addressed.
3. Specific mitigation measures have been developed for unique issues that have been identified, which include, but are not limited to: bedrock, sensitive wildlife habitat, possible soil contamination, traffic congestion, waste management, and radiation. Mitigation measures for these issues can be found in Section 6 of the Environmental Report in Exhibit B, Tab 1, Schedule 3.
4. In addition to the above, CNL has environmental requirements that will be followed while working on AECL property and these will also be communicated to the construction contractor.

5. Through the use of the procedures outlined above, it is expected that environmental impacts resulting from construction of the CNL Facility will not be significant.

## ENVIRONMENTAL REPORT

1. The Environmental Report (“ER”) by Stantec Consulting Limited can be found at [www.enbridgegas.com/cnl-chalkriver](http://www.enbridgegas.com/cnl-chalkriver).
2. The Environmental Report was submitted to the OPCC on May 29, 2015.
3. On June 24, 2015, the Technical Standards & Safety Authority confirmed that the ER was accepted and the design specifications<sup>1</sup> for the NPS 6 Extra High Pressure (“XHP”) Steel Pipeline meet the requirements of O. Reg. 210/01.

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<sup>1</sup> Exhibit C, Tab 1, Schedule 1

## ARCHAEOLOGICAL ASSESSMENT

1. A Stage 1 Archaeological Assessment completed by Stantec Consulting Ltd. (“Stantec”) can be found in Appendix B of the Environmental Report (also completed by Stantec) (Exhibit B, Tab 1, Schedule 3).
2. The Stage 1 Archaeological Assessment was completed on May 28, 2015 and has since been submitted to the Ministry of Tourism, Culture and Sport.
3. A Stage 2 Archaeological Assessment is in the process and is expected to be completed by the end of August 2015.

DESIGN SPECIFICATIONS

<u>Pipe</u>	<u>Pipe - NPS 6</u>	<u>Units</u>
Material	Steel	
Diameter	168.3	mm
Wall Thickness	4.8	mm
Grade	290	MPa
Specification	CSA Z245.1	
Material Toughness	CSA Z245.1	
Pipe Coating Specifications	CSA Z245.21	
Cathodic Protection	CGA OCC-1	
Cathodic Specification	Fusion Bond Epoxy <sup>1</sup>	
Class Location	4	
Design Pressure	4500	kPa
Hoop Stress at Design Pressure	27.1% SMYS*	
Maximum Operating Pressure (MOP)	4500	kPa
Hoop Stress at MOP	27.1% SMYS*	
Minimum Cover	1.0	metre
Fittings	CSA Z245.11	
Flanges	CSA Z245.12	
Valves	CSA Z245.15	
Test Medium	Water	
Strength Test Hydrostatic Pressure	9000	kPa
Hoop Stress at Strength Test Pressure	54.2% SMYS	
Leak Test Hydrostatic Pressure	6300	kPa

\*SMYS – Specified Minimum Yield Strength

<sup>1</sup> Double for HDD sections and single in remaining locations.



## HYDROSTATIC TEST PROCEDURES

1. All hydrostatic testing will be completed in accordance with the Enbridge Gas Distribution Specifications Manual, and the Enbridge Gas Distribution Hydrostatic Testing Procedures meeting the requirements of the CSA Z662 Oil and Gas Pipeline Systems and Ontario Regulation 210/01 ("Oil and Gas Pipeline Systems").
2. The Hydrostatic Test Procedures described herein is applicable to the proposed NPS 6 Steel pipeline.

### Testing Procedures Summary

3. The proposed steel pipeline will be hydrostatically tested (tested with water). The test will consist of two parts: a strength test and a leak test.

### Strength Test

4. The strength test is a four hour test, at a pressure corresponding to 54.4% of the Specified Minimum Yield Strength (290 MPa) of the pipe. The strength test pressure will be 9000 kPa (1300 psi).

### Leak Test

5. The leak test is conducted immediately following the strength test for a four hour duration. The leak test pressure is 1.4 times the Design Pressure. This results in a leak test pressure of 6300 kPa (915 psi).

Test Water

6. As municipal water is available nearby, test water is proposed to be obtained from the town or municipality. Test water is proposed to be discharged on the CNL facility, as per CNL guidelines.

CONSTRUCTION

1. The proposed construction schedule is as follows:

Leave to Construct Application	June 2015
Procurement of time-sensitive materials	September 2015
Expected LTC approval	November 2015
Receipt of Permits and Approvals	December 2015
Commence Construction	January 2016
Completion of Construction	October 2016
Completion of Reinstatement	May 2017
Final Inspection	August 2017

2. The construction of the pipeline will take approximately 10 months.  
The pipeline construction is scheduled to be completed and tested by October 2016 to meet the targeted in-service date requested by CNL.
3. Construction is planned to commence in winter as a mitigation measure for sensitive habitat along the route. The start in January will avoid construction between April 1 and September 30 in areas identified in the Environmental Report (Exhibit B, Tab 1, Schedule 3, Section 6.3.4, p. 107) for which there is sensitivity to the construction activities.
4. Tree clearing will be completed outside of nesting season to avoid disruption to aviary habitat. Should tree clearing during nesting season become necessary, environmental mitigation measures will be followed.

5. Rock excavation will be necessary for segments of the route, based on geotechnical investigation. Mechanical excavation is planned for these sections, but blasting may become necessary. Should blasting become necessary, local residents will be informed and mitigation measures will be employed to prevent adverse impacts to the environment and local structures.
6. Enbridge will construct the pipeline using qualified construction contractors following approved construction specifications updated to reflect the site specific conditions found on this project.
7. Enbridge is working with CNL to coordinate construction activities in CNL's premises.
8. Restoration monitoring will be conducted through 2017 to ensure successful environmental mitigation.

ID	Task Name	Start	Finish	Duration	Q3 15		Q4 15			Q1 16			Q2 16			Q3 16			Q4 16			Q1 17			Q2 17		Q3 17					
					Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul			
1	Leave To Construct Application	7/1/2015	11/17/2015	100d	[Gantt bar from Jul 2015 to Nov 2015]																											
2	Design	7/1/2015	8/27/2015	42d	[Gantt bar from Jul 2015 to Aug 2015]																											
3	Permits and Approvals	8/28/2015	12/3/2015	70d	[Gantt bar from Sep 2015 to Dec 2015]																											
4	Procurement of Materials	8/28/2015	12/31/2015	90d	[Gantt bar from Sep 2015 to Dec 2015]																											
5	Construction	1/1/2016	10/10/2016	202d	[Gantt bar from Jan 2016 to Oct 2016]																											
6	Commissioning	10/11/2016	10/17/2016	5d	[Gantt bar in Oct 2016]																											
7	Reinstatement	10/18/2016	11/30/2016	32d	[Gantt bar in Oct/Nov 2016]																											
8	Close Out and Final Inspection	12/1/2016	7/25/2017	169d	[Gantt bar from Dec 2016 to Jul 2017]																											

TOTAL ESTIMATED PROJECT COST

	\$
1.0 Material Cost	1,822,737
1.1 Main	826,606
1.2 Distribution	101,711
1.3 Station	894,420
2.0 Labour and Construction Cost	8,465,809
2.1 Main	5,730,322
2.2 Distribution	1,694,250
2.3 Station	1,041,238
3.0 External Costs (Geotechnical, Environmental, Surveying, External Engineering, Insurance)	848,500
4.0 Land Costs	96,500
5.0 Internal Cost (Project Management, Regulatory, Legal, Overhead)	814,500
6.0 Contingency	3,358,309
7.0 Interest	96,785
8.0 Total Project Costs	15,503,140

1. Enbridge will continue to consult with CNL to ensure design and construction are congruent to special requirements of a nuclear facility. Costs are subject to change if major design modifications are made. Enbridge and CNL will ensure the project remain feasible.
2. This estimate is comparable to the Association for the Advancement of Cost Engineering (“ACE”) Class 4/Class 3 Cost Estimates, with a preliminary project definition and schedule, preferred route selection, and semi-detailed unit costs.
3. The coating specification for this project will be Double Fusion Bonded Epoxy in locations where Horizontal Direction Drilling (“HDD”) is required for the Steel Main and Single Fusion Bonded Epoxy will be used for all non-HDD segments of the Steel Main.
4. Estimates for rock excavation are based on geotechnical information for the Preliminary Preferred Route. Geotechnical information is being acquired for the Proposed Deviation, and additional locations within the CNL facility for the distribution network. Current assumptions on the remaining segments are based on the stated geotechnical information, and local knowledge of the area.
5. The cost estimate includes the installation of the distribution network, which also includes twelve service and meter installations as the total project costs are used in project feasibility calculations. (See Exhibit E, Tab 1, Schedule 1.).
6. It is assumed the Land Costs will be comprised of sections along the Proposed Deviation of the route. Easement requirements are summarized in Exhibit D, Tab 1, Schedule 1. The remainder of the route will be installed on land owned by the customer.

7. The cost estimate includes the rebuild of an existing gate station to meet the increased load demand. The estimate also includes the installation of two regulator stations to reduce pressure. One station is required to reduce the pressure of the rebuilt station to that of the existing station, to continue servicing the residents of Chalk River. The other station is required at the customer facility to reduce pressure for the distribution network.
8. The cost estimate includes tree replacement. It is assumed tree replacement will be required as a result of tree removal along Baggs Road.
9. The cost estimate assumes all watercourse crossings, all occurring on CNL property, will be performed within the existing roadway to avoid disturbance of sensitive habitat. This is the most feasible construction method based on environmental mitigation measures.
10. The cost estimate assumes all road crossings will be done using Horizontal Directional Drilling.

## LAND REQUIREMENTS

1. The preferred route is as described in Exhibit B, Tab 1, and Schedule 1.
2. The preferred route will cross under Highway 17 requiring an encroachment permit, and traverse lands owned by a private landowner, where an easement will be required. The route will head North Westwards within a Town of Laurentian Hills Road Allowance, which will require permits pursuant to the Franchise Agreement. The route will traverse a small portion of the Town of Deep River Road Allowance, which will require permits pursuant to the Franchise Agreement. The remainder of the route will be on Atomic Energy of Canada Limited ("AECL") lands.
3. Enbridge's title search of the portion of the route traversing the Town of Laurentian Hills Road Allowance discovered an issue with title in the Land Registry Office. A portion of the lands should identify Her Majesty the Queen in the right of Canada as represented by the Minister of the Department of National Defence ("DND") as the landowner. Title documents indicate those lands are entirely owned by the Town of Laurentian Hills as an Original Road Allowance. Enbridge contacted DND to confirm the discrepancy and DND indicates that its records reflect that it has ownership of the lands. DND is in the process of fixing the title documents to reflect their land ownership. Enbridge will require a permanent easement from DND and they have been circulated on the preferred route and Enbridge's easement requirement.
4. Temporary Working Areas may be required adjacent to portions of the proposed route to facilitate construction. The landowners from which Enbridge anticipates Temporary Working Areas will be required are included in Exhibit D, Tab 1, Schedule 2.



The standard form Working Area Agreement is at Exhibit D, Tab 1, Schedule 3 and will be utilized for securing temporary working agreements with affected lands if and when the need arises.

5. The contact information for all the interested parties and affected landowners is at Exhibit A, Tab 2, Schedule 3 and Exhibit D, Tab 1, Schedule 2.

PERMITS AND AGREEMENTS REQUIRED

1. Easements or permits will be required from the following authorities:

<u>AUTHORITY</u>	<u>PURPOSE</u>
Ontario Ministry of Transportation Corridor Management Officer 50 Monck Street Bancroft, ON K0L 1C0 Attn: Barry Yandt	Encroachment Permit – Highway 17
Trans Canada Pipeline Alisia Lickiss 450-1 <sup>st</sup> Street S.W Calgary, Alberta T2P 5H1 <a href="mailto:crossings@transcanada.com">crossings@transcanada.com</a>	NEB Crossing Permit
Ontario Ministry of the Environment and Climate Change Technical Support Section PO Box 22032 Kingston, ON K7M 8S5 Attn: Nicolas Murphy	Permit to Take Water (if water taking is greater than 50,000L per day)  Environmental Compliance Approval (“ECA”), if required
Ontario Ministry of Natural Resources Pembroke District 31 Riverside Dr. Pembroke, ON K8A 8R6 Attn: Kirby Punt	Permits, where required, for: <ul style="list-style-type: none"> <li>- Species at Risk Permit</li> <li>- Work Permit</li> <li>- Species at Risk Overall Benefit Permit</li> <li>- Vegetation Clearing</li> </ul>
Environment Canada - Ontario Region Canadian Wildlife Service 867 Lakeshore Rd Burlington, Ontario L7R 4A6 Tel: (905) 336-4464 Fax: (905) 336-4587 <a href="https://www.ec.gc.ca/nature/default.asp?lang=En&amp;n=FB5A4CA8-1">https://www.ec.gc.ca/nature/default.asp?lang=En&amp;n=FB5A4CA8-1</a>	Permits, where required, for: <ul style="list-style-type: none"> <li>- Species at Risk Act Permit</li> </ul>

<p>Department of Fisheries and Oceans        867 Lakeshore Road        Burlington, ON        L7S 1A1        Telephone: (1-855-852-8320)</p>	<p>Self-Assessment for Serious Harm to Fish</p>
<p>Transport Canada        Navigable Waters Protection        100 Front Street South        1<sup>st</sup> Floor        Sarnia, ON        N7T 2M4</p>	<p>Navigable Protection Program        Navigation Protection Act Permit (if required)</p>
<p>[REDACTED]</p>	<p>[REDACTED]</p>
<p>Her Majesty the Queen in right of Canada as represented        by the Minister of National Defence        Garrison Petawawa Headquarters        Building S-111, 101 Menin Road        P.O. Box 9999, Stn Main        CFB Petawawa, Ontario        K8H 2X3        Attn: Joan Behnke – Realty Asset Manager</p>	<p>Permanent Easement        Temporary Working Area Agreement as required</p>
<p>Town of Laurentian Hills        34465 Highway 17, Point Alexander, R.R #1        Deep River, ON K0J 1P0        Attn: Gordon Rollins – Chief Building Official</p>	<p>Permits, where required, for Road Allowance        Temporary Working Area Agreement as required</p>
<p>Atomic Energy of Canada Limited (“AECL”)        Garry Yaraskavitch        Senior Director, Infrastructure, Plant Operations, and        Chief Security Officer        Building 508        Chalk River Laboratories        286 Plant Road        Chalk River, Ontario        K0J 1J0        613-584-3311 x44240</p>	<p>Temporary Working Area Agreement as required</p>

Town of Deep River  
100 Deep River Road  
P.O Box 400  
Deep River, ON  
K0J 1P0  
Attn: Krista Cadoreth

Permits, where required, for Road Allowance

NEGOTIATIONS TO DATE

1. Initial contact has been made with the Town of Laurentian Hills. Permitting for installing within the Road Allowance and negotiations for Temporary Working Areas will be initiated once detailed drawings are available.
2. Initial contact has been made with the private landowner and no formal objections of the project have been received. Formal negotiations of easements and temporary working areas will commence once detailed drawings are available.
3. Department of National Defence (“DND”) has been circulated with Enbridge’s easement requirements. DND has expressed that they have no formal objection to our easement request at this time. DND requested a formal meeting to discuss the project further; Enbridge will coordinate with DND to have a meeting in the month of July.
4. Easements will be negotiated utilizing an Agreement to Grant Easement prior to OEB Approval, with formal Easement Registration transpiring after OEB approval has been provided.
5. Enbridge will obtain all required Permits, Agreements to Grant Easement, Easements, and Working Area Agreements if required, for the route and location of the proposed facilities required for construction.
6. Attached are forms of Agreement that Enbridge will offer to land owners if, and as required, including:

- a. The Agreement to Grant Easement (Attachment 1)
- b. A Standard Easement Agreement (Attachment 2)
- c. The Working Area Agreement (Attachment 3)

## AGREEMENT TO GRANT EASEMENT

THIS AGREEMENT dated the     day of             , 20

BETWEEN:

(hereinafter called the "Transferor")

Of The First Part

- and –

**ENBRIDGE GAS DISTRIBUTION INC.**

(hereinafter called the "Transferee")

Of The Second Part

WHEREAS the Transferor is the registered owner in fee simple in possession, of the lands described herein hereinafter called the "Transferor's Lands").

AND WHEREAS the Transferor has agreed to grant to the Transferee an easement over a part of the Transferor's Lands, such part being \_\_\_\_\_ metre(s) in width and being hereinafter called the "Easement Lands".

WITNESSETH that in consideration of the sum of \_\_\_\_\_ Dollars(\$ \_\_\_\_\_ ) of lawful money of Canada now paid by the Transferee to the Transferor, the receipt whereof is hereby acknowledged, the Transferor does hereby agree to sell, transfer, grant and convey in perpetuity to the Transferee an unencumbered easement in, over, upon, under and/or through the Easement Lands, to survey, lay, construct, install, operate, use, inspect, remove, renew, replace, alter, enlarge, reconstruct, repair, expand and maintain a pipeline(s) including all works, appurtenances, attachments, apparatus, appliances, markers, fixtures and equipment (hereinafter collectively referred to as "Works") which the Transferee may deem necessary or convenient thereto and the transfer of easement shall include the right of the Transferee, its successors, assigns, servants and agents to use the surface of the Easement Lands for ingress and egress on foot and/or with vehicles, supplies, machinery and equipment at any time and from time to time for the sum of Dollars \_\_\_\_\_(\$ \_\_\_\_\_ ).

The parties hereto mutually covenant and agree each with the other as follows:

1. The location of the Easement Lands shall be selected by the Transferee, provided that the location shall not unreasonably interfere with the use by the Transferor of the remainder of the Transferor's Lands during the construction of any Works or at any time thereafter.
2. The Transferor shall, forthwith upon the request of the Transferee, execute and deliver a grant or transfer of easement in favour of the Transferee in the form attached hereto as Schedule "B" together with such other and further documents of title in respect of the Transferor's Lands as may be reasonably required by the Transferee in order to complete the transaction contemplated by this agreement.
3. The Transferee shall pay the purchase price of the said transfer of easement to the Transferor as soon as reasonably possible after the registration thereof in the appropriate Land Registry Office provided that the amount paid to the Transferor as consideration for this agreement shall be applied as part payment of the said purchase price.

4. Forthwith upon the execution of this agreement, the Transferee, its servants and agents shall be entitled to enter upon the Easement Lands and the transferor's Lands to survey, lay, construct, operate, use, inspect, remove, renew, replace, alter, enlarge, reconstruct, repair, expand and maintain the Works which the Transferee may deem necessary or convenient with the right to the Transferee to remove any boulder or rock, and to sever, fell, remove or control the growth of any roots, trees, stumps, brush or other vegetation on or under the Transferor's Lands which may be encountered during such construction.

5. As soon as reasonably possible after the construction of the Works, the Transferee shall remove all surplus soil and debris from the Transferor's Lands and restore them to their former state so far as is reasonably practicable.

6. The Transferor shall have the right to use and enjoy the surface of the Easement Lands except that such use and enjoyment shall not interfere with the rights of the Transferee hereunder. Without limiting the generality of the foregoing, the Transferor shall not without prior written consent of the Transferee place or erect, or cause to be placed or erected, on the Easement Lands any building, structure or fence and shall not excavate, drill, alter the grading, install thereon any pit, well, foundation and/or pavement which will obstruct or prevent the exercise and enjoyment by the Transferee of the easement which the Transferor hereby agrees to sell, grant and convey to the Transferee.

7. The Transferor represents and warrants that the Easement Lands have not been used for the storage of and do not contain any toxic, hazardous, dangerous, noxious or waste substances or contaminants (collectively the "Hazardous substances"). If the Transferee encounters any Hazardous Substances in undertaking any work on the Easement Lands, it shall give notice to the Transferor. At the expense of the Transferor, the Transferee (or, at the Transferee's option, the Transferor) shall effect the removal of such Hazardous Substances in accordance with the laws, rules and regulations of all applicable public authorities. The Transferee shall not bring any Hazardous Substances on the Easement Lands. In acquiring its interests in the Easement Lands pursuant to this Easement, the Transferee shall be deemed not to acquire the care or control of the Easement Lands or any component thereof.

8. Notwithstanding any rule of law or equity, any Works constructed by the Transferee hereunder shall be deemed to be the property of the Transferee, even though the same may have become annexed or affixed to the Transferor's Lands.

9. This agreement shall be conditional upon compliance with the provisions of the Planning Act and the Ontario Energy Board Act. The Transferor agrees to execute such consents or authorizations as may be necessary for the Transferee to obtain any necessary consents from the local Land Division Committee and agrees to co-operate in any such applications for consent.

10. This agreement shall be of the same force and effect as a covenant running with the Transferor's Lands and the rights hereunder shall be appurtenant to the lands of the Transferee more particularly described in the attached Schedule "A".

11. The Spouse consents to the transaction evidenced by this instrument and releases all interest in the within lands pursuant to the provisions of the Family Law Act, R.S.O. 1990, as amended and hereby agrees to execute for such purpose the grant or transfer of easement contemplated hereby.

The Transferor, spouses of each other, consent to the transaction evidenced by this instrument and release all interest in the within lands pursuant to the provisions of the Family Law Act, R.S.O. 1990, as amended.

12. Whenever the singular or neuter is used it shall, where necessary, be construed as if the plural or feminine or masculine had been used and vice versa, as the case may be.



13. This agreement shall extend to, be binding upon and enure to the benefit of the respective heirs, executors, administrators, successors and assigns of the parties hereto.

14. The transaction contemplated hereby shall be completed within One Hundred and Eighty (180) days following the approval hereof under the provisions of the Ontario Energy Board Act, including any appeal periods.

15. This agreement shall be null and void upon the registration of the Transfer of Easement as contemplated herein.

IN WITNESS WHEREOF, the parties hereto have executed this agreement.

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I/We Have the Authority to Bind the  
Corporation

**ENBRIDGE GAS DISTRIBUTION INC.**

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I/We Have the Authority to Bind the  
Corporation

## **SCHEDULE "A"**

### **TRANSFeree'S LANDS - DOMINANT TENEMENT**

PIN 64057-0029 (LT)  
PT TWP L T 92, THLD, AS IN M90798 SIT & TW M90798; WELLAND

PIN 04161-0019 (LT)  
PT L T 6 CON 6RF GLOUCESTER PART 1, 4R-10265 & PART 2, 5R.-5963;  
GLOUCESTER

PIN 03187-0004 (LT)  
PT W1/2 LOT 30 CON 2 MARKHAM AS IN MA49406; RICHMOND HILL

## **SCHEDULE "B"**

### **INTEREST/ESTATE TRANSFERRED**

1. The Transferors hereby transfer, sell, grant and convey in perpetuity to the Transferee, its successors and assigns, a free and unencumbered easement in, over, upon, under and/or through the lands described herein, hereafter referred to as the Easement Lands, to survey, lay, construct, install, operate, use, inspect, remove, renew, replace, alter, enlarge, reconstruct, repair, expand and maintain pipelines and all works, appurtenances, attachments, apparatus, appliances, markers, fixtures and equipment (hereinafter collectively referred to as "Works") which the Transferee may deem necessary or convenient thereto. This Transfer of Easement shall include the right of the Transferee, its successors, assigns, servants and agents to use the surface of the Easement Lands for ingress and egress on foot and/or with vehicles, supplies, machinery and equipment at any time and from time to time.
  2. The Transferee shall have the right at any time and from time to time to remove any boulder or rock and to sever, fell, remove or control the growth of any roots, trees, stumps, brush or other vegetation on or under the Easement Lands.
  3. The rights of the Transferee herein shall be of the same force and effect as a covenant running with the Easement Lands and shall be appurtenant to the lands and premises described in this Schedule as the Transferee's Lands.
  4. The Transferee shall have the right to assign or transfer its rights hereunder in whole or in part.
  5. This Transfer shall extend to, be binding upon and enure to the benefit of the estate trustees, successors and assigns of the parties hereto. If the Transferors are not the sole owners of the said lands, this Transfer shall bind the Transferors to the full extent of their interest therein and shall also extend to any after-acquired interest but all monies payable or paid to the Transferors hereunder shall be paid to the Transferors only in the proportion that their interest in the said lands bears to the entire interest therein.
- The Transferors hereby agree that all provisions herein are reasonable and valid and if any provision herein is determined to be unenforceable, in whole or in part, it shall be severable from all other provisions and shall not affect or impair the validity of all other provisions.
6. The Transferors shall have the right to use and enjoy the surface of the Easement Lands except that such use and enjoyment shall not interfere with the rights of the Transferee hereunder. Without limiting the generality of the foregoing, the Transferors shall not, without the prior written consent of the Transferee, place or erect on the Easement Lands any building, structure or fence and shall not excavate, alter the grading, drill, install thereon any pit, well, foundation and/or pavement which will obstruct or prevent the exercise and enjoyment by the Transferee of its rights hereunder.
  7. Notwithstanding any rule of law or equity, any Works constructed by the Transferee shall be deemed to be the property of the Transferee even though the same may have become annexed or affixed to the Easement Lands.
  8. The Transferee shall at its own expense as soon as reasonably possible after the construction of any Works or other exercise of its rights hereunder, remove all surplus sub-soil and debris from the Easement Lands and restore them to their former state so far as is reasonably practicable.

9. The Transferors covenant that

- (i) they have the right to convey the rights hereby transferred to the Transferee;
- (ii) the Transferee shall have quiet enjoyment of the rights hereby transferred;
- (iii) the Transferors or their successors and assigns will execute such further assurances and do such other acts (at the Transferee's expense) as may be reasonably required to vest in the Transferee, the rights hereby transferred; and
- (iv) the Transferors have not done, omitted or permitted anything whereby the Easement Lands is or may be encumbered (except as the records of the land registry office disclose).

10. The Transferor represents and warrants that the Easement lands have not been used for the storage of and do not contain any toxic, hazardous, dangerous, noxious or waste substances or contaminants (collectively the "Hazardous Substances"). If the Transferee encounters any Hazardous Substances in undertaking any work on the Easement Lands, it shall give notice to the Transferor. At the expense of the Transferor, the Transferee (or, at the Transferee's option, the Transferor) shall effect the removal of such Hazardous Substances in accordance with the laws, rules and regulations of all applicable public authorities. The Transferee shall not bring any Hazardous Substances on the Easement Lands. In acquiring its interests in the Easement Lands pursuant to this Easement, the Transferee shall be deemed not to acquire the care or control of the Easement Lands or any component thereof.

11. Whenever the singular or neuter is used it shall, where necessary, be construed as if the plural or feminine or masculine had been used and vice versa, as the case may be.

#### **TRANSFEE'S LANDS (DOMINANT TENEMENT)**

PIN 64057-0029 (LT)  
PT TWP LT 92, THLD, AS IN AA90798 S/T & T/W AA90798; WELLAND

PIN 04161-0019 (LT)  
PT LT 6 CON 6RF GLOUCESTER PART 1, 4R-10265 & PART 2, 5R-5963;  
GLOUCESTER

PIN 03187-0004 (LT)  
PT W1/2 LT 30 CON 2 MARKHAM AS IN MA49406; RICHMOND HILL

**INTEREST/ESTATE TRANSFERRED**

(1) The Transferors hereby transfer, sell, grant and convey in perpetuity to the Transferee its successors and assigns, a free and unencumbered easement in, over, upon, under and/or through the lands described herein, hereafter referred to as the Easement Lands, to survey, lay, construct, install, operate, use, inspect, remove, renew, replace, alter, enlarge, reconstruct, repair, expand and maintain pipelines and all works, appurtenances, attachments, apparatus, appliances, markers, fixtures and equipment (hereinafter collectively referred to as "Works") which the Transferee may deem necessary or convenient thereto. This transfer of easement shall include the right of the Transferee, its successors, assigns, servants and agents to use the surface of the Easement Lands for ingress and egress on foot and/or with vehicles, supplies, machinery and equipment at any time and from time to time.

(2) The Transferee shall have the right at any time and from time to time to remove any boulder or rock and to sever, fell, remove or control the growth of any roots, trees, stumps, brush or other vegetation on or under the Easement Lands.

(3) The rights of the Transferee herein shall be of the same force and effect as a covenant running with the Easement Lands and shall be appurtenant to the lands and premises described in this Schedule as the Transferee's Lands.

(4) The Transferee shall have the right to assign or transfer its rights hereunder in whole or in part.

(5) This Transfer shall extend to, be binding upon and enure to the benefit of the estate trustees, successors and assigns of the parties hereto. If the Transferors are not the sole owners of the said lands, this Transfer shall bind the Transferors to the full extent of their interest therein and shall also extend to any after-acquired interest but all monies payable or paid to the Transferors hereunder shall be paid to the Transferors only in the proportion that their interest in the said lands bears to the entire interest therein. The Transferors hereby agree that all provisions herein are reasonable and valid and if any provision herein is determined to be unenforceable, in whole or in part, it shall be severable from all other provisions and shall not affect or impair the validity of all other provisions.

(6) The Transferors shall have the right to use and enjoy the surface of the Easement Lands except that such use and enjoyment shall not interfere with the rights of the Transferee hereunder. Without limiting the generality of the foregoing, the Transferors shall not, without the prior written consent of the Transferee, place or erect on the Easement Lands any building, structure or fence and shall not excavate, alter the grading, drill, install thereon any pit, well, foundation and/or pavement which will obstruct or prevent the exercise and enjoyment by the Transferee of its rights hereunder.

(7) Notwithstanding any rule of law or equity, any Works constructed by the Transferee shall be deemed to be the property of the Transferee even though the same may have become annexed or affixed to the Easement Lands.

(8) The Transferee shall at its own expense as soon as reasonably possible after the construction of any Works or other exercise of its rights hereunder, remove all surplus sub-soil and debris from the Easement Lands and restore them to their former state so far as is reasonably practicable.

(9) The Transferors covenant that

- (i) they have the right to convey the rights hereby transferred to the Transferee;
- (ii) the Transferee shall have quiet enjoyment of the rights hereby transferred;
- (iii) the Transferors or their successors and assigns will execute such further assurances and do such other acts (at the Transferee's expense) as may be reasonably required to vest in the Transferee the rights hereby transferred; and
- (iv) the Transferors have not done, omitted or permitted anything whereby the Easement Lands is or may be encumbered (except as the records of the land registry office disclose).

(10) The Transferor represents and warrants that the Easement Lands have not been used for the storage of and do not contain any toxic, hazardous, dangerous, noxious or waste substances or contaminants (collectively the "Hazardous Substances"). If the Transferee encounters any Hazardous Substances in undertaking any work on the Easement Lands, it shall give notice to the Transferor. At the expense of the Transferor, the Transferee (or, at the Transferee's option, the Transferor) shall effect the removal of such Hazardous Substances in accordance with the laws, rules and regulations of all applicable public authorities. The Transferee shall not bring any Hazardous Substances on the Easement Lands. In acquiring its interests in the Easement Lands pursuant to this Easement, the Transferee shall be deemed not to acquire the care or control of the Easement Lands or any component thereof.

(11) Whenever the singular or neuter is used it shall, where necessary, be construed as if the plural or feminine or masculine has been used and vice versa, as the case may be.

**DOMINANT TENEMENTS - TRANSFEREE'S LANDS**

**PIN 64057-0029 (LT)**

PT TWP LT 92, THLD, AS IN AA 90798 S/T & T/W AA90798; WELLAND

**PIN 04161-0019 (LT)**

PT LT 6 CON 6RF GLOUCESTER PART 1, 4R-10265 & PART 2, 5R-5963;  
GLOUCESTER

**PIN 03187-0004 (LT)**

PT W1/2 LT 30 CON 2 MARKHAM AS IN MA49406; RICHMOND HILL



AFFIDAVIT OF CHRISTOPHER MEILLEUR  
REGARDING SEARCH OF TITLE

I, Christopher Meilleur, of the City of Toronto, MAKE OATH AND SAY AS FOLLOWS:

1. I am a Property Agent, in Land Services at Enbridge Gas Distribution Inc., and as such I have knowledge of the matters hereinafter deposed to.
2. I was informed by the Project Manager of Enbridge Gas Distribution Inc. of the properties through/upon which the proposed pipeline would be located. Accordingly, I conducted a search of title to these properties between the months of January, 2015 and June, 2015.
3. As a result of my searches of title, I determined the owners and encumbrances with land, or registered interest in land, which would be affected by the construction of the proposed pipeline. Attached and marked as Schedule A is a list of all such owners and encumbrances.

SWORN BEFORE ME at the )  
City of Toronto the 26<sup>th</sup> day of )  
June, 2015. )

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CHRISTOPHER MEILLEUR

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COMMISSIONER, ETC.



**SCHEDULE "A"**

**Atomic Energy of Canada Limited (AECL)**

Garry Yaraskavitch  
Senior Director; Infrastructure, Plant Operations, and Chief Security Officer  
Building 508  
Chalk River Laboratories  
286 Plant Road  
Chalk River, Ontario  
K0J 1J0  
613-584-3311 x44240

**Trans Canada Pipelines**

Alisia Lickiss  
450-1st Street S.W  
Calgary, Alberta  
T2P 5H1  
[crossings@transcanada.com](mailto:crossings@transcanada.com)

**Town of Laurentian Hills**

34465 Highway 17, Point Alexander, R.R #1  
Deep River, ON K0J 1P0  
Attn: Gord Rollins – Chief Building Official  
(613) 584-4015

**Town of Deep River**

100 Deep River Road  
P.O Box 400  
Deep River, ON  
K0J 1P0  
Attn: Krista Cadoreth  
(613)-584-3237

**Her Majesty the Queen in right of Canada as represented by the  
Minister of National Defence**

Joan Behnke  
Realty Asset Manager – CFB Petawawa  
Garrison Petawawa Headquarters  
Building S-111, 101 Menin Road  
P.O. Box 9999, Stn Main

CFB Petawawa, Ontario  
K8H 2X3  
(613) 587-5511



**Hydro One Networks Inc.**

Roman Dorfman  
Senior Real Estate Coordinator  
Facilities and Real Estate  
185 Clegg Road  
P.O Box 4300  
Markham, ON L6G 1B7  
(905) 946-6243

**Ontario Ministry of Transportation**

Barry Yandt  
Corridor Management Officer  
50 Monck Street  
Bancroft, ON  
K0L 1C0  
1 800-554-0487 ext 224

## ECONOMIC FEASIBILITY

### METHODOLOGY

1. The economic feasibility of the project has been determined using the methodology that adheres to the *“Ontario Energy Board Guidelines for Assessing and Reporting on Natural Gas System Expansion in Ontario”* and the EBO 188 *“Report of the Board”* dated January 30, 1998.
2. The economic feasibility of the project has been calculated by discounting the incremental cash flows forecasted over the customer revenue horizon. The resulting Net Present Value (“NPV”) represents the economic feasibility of the project. Since the project NPV is less than zero, a Contribution in Aid of Construction (“CIAC”) is required.
3. Canadian Nuclear Laboratories (“CNL”) has entered into a 20-year financial agreement with Enbridge, dated December 19, 2014 and amended June 17, 2015. Under the terms of the agreement, CNL will pay the CIAC to ensure the project is feasible. Within approximately 15 months of completion of the installation of the distribution line and related infrastructure, Enbridge will determine the final CIAC based on the actual costs incurred to complete the work. The final CIAC will be used for purposes of the Financial Agreement. A copy of the financial agreement can be found in Exhibit E, Tab 1, Schedule 2.

### KEY ASSUMPTIONS

#### Feasibility Parameters

4. The feasibility for the project has been prepared based on Enbridge’s latest feasibility parameters as detailed at page 4.

### Customer Revenue Horizon

5. The customer revenue horizon is 20 years.

### Contract Demand

6. The gas deliveries to CNL will be under Rate 100. The daily contract demand is 133,128 m<sup>3</sup>.

### Capital Costs

7. The project's capital costs are estimated to be \$15,503,140. The detailed capital cost estimate is provided at Exhibit C, Tab 2, Schedule 1. The construction period is assumed to be 10 months.

### Summary

8. The project has a Profitability Index ("PI") of 1.0, after customer contribution in the amount of \$10.7 million as outlined in the DCF schedule on pages 5 and 6.
9. The project meets the minimum project acceptance threshold PI of 1.0, and thus qualifies for approval by the Ontario Energy Board on the basis of this analysis.
10. Enbridge has arranged for financial assurance from CNL for the investment exposure. This is required to mitigate the risk of customer default and protect the interests of existing ratepayers.
11. A summary of the inputs and results of the feasibility is provided on page 3, while pages 4 to 6 show detailed feasibility parameters and results.

SUMMARY OF INPUTS

Capital Investment

Mains	\$9,888,644
Services	\$2,754,408
Stations	\$2,860,089
Total	\$15,503,140

Gas Requirements

Annual Volumes under Rate 100	14,048,810 m <sup>3</sup>
Contract Demand	133,128 m <sup>3</sup>

SUMMARY OF RESULTS

Net Present Value (20 years)	\$0.0
Profitability Index (20 years)	1.0
Customer Contribution	\$10,677,999

Canadian Nuclear Laboratories  
 Economic Feasibility  
 Parameters and Results

<u>Col. 1</u>	<u>Col. 2</u>
Line No.	Description
<b>FEASIBILITY PARAMETERS</b>	
1.	Discount Rate 5.69%
2.	CCA Rate 6.00%
3.	Tax Rate 26.50%
4.	Municipal Tax rate 0.50%
5.	Capital Tax Rate 0.00%
6.	Customer Revenue Horizon (Years) 20
7.	Annual Volumes (m <sup>3</sup> ) 14,048,810
8.	Contract Demand (m <sup>3</sup> ) 133,128
9.	Annual Distribution Revenues (Dollars) 705,334
10.	Annual O&M (Dollars) 6,858
11.	Capital Investment (Dollars) 15,503,140
	Working Capital
12.	O&M (Lead days) (11.10)
13.	Commodity (Lag days) 2.10
<b>FEASIBILITY RESULTS</b>	
14.	Net Present Value (Dollars) 0
15.	Profitability Index 1.00
16.	Contribution in Aid of Construction (Dollars) 10,677,999

Canadian Nuclear Laboratories  
 Economic Feasibility  
 DCF Analysis

Line No.	Col_1 Description	Col_2 Year 0	Col_3 Year 1	Col_4 Year 2	Col_5 Year 3	Col_6 Year 4	Col_7 Year 5	Col_8 Year 6	Col_9 Year 7	Col_10 Year 8	Col_11 Year 9	Col_12 Year 10
	Discount factors to project outset	0.9772	0.9288	0.8788	0.8314	0.7866	0.7443	0.7042	0.6662	0.6303	0.5964	0.5642
	<b>INCREMENTAL CAPITAL INVESTMENT</b>											
1.	Investment in Mains	(9,888,644)	-	-	-	-	-	-	-	-	-	-
2.	Investment in Services	(2,754,408)	-	-	-	-	-	-	-	-	-	-
3.	Investment in Stations	(2,860,089)	-	-	-	-	-	-	-	-	-	-
4.	Contribution In Aid Of Construction	10,677,999	-	-	-	-	-	-	-	-	-	-
5.	Net Investment Capital	(4,825,141)	-	-	-	-	-	-	-	-	-	-
6.	Working Capital	(888)	-	-	-	-	-	-	-	-	-	-
7.	Total Investment	(4,825,141)	-	-	-	-	-	-	-	-	-	-
8.	PV Of Total Investment At Project Outset	(4,715,898)	(4,715,898)	(4,715,898)	(4,715,898)	(4,715,898)	(4,715,898)	(4,715,898)	(4,715,898)	(4,715,898)	(4,715,898)	(4,715,898)
9.	<b>ACCUMULATED PV OF TOTAL INVESTMENT</b>											
	<b>CCA TAX SHIELD</b>											
10.	CCA Tax Shield	37,590	72,925	705,334	68,550	64,437	60,571	56,936	53,520	50,309	47,291	44,453
11.	PV Of CCA Tax Shield At Project Outset	34,915	64,085	507,677	56,995	50,688	45,080	40,092	35,856	31,711	28,203	25,082
12.	<b>ACCUMULATED PV OF CCA TAX SHIELD</b>											
	<b>INCREMENTAL OPERATING CASHFLOWS (BEFORE TAXES)</b>											
13.	Gas Distribution Revenue	705,334	705,334	705,334	705,334	705,334	705,334	705,334	705,334	705,334	705,334	705,334
14.	Gas Costs	(190,800)	(190,800)	(190,800)	(190,800)	(190,800)	(190,800)	(190,800)	(190,800)	(190,800)	(190,800)	(190,800)
15.	O&M Expenses	(6,858)	(6,858)	(6,858)	(6,858)	(6,858)	(6,858)	(6,858)	(6,858)	(6,858)	(6,858)	(6,858)
16.	Net Operating Cash (Before Taxes)	507,677	507,677	507,677	507,677	507,677	507,677	507,677	507,677	507,677	507,677	507,677
17.	PV of Net Operating Cash (Before Taxes) At Project Outset	471,539	446,135	422,099	399,358	377,842	357,485	338,225	320,003	302,762	286,451	268,451
18.	<b>ACCUMULATED PV OF NET OPERATING CASH (BEFORE TAXES)</b>											
	<b>TAXES</b>											
19.	Income Tax (Before Interest Tax Shield)	(128,098)	(128,098)	(128,098)	(128,098)	(128,098)	(128,098)	(128,098)	(128,098)	(128,098)	(128,098)	(128,098)
20.	Municipal Tax	(24,289)	(24,289)	(24,289)	(24,289)	(24,289)	(24,289)	(24,289)	(24,289)	(24,289)	(24,289)	(24,289)
21.	Capital Tax	-	-	-	-	-	-	-	-	-	-	-
22.	Total Taxes	(152,387)	(152,387)	(152,387)	(152,387)	(152,387)	(152,387)	(152,387)	(152,387)	(152,387)	(152,387)	(152,387)
23.	PV of Total Taxes At Project Outset	(141,539)	(133,914)	(126,699)	(119,873)	(113,415)	(107,304)	(101,304)	(96,054)	(90,879)	(85,952)	(81,117,182)
24.	<b>ACCUMULATED PV OF TOTAL TAXES</b>											
	<b>ACCUMULATED NPV AND PI</b>											
25.	Net Present Value	(4,350,983)	(3,974,677)	(3,622,283)	(3,292,110)	(2,982,603)	(2,692,330)	(2,419,972)	(2,164,311)	(1,924,225)	(1,698,674)	(1,488,674)
26.	Profitability Index	0.077	0.157	0.232	0.302	0.368	0.429	0.487	0.541	0.592	0.640	0.684

Note a) Construction period from January 4 2016 to October 31 2016, mid-term discounting.  
 Discount period equals 0.417 (0.5-10/12). January 4 2016 is project outset as time 0.  
 Note b) Year 1 Revenues start from November 1 2016 to October 31 2017.  
 Year 2 Revenues start from November 1 2017 to October 31 2018, and so on.

Canadian Nuclear Laboratories  
 Economic Feasibility  
 DCF Analysis

Line No.	Col.1 Description	Col.13 Year 11	Col.14 Year 12	Col.15 Year 13	Col.16 Year 14	Col.17 Year 15	Col.18 Year 16	Col.19 Year 17	Col.20 Year 18	Col.21 Year 19	Col.22 Year 20
	Discount factors to project outset	0.5338	0.5051	0.4779	0.4521	0.4278	0.4047	0.3829	0.3623	0.3428	0.3243
	<b>INCREMENTAL CAPITAL INVESTMENT</b>										
1.	Investment in Mains	-	-	-	-	-	-	-	-	-	-
2.	Investment in Services	-	-	-	-	-	-	-	-	-	-
3.	Investment in Stations	-	-	-	-	-	-	-	-	-	-
4.	Contribution In Aid Of Construction	-	-	-	-	-	-	-	-	-	-
5.	Net Investment Capital	-	-	-	-	-	-	-	-	-	-
6.	Working Capital	-	-	-	-	-	-	-	-	-	-
7.	Total Investment	-	-	-	-	-	-	-	-	-	-
8.	PV Of Total Investment At Project Outset	(4,715,898)	(4,715,898)	(4,715,898)	(4,715,898)	(4,715,898)	(4,715,898)	(4,715,898)	(4,715,898)	(4,715,898)	(4,715,898)
9.	<b>ACCUMULATED PV OF TOTAL INVESTMENT</b>										
	<b>CCA TAX SHIELD</b>										
10.	CCA Tax Shield	41,786	39,279	36,922	34,707	32,624	30,667	28,827	27,097	25,471	216,398
11.	PV Of CCA Tax Shield At Project Outset	22,307	19,839	17,644	15,692	13,965	12,411	11,038	9,817	8,731	70,177
12.	<b>ACCUMULATED PV OF CCA TAX SHIELD</b>	434,815	454,653	472,297	487,989	501,944	514,356	525,394	535,210	543,941	614,118
	<b>INCREMENTAL OPERATING CASHFLOWS (BEFORE TAXES)</b>										
13.	Gas Distribution Revenue	705,334	705,334	705,334	705,334	705,334	705,334	705,334	705,334	705,334	705,334
14.	Gas Costs	(190,800)	(190,800)	(190,800)	(190,800)	(190,800)	(190,800)	(190,800)	(190,800)	(190,800)	(190,800)
15.	O&M Expenses	(6,858)	(6,858)	(6,858)	(6,858)	(6,858)	(6,858)	(6,858)	(6,858)	(6,858)	(6,858)
16.	Net Operating Cash (Before Taxes)	507,677	507,677	507,677	507,677	507,677	507,677	507,677	507,677	507,677	507,677
17.	PV of Net Operating Cash (Before Taxes) At Project Outset	271,018	256,416	242,602	229,531	217,165	205,465	194,395	183,922	174,013	164,638
18.	<b>ACCUMULATED PV OF NET OPERATING CASH (BEFORE TAXES)</b>	3,992,916	4,249,332	4,491,934	4,721,465	4,938,630	5,144,095	5,338,490	5,522,412	5,696,425	5,861,063
	<b>TAXES</b>										
19.	Income Tax (Before Interest Tax Shield)	(128,098)	(128,098)	(128,098)	(128,098)	(128,098)	(128,098)	(128,098)	(128,098)	(128,098)	(128,098)
20.	Municipal Tax	(24,289)	(24,289)	(24,289)	(24,289)	(24,289)	(24,289)	(24,289)	(24,289)	(24,289)	(24,289)
21.	Capital Tax	-	-	-	-	-	-	-	-	-	-
22.	Total Taxes	(152,387)	(152,387)	(152,387)	(152,387)	(152,387)	(152,387)	(152,387)	(152,387)	(152,387)	(152,387)
23.	PV of Total Taxes At Project Outset	(81,350)	(76,967)	(72,820)	(69,897)	(66,185)	(61,673)	(58,351)	(55,207)	(52,233)	(49,418)
24.	<b>ACCUMULATED PV OF TOTAL TAXES</b>	(1,198,532)	(1,275,499)	(1,348,320)	(1,417,217)	(1,482,402)	(1,544,075)	(1,602,426)	(1,657,633)	(1,709,865)	(1,759,284)
	<b>ACCUMULATED NPV AND PI</b>										
25.	Net Present Value	(1,486,700)	(1,287,411)	(1,099,986)	(923,661)	(757,726)	(601,523)	(454,440)	(315,908)	(185,397)	0
26.	Profitability Index	0.685	0.727	0.767	0.804	0.839	0.872	0.904	0.933	0.961	1.000

Note a) Construction period from January 4 2016 to October 31 2016, mid-term discounting.  
 Discount period equals 0.417 (0.5 - 10/12). January 4 2016 is project outset as time  
 Note b) Year 1 Revenues start from November 1 2016 to October 31 2017.  
 Year 2 Revenues start from November 1 2017 to October 31 2018, and so on.



## FINANCIAL AGREEMENT

1. Canadian Nuclear Laboratories has entered into a 20-year financial agreement with Enbridge, dated December 19, 2014 and amended June 17, 2015.

These documents are attached.

2. The financial agreement provides for a contribution in aid of construction and financial assurance to ensure Canadian Nuclear Laboratories contributes to the project in a manner consistent with Board policy and other ratepayers are adequately protected.



December 19, 2014

Canadian Nuclear Laboratories / Laboratoires Nucléaires Canadiens  
286 Plant Road  
Chalk River, Ontario  
Canada, K0J 1J0

Attn: Todd Tallon, Project Leader, Natural Gas Project

Dear Todd,

**Re: Financial Agreement Relating to Gas Service Work**

You have advised Enbridge Gas Distribution Inc. (“us”, “we” or “Enbridge”) that Canadian Nuclear Laboratories / Laboratoires Nucléaires Canadiens (“you” or “Customer”) proposes to convert certain of its facilities to natural gas (the “**Customer’s Project**”) at the Chalk River Laboratories site (the “**Terminal Location**”).

In order for Enbridge to provide natural gas service to the Terminal Location (the “**Service**”), it is necessary for Enbridge to complete the installation and commissioning of one or more distribution line(s) and/or other upgrades to Enbridge’s gas distribution system and related infrastructure (collectively referred to as the “**Work**”).

In connection with Enbridge undertaking the Work, Customer is required to make the ‘contribution in aid of construction’ (the “**CIAC**”) set out herein. Further, in order to protect Enbridge’s capital investment in the Work, Enbridge requires the financial security from Customer (the “**Financial Security**”) set out herein.

Prior to commencing any of the Work, and in order for Enbridge to accommodate Customer’s request to provide the Service, Enbridge requires that Customer sign and return to Enbridge this letter agreement (the “**Agreement**”). The purpose of this Agreement is to ensure that Enbridge recovers its capital investment in the Work by setting out the terms and conditions on which Enbridge will commence and complete the Work, and on which Customer will provide the CIAC and the Financial Security.

In consideration of the foregoing, Enbridge and Customer agree as follows:

**1. Contract Parameters**

(a) Enbridge and Customer have agreed on the applicable rate number (the “**Applicable Rate**”), from among the rates established by Enbridge from time to time and set out in Enbridge’s ‘Handbook of Rates and Distribution Services’ as amended, updated or replaced by Enbridge with approval from the Ontario Energy Board (“**OEB**”), pursuant to which the Service will be provided.



(b) In addition, Customer has established a forecast of its annual gas consumption (the "**Estimated Annual Volume**") as of the date of this Agreement.

(c) The Applicable Rate and Estimated Annual Volume are set out in Appendix "A". Customer acknowledges and agrees that the financial terms set out herein have been determined based upon the contract parameters set out in Appendix "A" and that if such parameters change, the financial terms set out in this Agreement may be changed in the manner and to the extent set out in this Agreement.

(d) From time to time during the term of this Agreement, Customer may request that Enbridge provide the Service pursuant to a different rate number from among the rates so established by Enbridge from time to time. Any change to the Applicable Rate shall be reflected in an updated Appendix "A" which must be signed by authorized representative(s) of each of the parties to be effective.

(e) From time to time during the term of this Agreement, Customer may, and upon the request of Enbridge Customer shall, provide Enbridge with an update to the Estimated Annual Volume. Any change to the Estimated Annual Volume shall be reflected in an updated Appendix "A" which must be signed by authorized representative(s) of each of the parties to be effective. Further, if requested by Enbridge, Customer shall provide Enbridge with an annual forecast of monthly gas consumption expressed in cubic metres identifying expected daily flows, expected down times and anticipated peak consumption periods. For certainty, Enbridge shall have no obligation to deliver gas in accordance with any estimate or forecast of Customer.

## 2. Contribution in Aid of Construction

(a) Enbridge has completed its initial financial analysis of the Work and estimates that, based on current plans, completion of the Work will require a total investment of approximately Thirteen Million, Six Hundred and Ninety-Seven Thousand (\$13,697,000.00). Enbridge will make an estimated capital investment in the Work of Four Million, Six Hundred Thousand (\$4,600,000.00) (the "**Enbridge Investment**"), and will require a CIAC from Customer in the estimated amount of Nine Million and Ninety-Seven Thousand (\$9,097,000.00) (the "**Estimated CIAC**"). The Estimated CIAC shall be reviewed by Enbridge prior to filing with the OEB of the leave-to-construct application for the Work. If, following such review, Enbridge determines that the Estimated CIAC should be adjusted, whether higher or lower, then Enbridge shall notify Customer of such adjustment, and shall provide to Customer a revised Appendix "B" payment schedule. The Final CIAC Amount (as defined below) will be based upon the actual costs to complete the Work.

(b) Customer acknowledges that: (i) the Estimated CIAC (even if adjusted by Enbridge as contemplated in this Agreement) is only an estimate and is subject to finalization as set out in this Agreement, and (ii) the costs to be incurred in connection with the Work and the determination of the route to be used, may be subject to, among other things, environmental review, public consultation, final route selection, and regulatory requirements and approvals.

(c) Enbridge acknowledges Customer's request that Enbridge complete the Work and commence providing the Service (the "**In-Service Date**") on or before November 1, 2016 (the "**Target Date**"). Enbridge will use reasonable efforts to provide the Service by the Target Date. Despite the foregoing, the parties agree that delays may be possible and the Target Date may not be achievable due to factors beyond Enbridge's reasonable control. Enbridge shall not be responsible for any costs, losses



or damages incurred by Customer as a result of the In-Service Date being earlier or later than the Target Date.

(d) During performance of the Work, Enbridge will keep Customer apprised of: (i) the status and timing of the Work (as reasonably agreed by the parties), (ii) any matters which will materially affect the cost of the Work, the CIAC amount or the projected In-Service Date, (iii) any material changes to the Estimated CIAC, and (iv) any planned public meetings held in respect of the Work. In the event that Enbridge determines that the Estimated CIAC is required to be increased or decreased, then (A) the amounts and payment schedule set out in *Appendix "B"* may be revised by Enbridge, and (B) upon receipt of written notice from Enbridge, Customer shall pay the revised Estimated CIAC to Enbridge, and in accordance with any revised payment schedule provided by Enbridge.

(e) Enbridge shall invoice Customer for the Estimated CIAC in accordance with the payment schedule in *Appendix "B"*, as amended by Enbridge from time to time in accordance with this Agreement. Customer agrees to pay each invoice delivered by Enbridge in accordance with this Section within thirty (30) days of receipt thereof. Payments made by Customer under this subsection will be credited against Customer's CIAC obligation set out herein. The dates and amounts set out in the payment schedule in *Appendix "B"* are estimates only. The actual dates and amounts will be based upon: (A) the dates upon which Enbridge commits to the relevant costs; and (B) the relevant costs.

(f) Enbridge will establish the final amount of the CIAC (the "**Final CIAC Amount**") based on the actual costs incurred to complete the Work, and in a manner consistent with its then current feasibility policies and guidelines (the "**Feasibility Policy**") filed with the OEB, and Enbridge shall notify Customer of such Final CIAC Amount and any remaining amounts owing by Customer or Enbridge, as the case may be, in order to balance the total Estimated CIAC payments made by Customer against the Final CIAC Amount. The Final CIAC Amount will be established by Enbridge within the later of: (i) fifteen (15) months following the date of completion of the Work, and (ii) two (2) months following the date Enbridge is required to file its final report with the OEB, if applicable. Each party hereto agrees to pay any balance owing in respect of the Final CIAC Amount within thirty (30) days of notice thereof to Customer. Upon request, Enbridge will provide Customer with reasonable details of the calculation of the Final CIAC Amount, including actual costs of materials and construction.

(g) In the event that (i) the Applicable Rate is changed by the parties, whether prior to or after the calculation of the Final CIAC Amount, or (ii) the Actual Annual Volume (as defined below) is less than the Estimated Annual Volume in any year of the term of this Agreement, then Enbridge may recalculate the CIAC in a manner consistent with the Feasibility Policy and advise Customer in writing of the updated CIAC (the "**Updated CIAC**"). Customer agrees to pay any invoice delivered by Enbridge in accordance with this subsection within thirty (30) days of receipt thereof. Upon request, Enbridge will provide Customer with reasonable details of the calculation of any Updated CIAC. For certainty, the purpose of any such recalculation is to ensure that Enbridge is able to recover the full amount of the Enbridge Investment from the Customer.

(h) Upon the fifth (5th) anniversary of the In-Service Date, Customer may request, and Enbridge shall provide within sixty (60) days of any such request, written confirmation of whether there may be a partial refund of the CIAC paid by the Customer under this Agreement. Enbridge shall determine if a refund may be payable in accordance with the Feasibility Policy. Enbridge shall only be obligated to determine if a CIAC refund is payable once during the term of this Agreement. In the event



Enbridge determines a CIAC refund is payable, Enbridge shall pay such refund within thirty (30) days of notice thereof to Customer.

### 3. Financial Security

(a) The Financial Security shall consist of an irrevocable standby letter of credit in the amount of Four Million, Six Hundred Thousand (\$4,600,000.00). Such letter of credit shall be in a form and from an issuer acceptable to Enbridge. Customer shall provide Enbridge with the Financial Security on or before November 1, 2015 or such other date as the parties hereto may agree in writing.

(b) At any time during the term of this Agreement, Enbridge may, upon not less than fifteen (15) business days' notice to Customer, require Customer to provide Enbridge additional or increased financial assurances in respect of Customer's obligations hereunder in the amount and of the type required by Enbridge (the "**Additional Financial Security**", and for certainty, references to the Financial Security shall include any Additional Financial Security). A request for Additional Financial Security may be based upon: (i) an increased estimate from Enbridge of the cost of completion of the Work; (ii) an increase in the actual costs of completion of the Work; (iii) a change by Customer to the Applicable Rate; (iv) a material change in the estimated or actual gas consumption of Customer, including the Estimated Annual Volume; (v) Enbridge's reasonable belief that the performance of Customer under this Agreement has or may become unsatisfactory; (vi) the creditworthiness of Customer; (vii) a change in OEB policies or requirements; or (viii) a change in market conditions. Such request shall be consistent with Enbridge's then current policies relating to financial security. Such Additional Financial Security may consist of: (A) an irrevocable standby letter of credit in a form and from an issuer acceptable to Enbridge, and/or (B) such other security as Enbridge may specify. Customer shall provide such Additional Financial Security to Enbridge on or prior to the expiry of (15) fifteen business days from the date of receipt of Enbridge's notice, and Customer's failure to do so shall be a default hereunder entitling Enbridge to terminate this Agreement immediately.

(c) The Financial Security shall remain in place throughout the term of this Agreement.

(d) For certainty, Customer's obligations in respect of Financial Security under this Agreement are in addition to any other security required to be provided by Customer under any other agreements between Customer and Enbridge (collectively, the "**Enbridge Agreements**"), including, without limitation, under any large volume distribution contract or any gas delivery agreement. In that regard, additional or alternate financial assurances may be required to be provided by Customer to Enbridge under the Enbridge Agreements from time to time.

(e) Enbridge has the right to use, set-off, appropriate, apply and realize the Financial Security, or any part of it, provided to Enbridge by Customer, free from any claim of set-off or otherwise or right of any nature whatsoever of Customer, upon the occurrence an Event of Default of Customer under this Agreement or under any Enbridge Agreement by doing any one or more of the following: (i) taking possession of the security and any cash deposits by any method permitted by law; (ii) setting off or otherwise dealing with the security and any cash deposits; (iii) drawing on letters of credit; (iv) demanding payment on guarantees; (v) exercising any and all of the rights and remedies granted pursuant to the *Personal Property Security Act* (Ontario) and any other applicable legislation, or otherwise available at law or in equity; and (vi) filing such proofs of claim and other documents as may be necessary or advisable in order to have its claim lodged in any bankruptcy, winding-up or other judicial proceedings relating to Customer. No right, power or remedy of Enbridge (whether granted



herein or otherwise) shall be exclusive of or dependent on or merge in any other right, power or remedy, but all such rights, powers and remedies may from time to time be exercised independently or in combination. Customer shall remain liable for all obligations, indebtedness and liabilities owing by it to Enbridge that are outstanding following realization of all or any part of the security.

(f) Notwithstanding any other provision of this Agreement, Enbridge is hereby authorized by Customer, without demand for payment, and without any other formality, all of which are hereby waived, at any time and from time to time, to set off, appropriate and apply any and all deposits (general or special, time or demand, provisional or final, in whatever currency) or security, including any cash or other amounts, at any time held by Enbridge, and any and all amounts to be remitted by Enbridge to Customer, together with any other obligations (in whatever currency) at any time owing by Enbridge to or for the credit or the account of Customer now or hereafter existing under this Agreement or any of the Enbridge Agreements, against any and all of the obligations of Customer to Enbridge now or hereafter existing under this Agreement or any of the Enbridge Agreements, irrespective of whether or not Enbridge has made any demand under this Agreement or any of the Enbridge Agreements and although such obligations of Customer may be contingent or unmatured (and for purposes of this provision, "contingent or unmatured" obligations refers only to Customer's deficiency or surplus gas delivery obligation, if any, pursuant to any Enbridge Agreement, and the crystallization thereof as provided therein). Each of the parties hereto hereby waives, to the extent lawful, any "reasonable period" which may be imposed by a court prior to the exercise of such set-off, appropriation and application. The rights of Enbridge under this subsection (f) are in addition to any other rights and remedies (including other rights of setoff, consolidation of accounts and liens) that Enbridge may have. Enbridge agrees to promptly notify Customer at the time of or forthwith following any such setoff and application, but the failure to give such notice shall not affect the validity of such setoff and application.

(g) On each anniversary of the In-Service Date, Customer may request, and Enbridge shall provide within forty-five (45) days of any such request, written confirmation of the amount of the unrecovered Enbridge Investment as of the anniversary date of the In-Service Date. At such time, Customer may also inquire as to whether the Financial Security may be reduced; provided that Enbridge shall have no obligation in respect of such request, other than to consider such request in accordance with its then current practices regarding Financial Security. Enbridge shall not be obligated to recalculate the unrecovered Enbridge Investment more than once per year.

#### 4. Impact of Change in Applicable Rate or Failure to Meet Estimated Annual Volume

(a) Customer acknowledges that: (i) Enbridge has calculated the CIAC and Financial Security set out herein based on the Applicable Rate selected by Customer and on Customer's Estimated Annual Volume; and (ii) the rates and charges of the Applicable Rate, together with the CIAC and Financial Security, are intended to ensure that Enbridge recovers the Enbridge Investment and that the Service is feasible. Customer further acknowledges that in the event Customer either changes the Applicable Rate or fails to consume gas in the manner estimated by Customer, the resulting revenue may be insufficient for Enbridge to recover the Enbridge Investment and for the Service to be feasible.

(b) From time to time, Enbridge shall notify Customer of the annual volume of gas consumed by Customer during the twelve (12) month period ending on the day prior to the anniversary of the In-Service Date (the "Actual Annual Volume").



(c) In the event that (i) Customer changes the Applicable Rate, or (ii) the Actual Annual Volume is less than the Estimated Annual Volume, then Enbridge shall have the right to recalculate: (A) the CIAC in accordance with Section 2 above; and (B) the Financial Security in accordance with Section 3 above.

## 5. Work and Work Product

Notwithstanding the provision by Customer of the CIAC or the Financial Security, Enbridge shall remain the sole owner of all of the Work (including, without limitation, all equipment, materials, and property of any kind whatsoever, forming part thereof). Other than as set out herein or as may be specifically required to deliver the Service, Enbridge shall not be required to deliver to Customer any of the information, reports, documents or other results and proceeds which arise from the Work. Title to all such information, reports, documents, results and proceeds shall remain with Enbridge.

## 6. Term

This Agreement shall become effective as of the date upon which it is executed by each of Enbridge and Customer, and shall expire upon the earlier of:

- (i) the date that Enbridge provides written notice to Customer that Enbridge has fully recovered the Enbridge Investment;
- (ii) such date as the parties agree pursuant to a written agreement, provided that such agreement addresses the recovery of the Termination Charge (as defined below) in a manner acceptable to Enbridge, acting reasonably; or
- (iii) twenty (20) years after the In-Service Date.

## 7. Termination

(a) Subject to the other provisions of this Section 7, this Agreement may be terminated by Customer at any time upon sixty (60) days prior written notice to Enbridge.

(b) Subject to the other provisions of this Section 7, this Agreement may be terminated by Enbridge at any time (i) upon the occurrence of an Event of Default, or (ii) in the event all approvals and consents required for the Service or the Customer's Project, as the case may be, have not been obtained prior to January 1, 2016, or (iii) in the event the Service has been commissioned and the Customer does not commence taking the Estimated Annual Volume prior to June 1, 2017.

(c) In addition to any other events set out in this Agreement, the occurrence of any one or more of the following events shall constitute a default by Customer under this Agreement and shall be considered an event of default (an "Event of Default") if such default is not remedied prior to the expiry of the relevant notice period (if any) or the relevant cure period (if any) applicable to such default as hereinafter set out:

- (i) if Customer fails to perform or observe any of its obligations under this Agreement on its part to be observed and performed and such failure shall continue unremedied for a period of thirty (30) days following notice thereof



(giving particulars of the failure in reasonable detail) from Enbridge to Customer; or

- (ii) if Customer files a petition in bankruptcy, makes application or files a petition seeking any re-organization, arrangement, composition or similar relief under any law regarding insolvency or relief for debtors or makes an assignment for the benefit of creditors, or if a receiver or receiver and manager, trustee or similar officer is appointed for the business or property of Customer, or any part thereof, or if any involuntary petition, application or other proceeding under any bankruptcy or insolvency laws is instituted against the Customer and is not stayed, otherwise enjoined or discharged within fifteen (15) Business Days; or if any execution, distress or other enforcement process, whether by court order or otherwise, which would have a material adverse effect on the financial viability of Customer becomes enforceable against any property of Customer; or if Customer ceases carrying on business in the ordinary course, commits any act of bankruptcy under The Bankruptcy and Insolvency Act or is wound up; or
- (iii) if Customer ceases to be a customer of Enbridge; or
- (iv) if there occurs an 'Event of Default' of Customer under any other Enbridge Agreement (as defined in the relevant Enbridge Agreement);

provided that each of the above-noted Events of Default have been inserted for the benefit of Enbridge and may be waived by Enbridge in whole or in part at any time by notice to Customer, Enbridge may extend the period for the remediation of any such Event of Default (if any), provided that Customer is then diligently pursuing the satisfaction thereof and demonstrates to the reasonable satisfaction of Enbridge that the steps being taken by Customer are likely to satisfy the Event of Default within a reasonable period of time.

(d) In the event this Agreement expires (without Enbridge having recovered the Enbridge Investment) or is terminated by either party for any reason, whether for convenience, cause or other reason:

- (i) Customer shall pay to Enbridge, forthwith upon receipt of an invoice from Enbridge therefore, the sum of: (A) any amount of the Enbridge Investment that has not been recovered by Enbridge through rates and charges or otherwise; plus, (B) any non-recoverable decommissioning costs or expenses incurred or to be incurred by Enbridge as a direct result of Customer ceasing to be a customer of Enbridge at the location for which the Work was completed (collectively, the "Termination Charge"); and
- (ii) Enbridge may exercise its right under all or any part of any Financial Security then held by or for the benefit of Enbridge, for the purpose of recovering any of the amounts referred to in subsection (d)(i) above; and
- (iii) Enbridge may bring an action at law as may be necessary or advisable in order to recover its damages and costs; and





(iv) Enbridge may exercise any of its other rights and remedies provided for hereunder or which are otherwise available to it.

(e) Unless otherwise agreed in writing, the payment obligations set out in this Agreement shall survive the termination or expiration of this Agreement.

#### 8. Limitation on Liability

(a) In no event shall either party be liable to the other for any indirect or consequential losses, including loss of profits, business interruption losses, or any losses as a result of claims by third parties, even if such party has been apprised of the likelihood of such damages occurring. In no event shall a party be liable for any aggravated or non-compensatory damages, including punitive or exemplary damages, whether by statute, in tort or contract.

(b) In no event shall the aggregate liability of any party to the other arising out of one or more breaches of this Agreement, whether based on warranty, contract, tort or otherwise, exceed the total cost to Enbridge of the Work (including, without limitation, the amount of the CIAC and the Enbridge Investment).

#### 9. Notices

Any notice, document or other communication required or permitted to be given hereunder (each, a "notice") shall be sufficiently given if set out in writing and personally delivered or sent by facsimile or electronic mail. Any notice shall be deemed to have been received by the party to whom it is directed, (i) if delivered, when delivered, or (ii) if sent by facsimile or electronic mail, on the date of transmission; provided in each case that it is delivered or transmitted on a business day prior to 5:00p.m. local time in the place of delivery or receipt; and if a notice is delivered or transmitted after 5:00p.m. local time on a day or such day is not a business day, then such notice shall be deemed to have been given and received on the next business day. Each notice shall be addressed to the parties as follows:

(i) in the case of Enbridge:

500 Consumers Road  
North York, Ontario, M2J 1P8  
Attn: Abbas Chagani  
Email: abbas.chagani@enbridge.com

with a copy to: Law Department  
Fax: (416) 495-5994

(ii) in the case of Customer:

286 Plant Road  
Chalk River, Ontario  
Canada, K0J 1J0  
Attn: Todd Tallon, PMP, Project Leader  
Email: todd.tallon@cnl.ca

A party may, from time to time, change its address for service hereunder by notice to the other party.



## 10. Miscellaneous

(a) No party shall refer to the other party hereto in any public announcement, notice or consultation with respect to this Agreement without the prior written approval of the party proposed to be referenced in such announcement, notice or consultation.

(b) The parties agree to execute and deliver such other reasonable documents and perform and cause to be performed such other reasonable acts and things as may be reasonably necessary or desirable in order to give full effect to this Agreement and every part hereof.

(c) This Agreement constitutes the entire agreement between the parties and supersedes all prior agreements, representations, warranties, statements, promises, information, arrangements and understandings, whether oral or written, express or implied, with respect to the subject matter hereof.

(d) No amendment or waiver of this Agreement shall be binding unless executed in writing by the party to be bound thereby. No waiver of any provision of this Agreement shall constitute a waiver of any other provision, nor shall any waiver of any provision of this Agreement constitute a continuing waiver unless otherwise expressly provided.

(e) No party may assign this Agreement or any of its rights hereunder, without the prior written consent of the other party. This Agreement shall enure to the benefit of and be binding upon the parties and their permitted successors and assigns.

(f) There shall be no, and Customer shall not permit to occur or enter into or undertake a transaction or series of transactions which results or will result in a, Change of Control of Customer, without the prior written consent of Enbridge, provided that such consent shall not be unreasonably withheld where the Company is satisfied that neither the creditworthiness of Customer nor the Financial Security provided hereunder shall be adversely affected by the Change of Control. For these purposes, "Change of Control" shall mean: (i) an acquisition or purchase of Customer, directly or indirectly, by a third party by the sale, transfer of shares or otherwise; (ii) a proceeding taken with a view to the reconstruction of Customer or a consolidation, amalgamation, merger, reorganization, winding up or dissolution or any other change in the ownership structure of Customer; (iii) a liquidation of Customer; and/or (iv) any circumstance under which Customer ceases to be wholly owned or controlled, directly or indirectly, by the same person or persons as on the date of this Agreement.

(g) Nothing in this Agreement shall create or be deemed to create a relationship of partners, joint venturers, fiduciary, principal and agent or any other relationship between the parties. Except as set out herein, no party shall have the right, power or authority to create or incur any liabilities, obligations or responsibilities on behalf of any other party.

(h) This Agreement shall be governed by and construed in accordance with the laws of Ontario.



(i) This Agreement contains financial estimates and amounts which may need to be recalculated by Enbridge in the event that the parties do not execute the Agreement in a timely manner. As a result, Enbridge reserves the right to update the financial estimates and amounts set out herein in the event this Agreement is not executed by the parties within ninety (90) days of being provided by Enbridge to Customer.

Please confirm that the foregoing reflects our agreement by having authorized signing officers sign where indicated below, and returning one executed copy to us.

Yours truly,

**ENBRIDGE GAS DISTRIBUTION INC.**



Per: [Signature]  
name and title: **JAMIE MILNE, V.P. Market Development and Customer Care**

Per: [Signature]  
name and title: **Glenn Beaumont  
President**

We have authority to bind the corporation.

-----  
The foregoing the terms and conditions on which Enbridge will commence and complete the Work and on which Customer will provide the CIAC and the Financial Security are hereby accepted, confirmed and agreed to as of the signing date set forth below.

**CANADIAN NUCLEAR LABORATORIES / LABORATOIRES  
NUCLÉAIRES CANADIENS**

Per: [Signature]  
Dr. Robert Walker President and CEO

Per: [Signature]  
Randy Lesco, VP Operations & CNO

We have authority to bind the corporation.

Date: 2014-12-22



Appendix "A"

Contract Parameters

Applicable Rate:	100
Estimated Annual Volume:	14,000,000 m <sup>3</sup>
Contract Demand:	133,000 m <sup>3</sup>

Date: as of December 22, 2014.

**ENBRIDGE GAS DISTRIBUTION INC.**



Per: [Signature]  
name and title: JAMIE MILNER, VP Market Development & customer care

Per: [Signature]  
name and title: Glenn Beaumont President

**CANADIAN NUCLEAR LABORATORIES / LABORATOIRES NUCLÉAIRES CANADIENS**

Per: [Signature]  
name and title: Robert S. Walker, President and CEO

Per: [Signature]  
name and title: R. Lasser VP-Reg. Affs



**Appendix "B"**

**CIAC Payment Schedule**

<b>Date</b>	<b>Amount</b>
on signing	\$500,000.00
February 28, 2015	\$1,250,000.00
June 30, 2015	\$1,250,000.00
February 28, 2016	\$2,097,000.00
June 30, 2016	\$2,000,000.00
November 30, 2016	\$2,000,000.00
Total	\$9,097,000.00

Note: In accordance with Section 2, the Estimated CIAC is an estimate only. The actual dates and amounts will be based upon: (A) the dates upon which Enbridge commits to the relevant costs; and (B) the relevant costs.





June 17, 2015

PRIVATE AND CONFIDENTIAL

Canadian Nuclear Laboratories / Laboratoires Nucléaires Canadiens  
Chalk River Laboratories  
Chalk River, Ontario  
Canada, K0J 1L0

SENT BY EMAIL

Attn: Todd Tallon, Project Leader, Natural Gas Project

Dear Mr. Tallon

**Re: Notice of Adjustment of Estimated CIAC under Financial Agreement**

We refer to our letter agreement of December 22, 2014 (the "Financial Agreement") relating to natural gas service at Canadian Nuclear Laboratories' Chalk River facility and, among other things, the required contribution in aid of construction. In this letter, unless otherwise defined, capitalized words or phrases shall have the meanings attributed to them in the Financial Agreement.

The purpose of this letter is to notify you of Enbridge's adjustment to the estimated total investment in accordance with Section 2 of the Financial Agreement. Enbridge hereby notifies you that the total estimated cost is adjusted from Thirteen Million, Six Hundred and Ninety-Seven Thousand (\$13,697,000.00) to Fifteen Million, Five Hundred and Three Thousand (\$15,503,000.00). As a result, the estimated Enbridge Investment is now Four Million, Eight Hundred and Twenty-Five Thousand (\$4,825,000.00). The new Estimated CIAC is Ten Million, Six Hundred and Seventy-Eight Thousand (\$10,678,000.00). Attached hereto is a revised Appendix "B" payment schedule, setting out Customer's adjusted payment obligations in respect of the Estimated CIAC.

Kindly confirm your agreement by signing and returning to the undersigned the attached duplicate copy of this letter. If you have any questions or require any clarification, please do not hesitate to contact the undersigned.

Yours very truly,

A handwritten signature in black ink, appearing to read "Abbas Chagani". The signature is written in a cursive style and is located below the "Yours very truly," text.

Abbas Chagani  
Strategic Accounts Manager

The undersigned hereby accepts and agrees to the foregoing amendments to the Financial Agreement, effective as of and from the date hereof, this June 18<sup>th</sup>, 2015.

Canadian Nuclear Laboratories / Laboratoires Nucléaires Canadiens

Per:   
name and title:

J. D. CAMPBELL

DIRECTOR, PROJECTS.

**Appendix "B"**

**CIAC Payment Schedule**

<b>Date</b>	<b>Amount</b>
<b>on signing</b>	<b>\$500,000.00*</b>
<b>September 30, 2015</b>	<b>\$2,000,000.00</b>
<b>March 31, 2016</b>	<b>\$3,000,000.00</b>
<b>June 30, 2016</b>	<b>\$3,000,000.00</b>
<b>September 30, 2016</b>	<b>\$2,000,000.00</b>
<b>December 31, 2016</b>	<b>\$178,000.00</b>
<b>Total</b>	<b>\$10,678,000.00</b>

**\*note: as of the date of this letter, this amount has been paid.**



### ABORIGINAL PEOPLES CONSULTATION

1. To identify the potential for impacts to existing or asserted Aboriginal, land claim, or treaty rights within the study area, Stantec Consulting Ltd. (“Stantec”) contacted First Nations, Métis, and related agencies. The process used by Stantec was consistent with the Ontario Energy Board’s *“Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario” (Sixth Edition, 2011)*.
2. Stantec identified First Nations, Metis, and related agencies which are located within a 100 kilometer (“km”) radius of the study area as having a potential to have an interest in the project.
3. The following groups were notified of the commencement of the Environmental Assessment as well as the public open house on January 28, 2015:
  - Pikwàkanagàn First Nation;
  - Métis Nation of Ontario; and
  - Algonquins of Ontario Consultation Office (represents communities in the Ottawa River watershed).
4. Aboriginal Affairs and Northern Development Canada (“AANDC”) and the Ministry of Aboriginal Affairs (“Ontario”) were notified of both the commencement of the Environmental Assessment as well as the public open house on January 28, 2015.
5. Responses from First Nations and related agencies are provided in the Environmental Report, which is filed in Exhibit B, Tab 1, Schedule 3, Appendix A1.

6. All written correspondence received during the public consultation process is provided in the Environmental Report found in Exhibit B, Tab 1, Schedule 3, specifically Appendix A.
7. On March 10, 2015 Stantec received an e-mail from AANDC regarding the project and provided Stantec information and sources for conducting searches of First Nations in the vicinity of the study area. This e-mail was used to confirm the Aboriginal groups initially contacted and can be found in the Environmental Report, which is filed in Exhibit B, Tab 1, Schedule 3.
8. Follow-up calls to all First Nations groups were placed on April 7, 2015, to ensure the notifications were received. Pikwàkanagàn First Nation returned the follow-up call on April 10, 2015, indicating questions and comments would be forwarded within a week of the call. Another follow-up call was placed to the Pikwàkanagàn First Nation on June 1, 2015 but no answer was received and a voicemail message was left. The Pikwàkanagàn First Nation returned the voicemail on June 18, 2015 requesting the project notification be resent. The original letter and notification were forwarded on June 19, 2015. No questions or comments from First Nation groups have been received to date.

/u