

Suite 3000 79 Wellington St. W. Box 270, TD Centre Toronto, Ontario M5K 1N2 Canada Tel 416.865.0040 Fax 416.865.7380

www.torys.com

January 4, 2013

RESS, EMAIL & COURIER

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

Attention: Ms. K. Walli, Board Secretary

Dear Ms. Walli:

Re: Application by EWT LP for Designation to Develop the New East-West Tie Line (EB-2011-0140)

We are counsel to EWT LP in the above noted proceeding. In accordance with the Board's Phase 1 Decision and Order dated July 12, 2012 and the associated filing requirements, please find enclosed EWT LP's application for designation to develop the new East-West Tie Line. As this is an East-West Tie designation application, please do not make this application public until all other applications in this matter are made public.

Yours truly,

Charles Keizer

Tel 416.865.7512 Fax 416.865.7380 ckeizer@torys.com

cc: Andy McPhee, EWT LP

ONTARIO ENERGY BOARD

IN THE MATTER OF sections 70 and 78 of the *Ontario Energy Board Act*, 1998, S.O. 1998, c. 15, (Schedule B);

AND IN THE MATTER OF a Board-initiated proceeding to designate an electricity transmitter to undertake development work for a new electricity transmission line between Northeast and Northwest Ontario: the East-West Tie Line.

EB-2011-0140

EWT LP Designation Application

January 4, 2013

TABLE OF CONTENTS

Table of Contents

EXHIBIT	APPENDIX	CONTENTS
APPLICATION	ON	·
SUMMARY		
PART A - CA	PABILITY OF	THE APPLICANT
1		Background Information
2		Organization
	2A	Management Team Resumés
3		First Nation and Métis Participation
4		Technical Capability
	4A	EWT LP Development Phase Project Activities Diagram
	4B	Technical Team Resumés
	4C	Consultants Experience
	4D	GLPTLP Procurement Procedure Policy
	4E	Hydro One Land Acquisition Compensation Principles
	4F	GLPTLP Health and Safety Policy; Brookfield Safe Work Management System;
		Brookfield Contractor Safety Management Policy
	4G	GLPTLP Environmental Policy
5		Financial Capacity
	5A	Hydro One Credit Rating
	5B	Brookfield Infrastructure Credit Rating
	5C	GLPTLP Credit Rating
PART B - PL	AN FOR THE I	EAST-WEST TIE LINE
6		Proposed Design
	6A	Reference Option Report
	6B	Affidavit of Lloyd Andrew McPhee of EWT LP
	6C	Detailed Engineering Methodology for Refining the East-West Tie Line Design
	6D	CRS Report
	6E	230 kV CRS Structure Diagram
	6F	Key Features of Structure Design Variations
7		Schedule
	7A	Project Workflow (Regular)
	7B	Project Workflow (Accelerated)
	7C	Development Gantt Chart
8		Costs
	8A	Detailed Development Budget
9		Landowner, Municipal and Community Consultation
	9A	Environmental Assessment Process
	9B	Potential Consultees
	9C	Study Area Map
	9D	Route Selection Process
	9E	East-West Tie Evaluation Criteria
	9F	Relevant Land Use Policies
	9G	Section 1 & 2 Topography Map
	9H	Diagram re Retiring Existing Circuits between Thunder Bay and Nipigon
	9I	Section 3 Topography Map
	9J	Section 4 Topography Map
10		First Nation and Métis Consultation

Filed: 2013-01-04 EB-2011-0140 Table of Contents Page 2 of 2

EXHIBIT	APPENDIX	<u>CONTENTS</u>
	10A	First Nations, Métis and Public Consultation Plan
	10B	HONI Bruce to Milton MOU
	10C	Land Claims
PART C - OTHER FACTORS		
GLOSSARY		

35306-2005 14551657.6

APPLICATION

ONTARIO ENERGY BOARD

1 2		IN THE MATTER OF sections 70 and 78 of the <i>Ontario Energy Board Act</i> , 1998, S.O. 1998, c. 15, (Schedule B);
3 4 5 6		AND IN THE MATTER OF a Board-initiated proceeding to designate an electricity transmitter to undertake development work for a new electricity transmission line between Northeast and Northwest Ontario: the East-West Tie Line.
7		EB-2011-0140
8	1.	EWT LP hereby applies to the Ontario Energy Board (the "Board") for an Order
9		or Orders made pursuant to sections 70 and 78 of the Ontario Energy Board Act,
10		1998, as amended (the "OEB Act") designating EWT LP as the licensed
11		transmitter to develop the new East-West Tie Line (the "Project"), approving its
12		development plan including its designation and development costs, and
13		establishing any necessary deferral account in respect of these costs.
14	2.	EWT LP is a limited partnership formed under the laws of Ontario. The limited
15		partnership interests in EWT LP are held equally by each of Bamkushwada LP
16		("BLP"), Great Lakes Power Transmission EWT LP ("GLPT-EWT") and Hydro
17		One Inc. ("Hydro One"). Shares of EWT LP's general partner, East-West Tie
18		Inc., are held equally by BLP, Great Lakes Power Transmission Inc. and Hydro
19		One.
20	3.	BLP is a newly formed limited partnership comprised of six limited partners: (1)
21		Red Rock Indian Band, (2) Pays Plat First Nation, (3) Ojibways of the Pic River
22		First Nation, (4) Pic Mobert First Nation, (5) Michipicoten First Nation and (6)

1 Fort William First Nation (together, the "Participating First Nations"). The 2 communities of the Participating First Nations are all located within 40 km of the 3 existing East West Tie line, which lies entirely within their traditional territories 4 and also crosses two of the Participating First Nations' reserves. GLPT-EWT is a 5 partnership of Brookfield Infrastructure Holdings (Canada) Inc. ("BIH") and 6 Great Lakes Power Transmission Inc. ("GLPT") (both of which are the partners 7 of the licensed transmitter Great Lakes Power Transmission LP). As BIH and GLPT are indirectly controlled by Brookfield Infrastructure Partners LP 8 9 ("Brookfield"), EWT LP is able to draw on Brookfield's international expertise 10 and significant capital resources to develop and construct the Project. Hydro One 11 is a holding company that is wholly-owned by the Province of Ontario. Hydro 12 One's largest wholly-owned subsidiary is licensed transmitter Hydro One 13 Networks Inc. ("HONI"). HONI owns and operates approximately 96% of the 14 transmission system in Ontario, one of the largest transmission systems in North 15 America, including the existing East-West Tie and related transmission stations. 16 4. EWT LP has followed the filing requirements set out in the Board's Phase 1 17 Decision and Order in the above noted proceeding dated July 12, 2012. 18 5. EWT LP has also been licensed by the Board to own and operate a transmission 19 system. EWT LP's transmission license number is ET-2011-0350. 20 6. EWT LP has detailed knowledge of the Project area and extensive relationships

with local and Aboriginal communities. During development, EWT LP will also

bring to bear experience gained from developing some of the most significant
transmission projects recently constructed in Ontario. EWT LP, through
BLP, possesses intimate knowledge of the local geography and traditional
activities on the land. Traditional and local knowledge is integral to the
development of the Project and will enable EWT LP to plan routing, construction,
operations and maintenance activities in an efficient manner.

- EWT LP is unique in that it represents the rare circumstance where First Nations communities have joined with non-First Nation entities in a for-profit venture in which the First Nations communities are equal equity participants. In addition to equity participation, where all applicable technical and professional standards are met, and the costs are commercially reasonable, EWT LP will also give priority with respect to employment, training and commercial opportunities to Aboriginal businesses and community members.
- 8. EWT LP has prepared a prudent and robust plan for the development of the new line which includes all engineering, design, routing, economic and environmental studies needed to prepare and bring an application to the Board for leave to construct.
- A transmitter's ability to expeditiously and cost effectively develop and construct
 a new line in Ontario depends not only on the transmitter's ability to complete the
 engineering but also its ability to build broad-based stakeholder support for the
 Project. Recognizing the critical importance of building public acceptance, EWT

7

8

9

10

11

12

13

14

15

16

17

7.

1 LP has developed a robust and comprehensive consultation plan for consultation
2 with Aboriginal communities, agencies, land owners and the public.

- For the purposes of this Application, EWT LP's development plan proposes a sound technical design for the Project, which is based on the Board's Reference Option. EWT LP has also outlined certain innovative technical alternatives to the Reference Option that EWT LP will assess further during the development phase. These alternatives have the potential to result in significant cost savings to the ratepayers without sacrificing the safety or reliability of the Project.
- 9 11. EWT LP's development plan provides the Board with a true and fair view of the 10 cost and time required to develop the Project. In its development plan, EWT LP 11 has made a number of prudent assumptions regarding the necessity and timing of 12 certain environmental assessment and consultation activities. EWT LP's plan 13 minimizes the time required to develop the line without sacrificing the robustness 14 of EWT LP's consultation plans or technical and environmental studies. Based 15 EWT LP's schedule, development work to the point of filing the application for 16 leave to construct should take between 23 months and 32 months to complete 17 depending on the complexity of the environmental issues and level of public 18 support. EWT LP's estimated budget for completing Project development is in 19 the range of \$17.1 million to \$22.1 million.

1	12.	This Application is supported by written evidence. The written evidence will be				
2		pre-filed and may be amended from time to time, prior to the Board's final				
3		decision in Phase 2 of the above proceeding.				
4	13.	The Applicant requests that, pursuant to Section 34.01 of the Board's Rules of				
5		Practice and Procedure, this proceeding be conducted by way of written hearing.				
6	14.	The Applicant requests that a copy of all documents filed with the Board in this				
7		proceeding be served on the Applicant and the Applicant's counsel, as follows:				
8		The Applicant:				
9 10 11 12		EWT LP 181 Bay Stree Toronto, Onta M5J 2T3				
13		Attention:	Mr. Andy Mo	cPhee		
14			President			
15			Telephone:	(705) 941-5661		
16 17			Fax: Email:	(705) 941-5600 amcphee@glp.ca		
1 /			EIIIaII.	amephee@gip.ca		
18			- and -			
19			Mr. Peter Bet	ttle		
20		Vice President, Project Development				
21		Telephone: (819) 561-8014				
22		Email: pbettle@glp.ca				

Filed: 2013-01-04 EB-2011-0140 Application Page **6** of **6**

1	The Applicant's Cou	nsel:		
2	Torys LLP			
2 3	79 Wellington Street West, Suite 3000			
4	Box 270, TD Centre			
4 5		Toronto, Ontario		
6	M5K1N2			
7	Attention:	Mr. Charles I	Keizer	
8		Telephone:	(416) 865-7512	
9		Fax:	(416) 865-7380	
10		Email:	ckeizer@torys.com	
11		- and -		
12		Mr. Tyson Dyck		
13		Telephone:	(416) 865-8136	
14		Fax:	(416) 865-7380	
15		Email:	tdyck@torys.com	
16	DATED at Toronto, Ontario	o, this 4 th day o	f January, 2013.	
17		EWT	LP	
18	By its counsel,			
19		/		
20		Charl	es/Keizer	

SUMMARY

Filed: 2013-01-04 EB-2011-0140 Summary Page **1** of **14**

1 **SUMMARY OF THE APPLICATION**

- 2 The Ontario Energy Board (the "Board") has initiated this proceeding (EB-2011-0140) to
- 3 designate an electricity transmitter to undertake development work for a new electricity
- 4 transmission line between Wawa and Thunder Bay, Ontario (the "Project"). The Board has
- 5 invited licenced transmitters seeking designation to prepare a development plan for the Project.

6 THE CORE PRINCIPLE

- 7 At the heart of the Board's policy on transmission development and the designation proceeding,
- 8 is the core principle of providing benefits to rate payers. To satisfy this core principle, the
- 9 transmitter designated by the Board must:
- have extensive experience and knowledge;
- have a development plan designed to achieve public acceptance;
- ensure Aboriginal participation in the Project;
- be technically innovative; and
- submit a prudent plan.
- 15 EWT LP satisfies these criteria.

16 **EWT LP**

- 17 As a new entity, EWT LP was purposely formed to bring together three partners: the six First
- Nation communities most directly affected by the development of the Project, through their
- partnership in Bamkushwada LP ("BLP"); Great Lakes Power EWT LP ("GLPT-EWT"); and
- Hydro One Inc. ("Hydro One"). The partners of EWT LP and their applicable partner related
- 21 entities will act as one and employ their collective knowledge and expertise to develop the
- 22 Project.

¹ Phase 1 Decision and Order, July 2, 2012, p. 5.

Filed: 2013-01-04 EB-2011-0140 Summary Page **2** of **14**

- 1 BLP is a newly formed limited partnership comprised of six limited partners: (1) Red Rock
- 2 Indian Band, (2) Pays Plat First Nation, (3) Ojibways of the Pic River First Nation, (4) Pic
- 3 Mobert First Nation, (5) Michipicoten First Nation and (6) Fort William First Nation (together,
- 4 the "Participating First Nations"). The communities of the Participating First Nations are all
- 5 located within 40 km of the existing East West Tie line, which lies entirely within their
- 6 traditional territories and also crosses two of the Participating First Nations' reserves. As a
- 7 result, the Participating First Nations are directly affected by the Project.
- 8 GLPT-EWT is a partnership of Brookfield Infrastructure Holdings (Canada) Inc. ("BIH") and
- 9 Great Lakes Power Transmission Inc. ("GLPT"), both of which are the partners of the licensed
- transmitter Great Lakes Power Transmission LP ("GLPTLP") and are indirectly controlled by
- Brookfield Infrastructure Partners LP ("Brookfield Infrastructure"). GLPT-EWT is part of the
- 12 Brookfield Infrastructure Power and Utilities Group ("Brookfield Utilities Group"). As such,
- 13 GLPT-EWT will be able to draw on the Brookfield Utilities Group's international expertise and
- significant capital resources to develop and construct the Project.
- 15 Hydro One is a holding company that is wholly-owned by the Province of Ontario. Hydro One's
- largest wholly-owned subsidiary is Hydro One Networks Inc. ("HONI"). HONI owns and is in
- the business of planning, constructing, operating and maintaining transmission and distribution
- 18 networks across Ontario. HONI's transmission and distribution businesses are regulated by the
- 19 Board (ET-2003-0035 and ED-2003-0043). HONI owns and operates approximately 96% of the
- transmission system in Ontario, one of the largest transmission systems in North America,
- 21 including the existing East-West Tie and related transmission stations.

22 THE CONTEXT

- A recognition of the context in which a development plan is to be implemented is important to
- 24 the plan's success. An appreciation of the context is therefore relevant to the Board's evaluation
- of the submitted development plans.
- 26 The existing East-West Tie transmission line was constructed in a different era characterized by
- the absence of many of today's regulatory and social requirements. During the 1950's and

Filed: 2013-01-04 EB-2011-0140 Summary Page **3** of **14**

- 1 1960's, Ontario's electricity industry worked hard to meet the growing demand for electricity.
- 2 New lines brought power from distant generation stations to expanding urban load centres, often
- 3 on new rights of way crossing both private and Crown land. The route and technical design were
- 4 developed and implemented with minimal consideration of either public acceptance or the line's
- 5 environmental impact.
- 6 Circumstances have changed. Three significant developments now affect how a transmitter now
- 7 plans to develop a project:

11

12

13

14

15

- Aboriginal rights: recent Supreme Court have recognized and affirmed Aboriginal
 rights. Developers can no longer ignore the impact of their activities on Aboriginal
 communities.
 - *Environment*: there is a growing awareness of the environment and the need to protect and conserve it. Ontario appointed its first Minister of the Environment and enacted the *Environmental Assessment Act* some years after the completion of the existing East West Tie line.
 - *Public Opinion*: public attitudes toward new transmission, and energy projects in general, have changed dramatically since the bulk of Ontario's transmission system was constructed.
- In this context, there are two central aspects to developing a transmission line in the Twenty-first
- 19 Century in Ontario: (i) technical design; and (ii) public acceptance of the project.
- 20 The technical design for the new East-West Tie will need to provide for reliability, meet all
- 21 applicable construction and operating standards, be technically feasible and also be cost
- 22 effective. However, the continuing satisfactory operation of the existing East-West Tie suggests
- that such a technical design already exists, and that the technical issues associated with the harsh
- 24 climate and terrain have already been successfully overcome. Furthermore, transmitters
- designing a new East-West Tie now have the advantage of advancements in technology both in
- the line design and construction.
- 27 Instead, a transmitter's success will depend largely on its ability to build broad-based stakeholder
- support for its project. Arguably, even the best and most innovatively engineered project will
- 29 not be built in the absence of public acceptance. Therefore, gaining public acceptance from

Filed: 2013-01-04 EB-2011-0140 Summary Page **4** of **14**

- landowners, federal and provincial agencies, the public, and First Nations and Métis becomes the
- 2 necessary condition for the project to move forward through development to completion. The
- designated transmitter must obtain a "social licence" from stakeholders to develop, construct and
- 4 operate the Project.
- 5 It is in this context that the Board must consider the development plans filed in the designation
- 6 proceeding, and designate the transmitter and transmission project development plan that will
- 7 provide the greatest benefit to ratepayers.
- 8 Achieving the social licence to develop the Project, together with a feasible and cost effective
- 9 technological design, is at the heart of EWT LP's development plan. It is integral to EWT LP's
- organization, its approach to public and Aboriginal consultation, its technical design, and its
- 11 route selection methodology.

12 KNOWLEDGE AND EXPERIENCE

- 13 EWT LP has detailed knowledge of the Project area and extensive relationships with local and
- 14 Aboriginal communities. EWT LP will also bring to bear experience gained from developing
- some of the most significant transmission projects constructed in Ontario recently.
- 16 GLPT-EWT is an affiliate of licensed transmitter GLPTLP. GLPTLP owns and operates
- electricity transmission facilities extending northwards from Sault St. Marie to Wawa, where
- 18 they share a common connection point with the existing East-West Tie; and eastwards from Sault
- 19 St. Marie to Hydro One's Mississaugi TS. GLPTLP therefore has direct knowledge and
- 20 experience operating and maintaining transmission facilities in the proximity of the Project area.
- Furthermore, by having completed the planning, design, permitting and construction of a 164 km
- 22 230 kV overhead line between Sault St. Marie and HONI's Wawa TS, GLPTLP has both
- constructed one of the longest electricity transmission lines to have been built in Ontario in
- recent years and, uniquely, has experience developing a line in conditions similar to those
- 25 expected for the Project.
- As noted, Hydro One, through HONI, owns and operates the existing East-West Tie Line and the
- 27 transmission stations to which the Project will connect. Post designation, EWT LP, through

Filed: 2013-01-04 EB-2011-0140 Summary Page **5** of **14**

- 1 HONI, will have this direct and intimate knowledge. EWT LP will also benefit from HONI's
- 2 experience as Ontario's principal transmitter and, in particular, the knowledge gained through the
- development and construction of the Bruce-to-Milton Transmission Reinforcement Project, the
- 4 largest transmission project to have been completed recently in Ontario.
- 5 BLP, through the Participating First Nations, possesses intimate knowledge of the geography and
- 6 traditional land use in the Project area. Some of the Participating First Nations have developed
- 7 energy projects in their traditional territories and have knowledge and experience with the unique
- 8 aspects of the Project area. They also have strong relationships with local communities and
- 9 governments. From the outset of the development phase, they will be able to draw on all of these
- factors to assist EWT LP plan, route, design, construct and operate the Project cost-effectively.
- 11 They will also be able to assist other potentially affected Aboriginal communities to develop a
- better understanding of the Project and to participate effectively and efficiently in the
- consultation and environmental assessment processes. BLP's active participation provides
- development efficiencies and will help reduce the risk of schedule delays.
- 15 EWT LP's development team also includes four experienced consultants Power Engineers
- 16 Inc., AECOM Canada Ltd., Shared Value Solutions Ltd. and Altus Group Inc. These consultants
- will provide specialized skills, resources and advice to assist EWT LP develop the Project.
 - Power Engineers is one of the largest specialist transmission and distribution engineering firms in North America with over 30 years of experience. Power Engineers will assist in ensuring that the Project is designed to meet all applicable international, North American, Canadian and provincial standards. Power Engineers will be influential in the route selection process.
 - AECOM is a global professional service firm that has worked with more than 300 power utilities in over 50 countries on more than 27,000 km of transmission lines. AECOM has extensive experience of completing environmental assessments in Ontario. AECOM will assist EWT LP in co-ordinating and implementing all the consultations, studies, field work, assessments and evaluations required for the provincial environmental assessment and for route selection.
 - SVS is a human environment consultancy firm that specializes in communications and community consultation and engagement. SVS will assist EWT LP by coordinating, scheduling, facilitating and documenting all public engagement

18

19

20

21

22

23

24

25

2627

28

29

Filed: 2013-01-04 EB-2011-0140 Summary Page **6** of **14**

activities associated with the Project, including, to the extent necessary, those procedural aspects of the Crown's duty to consult with First Nations and Métis communities that the Crown may delegate to EWT LP.

• Altus is a Canadian provider of professional services in the real estate sector. Altus will assist EWT LP by providing geomatics and survey services for Project siting and routing; and research, valuation and advisory assistance for the acquisition of land rights for a contiguous right of way.

ABORIGINAL PARTICIPATION

4

5 6

7

- 9 EWT LP is unique in that it is a rare example of First Nations communities and industry joining
- together in a for-profit venture to develop, own and operate public infrastructure where the First
- Nations communities are equal owners. For the six Participating First Nations communities,
- 12 EWT LP represents the opportunity to be both owner and project proponent. Through BLP, they
- have an equal and indivisible share and ownership of the partnership assets and stand to make a
- return on their investment in EWT LP proportionate to their ownership share. They will play an
- integral role in the Project's development and have, in conjunction with Hydro One and GLPT-
- 16 EWT, a leadership role in the ultimate development, construction and operation of the Project.
- 17 In effect, through BLP, the Participating First Nations have an equal and indivisible stake in the
- success or failure of EWT LP and its efforts to be designated.
- 19 In asserting their desire to participate in both the economics and governance of the Project, the
- 20 Participating First Nations have chosen to organize as one group and have selected GLPT-EWT
- and Hydro One as their partners. It has taken EWT LP's partners almost three years to negotiate
- and agree on how the Participating First Nations will participate in EWT LP, and during this
- 23 time the partners have developed an enduring relationship based on trust, respect and equality.
- Such a relationship cannot be replicated quickly, if at all. Indeed, the relationship is not simply a
- 25 product of time but also the result of a commitment to shared values. For transmitters that have
- 26 not made similar participation arrangements, there is a real risk they will not be able to do so, or
- 27 that they will only be able to do so if they first take a similar amount of time to develop the
- 28 necessary relationships, and then only if their vision for the Project aligns with that of the
- 29 Participating First Nations. The initiative already undertaken by EWT LP in this regard cannot
- 30 be underestimated.

Filed: 2013-01-04 EB-2011-0140 Summary Page **7** of **14**

- 1 The benefits to EWT LP of BLP's participation include BLP's large source of cultural and
- 2 traditional knowledge about the Project area. BLP's early participation in the Project planning
- 3 process and their availability to participate in development work, especially the environmental
- 4 assessment, significantly lowers the risk of cost overruns and delays as compared to the
- 5 alternative where a designated transmitter planned and developed the Project without this
- 6 important local expertise or participation. BLP's part-ownership of EWT LP indirectly provides
- 7 an incentive for the six Participating First Nations to ensure that EWT LP's plans for routing,
- 8 consultation and environmental review are robust, comprehensive, and properly managed. In
- 9 this regard the interests of the Participating First Nations and the ratepayer are closely aligned.
- 10 EWT LP will also benefit from BLP's existing relationships with other Aboriginal communities,
- land owners, municipalities and agencies in the Project area. These relationships developed over
- many decades will facilitate EWT LP's rapid understanding of key Aboriginal and local issues
- that may affect the location, design and construction of the new line.
- 14 BLP draws other benefits from the relationship in addition to its equity participation. Where all
- applicable technical and professional standards are met and the costs are commercially
- reasonable, EWT LP will give priority with respect to employment, training and commercial
- 17 opportunities to Participating First Nation community members and to businesses owned or
- 18 controlled by a Participating First Nation or its members. However, EWT LP notes that this does
- 19 not preclude other non-participating First Nations and Métis communities from competing to
- 20 provide goods and services and thereby benefitting economically from the development and
- 21 construction of the Project. EWT LP will complete community resource assessments to identify
- Aboriginal community businesses that may be able to provide services and these businesses will
- be invited to participate in EWT LP's competitive procurements. EWT LP will also work with
- 24 First Nation economic development and employment officers to ensure Aboriginal businesses
- and community members are kept informed of contracting and employment opportunities during
- the construction of the Project.

Filed: 2013-01-04 EB-2011-0140 Summary Page **8** of **14**

CONSULTATION

- 2 A number of Ontario electricity projects have recently been cancelled at the development stage.
- 3 Examples include the Oakville generating station, the North York Region transmission
- 4 reinforcement, the shipment of old nuclear steam generators through the St. Lawrence Seaway
- 5 and an offshore wind energy project in Scarborough. None of these projects failed because the
- 6 project proponent lacked the necessary technical capability or financial capacity. Instead, they
- 7 all ran into overwhelming public opposition.
- 8 Although the broad-based public support necessary for a project's success, sometimes termed the
- 9 "social licence", is not in itself a new concept, it has become a critical factor in the success of
- any project. A transmitter's ability to expeditiously and cost effectively develop and construct a
- new line in Ontario depends not only on the transmitter's ability to complete the engineering but
- also its ability to build broad-based stakeholder support for the Project.
- 13 Recognizing the critical importance of building public acceptance, EWT LP has developed a
- 14 robust and comprehensive plan for consulting with Aboriginal communities, and for consulting
- with municipalities, federal and provincial agencies, land owners and the public. The plans have
- been prepared not only to meet the statutory consultation requirements of the *Environmental*
- 17 Assessment Act but also both to solicit stakeholder input at the earliest opportunity and
- throughout the Project, and to incorporate this input into the final project design. EWT LP will
- consult with stakeholders to better understand the unique aspects of the Project area so that it can
- design and route the line to minimize as far as reasonably practical any adverse impacts, while
- 21 recognizing that the line also needs to meet certain technical and performance standards and be
- 22 cost effective for ratepayers.
- EWT LP has allowed for five rounds of public open houses during line routing, design and the
- environmental assessment to ensure that everyone who may be affected by the Project has been
- 25 provided ample opportunity to be informed and to provide input. In recognition of the length of
- 26 the Project area from Thunder Bay to Wawa, each round of open houses will be held in multiple
- 27 locations. EWT LP will be assisted by its consultants SVS, AECOM and Altus, and also by BLP

Filed: 2013-01-04 EB-2011-0140 Summary Page **9** of **14**

- 1 who are also members of these local communities. Each round of open houses has been
- 2 carefully scheduled to provide timely input in to each stage in the development of the Project.
- 3 EWT LP has also planned to meet with landowners early in the project. The availability of land
- 4 on which to site the new line will be critical to the success of the project. EWT LP has planned
- 5 to meet with land owners early in the development process in order to identify and evaluate
- 6 potential routes with the benefit of their input, and with a view to reaching voluntary settlements
- 7 for the acquisition of land rights. This approach ultimately benefits ratepayers because it reduces
- 8 the risk of having to return to the Board after leave to construct has been granted to seek
- 9 expropriation of land rights, a time consuming and expensive process.

10 TECHNICAL DESIGN AND INNOVATION

- 11 For the purposes of its designation application, EWT LP has adopted a conventional double
- circuit line design based on the X10 family of steel lattice towers. The design complies with the
- 13 Reference Option other than for a reduced right-of-way width. EWT LP notes, however, that it
- is important not to commit to a specific design before the development work has even
- 15 commenced. The development work required for a new transmission line of this rating and
- length will involve ongoing engineering work, extensive discussions with land owners and other
- stakeholders, the acquisition of land rights, the completion of an environmental assessment and
- 18 consultation with First Nations and Métis communities. The technical design of the Project
- cannot be completed until this development work has been completed. At this stage, no
- applicant can say that a particular design is the "one". Therefore, although the Reference Option
- 21 is a valuable framework for this Application, it contains certain assumptions that must be
- 22 revisited during the development phase.
- In its report titled "Engineer's Report on the EWT Transmission Line OEB Reference Option",
- 24 which is attached at Appendix 6A (the "Reference Option Report"), Power Engineers determined
- 25 that the X10 tower family as viable but also indicated that there may be opportunities to vary the
- design to reduce costs to the benefit of ratepayers. Power Engineers identified one criteria, the
- single loop galloping criteria, which it suggests may be overly conservative. Adhering to the
- 28 galloping criteria using traditional tower designs will require shorter spans and this will increase

Filed: 2013-01-04 EB-2011-0140 Summary Page **10** of **14**

- 1 the number of towers required and hence the construction and maintenance cost of the line. An
- 2 alternative approach would be to design new taller, stronger towers with a much larger
- 3 headframe to provide the additional vertical phase clearance needed to meet the galloping
- 4 criteria. However, Power Engineers noted that the existing East-West Tie, which has relatively
- 5 long spans using the X7 tower family, does not comply with the Board's galloping criteria, and
- 6 Hydro One Networks Inc. reported that the line had performed satisfactorily with no issues
- 7 caused by galloping. EWT LP therefore has planned to review the galloping criteria prior to
- 8 finalizing the choice of towers in order to achieve the most cost effective technical design.
- 9 In its December 17, 2012 Power Engineers report titled "Assessment of the Use of CRS
- 10 Structures on HV/EHV Transmission Lines", which is attached at Appendix 6D (the "CRS
- 11 Report"), Power Engineers further considered the electrical performance of a single circuit
- 12 alternative (795 kcmill Drake Conductors in a 2 bundle arrangement) and concluded that it
- would have equivalent electrical performance to the single line options studied by the IESO in its
- August 18, 2011 Feasibility Study for Reinforcing the East-West Tie (the "IESO Study"). The
- 15 IESO concluded that a single circuit line complies with all reliability standards but unlike a
- double circuit line would require the IESO to take post-contingency actions to prepare for a
- 17 second contingency. Power Engineers indicated that steps could be taken to make a single
- circuit line more reliable than the design studied by the IESO for relatively small incremental
- 19 costs. Doing so would reduce but not eliminate the difference in performance of a single circuit
- 20 line compared to a double circuit line.
- Based on this initial consideration of the single line alternative, EWT LP has explored how the
- 22 cost-benefit analysis would change if a single line option were considered in combination with
- cross-rope suspension ("CRS") structures. Power Engineers noted in the same report that CRS
- structures, though new to Ontario, have been widely and successfully used in other jurisdictions
- 25 including a 2,000 km line in northern Québec. Power Engineers also notes that CRS structures
- 26 have a significantly lower construction cost compared to conventional free-standing steel lattice
- 27 towers. Power Engineers estimates a new single circuit East-West Tie line using CRS structures

Filed: 2013-01-04 EB-2011-0140 Summary Page **11** of **14**

- would be approximately \$116 million less expensive than a conventional double circuit line
- 2 based on the existing X10 tower family.
- 3 Therefore EWT LP plans to study whether the cost savings associated with a single circuit line
- 4 using CRS structures justifies the difference in performance after a single contingency event
- 5 compared to a double circuit line.

A PRUDENT PLAN

7 Schedule

- 8 EWT LP has prepared a detailed schedule for the development of the Project from designation to
- 9 the filing of an application for leave to construct, and also for all subsequent work necessary to
- 10 complete the Project up until the point when it is ready for construction. The schedule shows
- that development work to the point of filing the application for leave to construct is expected to
- take between 23 months and 32 months to complete depending on the complexity of the
- environmental issues and level of public support, neither of which are fully known at this time.
- 14 EWT LP has the flexibility to further reduce the schedule should subsequent regulatory changes
- 15 allow.
- 16 EWT LP notes that its ability to shorten the schedule from 32 months to 23 months depends on a
- 17 number of factors that are outside of its control. Pursuing speed in the development phase at all
- 18 cost increases the risk that permits will be delayed or even denied. A balance has to be struck
- between minimizing the time required to develop the Project and sacrificing the robustness of
- 20 EWT LP's consultation activities, technical studies and environmental assessment. This is a fine
- balance, and one that EWT LP has struck appropriately.
- 22 Key to EWT LP's development phase schedule (and in turn its cost estimate) is a detailed Gantt
- chart shown at Appendix 7C which breaks down development of the Project into approximately
- 24 300 individual tasks and subtasks. EWT LP has outlined detailed reporting requirements that
- will ensure that the Board has up-to-date knowledge of any issues that may arise and EWT LP's
- plans to mitigate them. As a result, the Board will have confidence that proactive steps are being
- taken before any serious issue transpires.

Filed: 2013-01-04 EB-2011-0140 Summary Page **12** of **14**

- 1 EWT LP has relied on a number of techniques and innovations to shorten its development
- 2 schedule without imposing undue risks on ratepayers.

3

4

5

6 7

8

9

10

11

12

13

14

15

16

17

18

19

20

21 22

23

24

25

26

2728

29

30

- The environmental assessment process in Ontario provides a systematic framework for identifying and evaluating alternatives. EWT LP has based its development plan around the environmental assessment and has carefully coordinated its engineering studies and routing activities with the environmental assessment and consultation activities in order to reduce the overall development schedule.
- Given its familiarity with the Project area and the environmental assessment process in Ontario, EWT LP plans to start environmental field studies in advance of receiving the Minister of the Environment's formal approval of the terms of reference for the environmental assessment in order to start field studies during the ecologically rich summer season.
- EWT LP has engaged land acquisition experts at the beginning of the Project to make consultation with land owners a priority for the early stages of project development with a view to reaching voluntary settlements. This innovation mitigates the risk of routing the line across land that can only be obtained after expensive and time consuming expropriation.
- EWT LP will proactively consult with stakeholders throughout the Project and include their feedback in the design of the Project, rather than designing the Project and then using open houses as a forum to explain and defend decisions that have already been made. EWT LP will maximize the use of BLP's existing relationships and those of its other partners to expedite consultation activities.
- EWT LP will maximize the use of suitably qualified local contractors, including BLP-related organizations, to assist in the completion of development work. This eliminates the need for the contractors to familiarize themselves with the terrain, stakeholders and the regulatory processes.
- EWT LP will competitively pre-qualify construction contractors early in the development process so they are available to opine on the constructability of alternative designs. Familiarity of the Project will allow them to provide firm construction prices more quickly for inclusion in EWT LP's application for leave to construct.
- 32 EWT LP estimates that line construction could be readily completed within 22 months from the
- date the construction contract is executed. This will result in an in-service date no later than
- November 2018 (assuming designation on August 1, 2013). The construction schedule will
- depend on the final line design and the construction technique, both of which will be finalized

Filed: 2013-01-04 EB-2011-0140 Summary Page **13** of **14**

- once the environmental assessment is substantially complete. EWT LP notes that the use of CRS
- 2 structures could shorten the construction schedule because the towers are lighter, simpler and
- 3 therefore easier to erect than self-supporting towers, especially where access is limited as is the
- 4 case of the Project area.
- 5 Cost
- 6 EWT LP has prepared a summary of the total costs associated with the Plan, divided into
- 7 development costs, construction costs and operation and maintenance costs.
- 8 EWT has prepared an estimate of the development costs by assigning a cost to each task or group
- 9 of tasks set out in its Gantt Chart at Appendix 7C and calculating the total required. EWT LP's
- 10 estimated budget for completing Project development up to filing an application for leave to
- 11 construct is in the range of \$17.1 million to \$22.1 million. EWT LP's estimated development
- 12 costs for the Project are shown in greater detail in Appendix 8A.
- 13 As required by the Board's filing guidelines, EWT LP has provided an estimated budget for the
- 14 construction of the Project based on the Board's Reference Option and route. The EWT LP's
- estimated budget has been prepared in conjunction with its engineering consultant, Power
- 16 Engineers Inc. EWT LP has also sought and received input on its estimated budget from two
- 17 major North American construction companies, Kiewit Corporation and Valard Construction LP,
- and has incorporated their feedback. Based upon the Reference Option, EWT LP estimates the
- 19 construction costs, including AFUDC, to be in the range of \$340 million to \$510 million for a
- double circuit overhead line. The use of CRS structures would reduce the cost by approximately
- 21 \$116 million.

22 **CONCLUSION**

- 23 EWT LP through its partners, their related entities, and through its consultants has demonstrated
- 24 the necessary technical capabilities and financial capacity to develop, construct and operate the
- proposed new East-West Tie Line. EWT LP has prepared a prudent and robust plan for the
- development of the new line which includes all engineering, design, routing, economic and
- 27 environmental studies needed to prepare and bring an application to the Board for leave to

Filed: 2013-01-04 EB-2011-0140 Summary Page **14** of **14**

- 1 construct. EWT LP has also prepared a comprehensive plan for consultation with Aboriginal
- 2 communities, agencies, land owners and the public.
- 3 EWT LP recognizes that establishing broad-based public support is critical to the success of any
- 4 major infrastructure project in Canada, and will be especially important in the case of the East-
- 5 West Tie given its length and location. EWT LP is uniquely qualified to build this support and
- 6 to develop, construct and operate the new East-West Tie Line as a result of the participation of
- 7 the six directly affected First Nations in EWT LP's ownership and management.

PART A CAPABILITY OF THE APPLICANT

PART A CAPABILITY OF THE APPLICANT EXHIBIT 1 BACKGROUND INFORMATION

1 1. Background Information

- 2 1.1 Applicant's Name
- 3 The applicant is East-West Tie Inc. on behalf of EWT LP ("EWT LP").
- 4 The Applicant's contact details are as follows:
- 5 EWT LP
 6 181 Bay Street, Suite 300
 7 Toronto, Ontario
 8 M5J 2T3
 9 Attention: Mr. Andy McPhee
 10 President
 11 Telephone: (705) 941-5661
- 11 Telephone: (705) 941-5661 12 Fax: (705) 941-5600 13 Email: amcphee@glp.ca
- 14 and -
- Mr. Peter Bettle
- Vice President, Project Development
- 17 Telephone: (819) 561-8014 18 Email: pbettle@glp.ca
- 19 The Applicant's counsel's contact information is as follows:
- 20 Torys LLP
- 21 79 Wellington Street West, Suite 3000
- Box 270, TD Centre
- Toronto, Ontario
- 24 M5K 1N2
- 25 Attention: Mr. Charles Keizer
- 26 Telephone: (416) 865-7512
- Fax: (416) 865-7380 Email: ckeizer@torys.com
- 29 and -

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 1 Page **2** of **3**

1 2 3 4	Mr. Tyson Dyck Telephone: (416) 865-8136 Fax: (416) 865-7380 Email: tdyck@torys.com
5	1.2 <u>Transmission Licence</u>
6	EWT LP's transmission licence number is ET-2011-0350.
7	1.3 <u>Change in Licence Information</u>
8 9 10	Consistent with the Board's Phase 1 decision and order (EB-2011-0140) dated July 12th 2012, and as described in EWT LP's letter to the Board dated July 31, 2012, the following information provided as part of EWT LP's transmission licence application has changed:
11	Mr. Struthers has resigned as the Secretary of EWT LP
12	 Mr. Marcello has resigned as a director of EWT LP
13	1.4 No Licence or Permit Revocation or Investigation
14 15	EWT LP confirms that it has not previously had a licence or permit revoked and is not currently under investigation by any regulatory body.
16	1.5 <u>Confirmation of Commitment</u>
17 18 19	EWT LP confirms that it is committed to the completion of the development work for the East-West Tie line, and to the filing of a leave to construct application for the line, to the best of its ability.
20	1.6 <u>Senior Officer Statement</u>
21	I, Lloyd Andrew McPhee, President of EWT LP, confirm that this application for designation is complete and accurate to the best of my information and belief.
23	Lloyd Andrew McPhee, President Date

- 1 1.7 <u>Runner-up</u>
- 2 EWT LP is not willing to be named as a runner up if EWT LP is not the designated transmitter.
- 3 1.8 Coordination and Cooperation
- 4 EWT LP confirms that its application has been prepared without coordination or cooperation
- 5 from other transmitters participating in this proceeding.
- 6 Consistent with the Board's Phase 1 decision and order, EWT LP also confirms that it has made
- 7 arrangements so as to ensure that no individual will be performing work concurrently for Hydro
- 8 One Networks and EWT LP until the close of record in Phase 2 of this proceeding and, to the
- 9 best of its knowledge, these arrangements have been effective. Furthermore, EWT LP can
- 10 confirm that the work location of EWT LP has been and continues to be physically separated
- 11 from Hydro One Networks Inc. offices.
- 12 This application has been prepared with the assistance of EWT LP's consultants who will
- implement the development program under EWT LP's management if EWT LP is designated;
- 14 Bamkushwada LP; Great Lakes Power Transmission staff who are members of the EWT
- 15 Development Team; and Brookfield.

PART A CAPABILITY OF THE APPLICANT

EXHIBIT 2 ORGANIZATION

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 2 Page **1** of **28**

2. Organization

2 2.0 Overview

1

- 3 EWT LP is a newly formed Ontario limited partnership that has been established specifically for
- 4 the purposes of participating in the Designation Proceeding and, once designated, planning,
- 5 developing, constructing, owning, operating and maintaining the proposed East-West Tie Line
- 6 (the "Project"). The partnership interests are held equally by each of the three limited partners:
- 7 Bamkushwada LP, Great Lakes Power Transmission EWT LP and Hydro One Inc. ¹ The partners
- 8 bring unique skills, resources and experience to EWT LP, with respect to technical capability,
- 9 financial capacity, project management capabilities, local knowledge and experience with
- 10 relevant regulatory processes and approvals. Together, EWT LP has the skills, attributes and
- experience necessary to meet the priorities and challenges of developing, constructing and
- operating the Project effectively, efficiently and expeditiously.
- 13 In accordance with the Ontario Energy Board's (the "Board's") filing requirements, this section
- includes the following:
- Overview of Organizational Plan (2.1):
- Management Team (2.2);
- Overview of EWT LP Experience (2.3); and
- 18 Relevance of Experience (2.4)

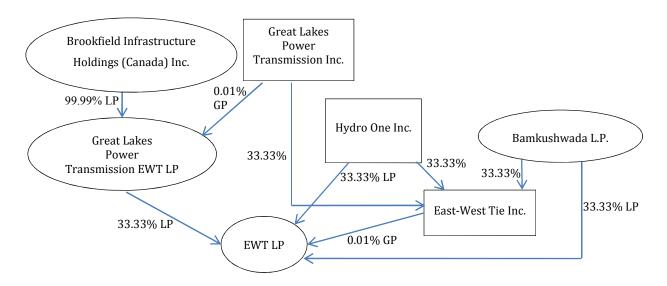
19

¹ Shares of EWT LP's general partner, East-West Tie Inc., are held equally by BLP, Great Lakes Power Transmission Inc. ("GLPT") and Hydro One.

1 2.1 Overview of Organizational Structure

2 Organization of the EWT LP structure is shown in Figure 2.1.

3 Figure 2.1: EWT LP Ownership Structure

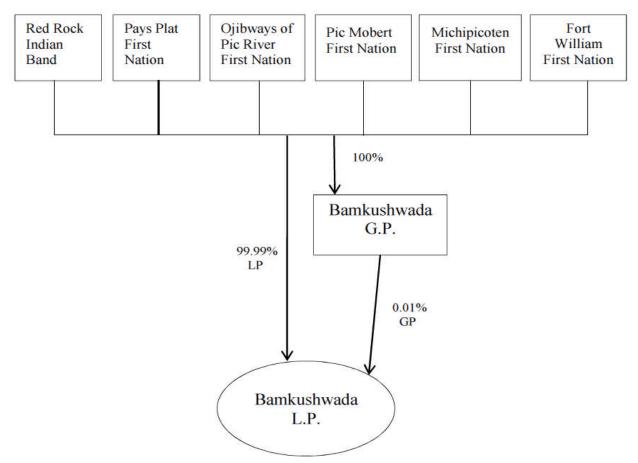


To undertake the Project, EWT LP intends to draw upon the resources, experience and capabilities of its partners and their related entities. In addition, EWT LP has contracted with third parties for the provision of specialized services that will be necessary in connection with the Project. The following Sections describe each of EWT LP's partners and their relevant experience. Key third party contractors that EWT LP intends to retain in connection with the Project are also identified.

11 2.1.1 Bamkushwada LP ("BLP")

- BLP is a newly formed limited partnership. The partnership interests are held equally by each of six First Nations: (1) Red Rock Indian Band, (2) Pays Plat First Nation, (3) Ojibways of the Pic River First Nation, (4) Pic Mobert First Nation, (5) Michipicoten First Nation and (6) Fort
- William First Nation (together, the "Participating First Nations").
- Organization of the BLP structure is shown in Figure 2.2.

Figure 2.2: BLP Ownership Structure



The Project is located entirely within the traditional territories of the Participating First Nations, who are all located within 40 km of the existing East West Tie. The Participating First Nations are therefore most proximate to and directly affected by the proposed Project. BLP through the Participating First Nations possesses an intimate knowledge of the local geography gained through traditional activities which take place on the land. Traditional knowledge acquired through hunting, fishing, trapping and gathering as well as oral history will be a key source of information used in the development of the Project. Efficient access to this information will enable EWT LP to plan routing, construction, operations and maintenance activities in an effective manner and to reduce the potential for harmful impacts to these activities. The Participating First Nations will add efficiency to the development process, resulting in savings to ratepayers.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 2 Page **4** of **28**

1 In addition to local geographic knowledge, the designated transmitter must understand how the

2 Project may impact traditional and cultural sites and values. Where possible, the Project must

avoid sacred sites such as burial sites, important cultural sites such as community powwow

grounds and hunting sites, and other sites used by Aboriginal communities. EWT LP intends to

adopt objectives of avoiding these important sites. In order to achieve these objectives, BLP will

play an essential role in providing efficient access to this information early in the planning stages

of the Project, so that it may then result in development and construction efficiency and cost

8 savings.

3

4

5

6

7

12

13

14

15

16

19

22

23

24

25

2627

28

9 Beyond the Participating First Nations, EWT LP will be required to consult with local

municipalities and other Aboriginal communities. The partners of BLP will again play a key role

11 to meet these requirements. BLP's partners have existing relationships with these local

municipalities and Aboriginal communities and will provide an important first point of contact

between EWT LP and these communities. Many of these inter-community relationships are

based on trust and cooperation. For example, the Pic River First Nation, a member of BLP, has

nurtured a close relationship with the Town of Marathon, culminating in the execution of the

Friendship Treaty, which confirms a shared commitment to open communication, cooperation

and environmental protection.

18 Some of the Participating First Nations also have gained important experience through the

development of other projects in the proposed Project area. Through these Participating First

Nations, BLP has experience in forestry management and planning; energy project approvals

21 processes, including the Board's leave to construct process; environmental assessment processes

and various other provincial and federal approvals processes. The Participating First Nations

have developed, owned and/or operated projects that include the following:

• <u>Umbata Falls GS</u>: The Ojibways of the Pic River First Nation ("Pic River") owns a 51% stake in the Umbata Falls GS ("Umbata Falls"). Umbata Falls is a 25.0 MW hydroelectric development, and its dam, intake, and powerhouse facility are located in the White River Provincial Park. Umbata Falls is connected to the provincial grid by a 30 km long 115 kV

transmission line. As part of Umbata Falls' Board of Directors and management team,

Pic River was actively involved in obtaining leave to construct² and environmental approvals for Umbata Falls GS and its associated transmission line. Pic River maintains majority control³ of Umbata Falls GS and participates in all aspects of its management. Through projects such as Umbata Falls, Pic River has significant experience managing competing interests in lands, including Aboriginal harvesting interests, mining interests and government interests. Umbata Falls required the acquisition of Crown land, including lands within the White Lake Provincial Park. Pic River engaged in extensive consultation with local First Nations communities and municipalities. In addition, Pic River was required to negotiate with resource development companies regarding competing forestry interests and mining claims in the Project area.

- <u>Twin Falls GS</u>: Pic River owns and operates a 5 MW hydroelectric facility, which is connected to a transmission station by a 30 km long 44 kV distribution line. Acquisition of Crown land as part of the development of Twin Falls required extensive consultation with local First Nations communities and municipalities.
- Gitchi Animki Hydroelectric Project: Pic Mobert First Nation ("Pic Mobert") is currently developing the Gitchi Animki Hydroelectric Project ("Gitchi Animki"), an 18.9 MW hydroelectric project to be constructed in 2013. Pic Mobert has a 50% stake in Gitchi Animki and is active in managing its interest in the project through its Board of Directors and appointed project staff. As Gitchi Animki will be located in the White River Provincial Park, it has required a complex approvals process, including an environmental assessment process on provincial park lands and the acquisition of Crown land. As part of the Gitchi Animki consultation process, Pic Mobert consulted with First Nation communities and municipalities in the Project area.
- <u>Lower Lake Hydroelectric Project</u>: Pays Plat First Nation ("Pays Plat") and Pic River are in partnership with Brookfield Renewable Power developing a 10 MW hydroelectric facility at Terrace Bay. This project is still under development, and Pays Plat and Pic River have acquired experience in managing the provincial environmental assessment approvals process and managing competing land interests in the project area. Once the project environmental assessment has been approved, Pays Plat and Pic River will assist in the preparation and submission of the required leave to construct application.
- <u>High Falls GS and Manitou Falls GS</u>: Pic River is currently developing generating stations at High Falls and Manitou Falls. Pic River has completed the provincial environmental assessment processes for these projects and is managing the approvals processes for both projects, including approvals for interconnection to the provincial grid via 44 kV distribution lines.

² EB-2005-0487

³ Pic River will acquire 100% ownership of Umbata Falls upon the conclusion of the Umbata Falls limited partnership agreement.

- <u>Pic River Development Corporation ("PRDC")</u>: Pic River, through its economic development corporation, has developed significant forestry management expertise. For over 30 years, it has provided comprehensive forestry harvesting and management services in the proposed Project area. PRDC holds provincial harvesting licenses on four Forest Management Units. PRDC has extensive experience as a forest harvester in acquiring licenses, permits and approvals required to harvest timber from Ontario's forests. These activities are directly related to the scope of the Project, as an estimated 400 km of right-of-way may require clearing and harvesting. In addition to harvesting, Pic River (First Nation) is located in four Forest Planning Authorities and has extensive experience in forest management, all of which are relevant to the development of the Project.
- Red Rock Indian Band: Located in the Lake Nipigon Forest area, the Red Rock Indian Band has operated a forestry harvesting operation since 1986. In addition to holding a forest resource license in the Lake Nipigon Forest, the Red Rock Indian Band has extensive experience in obtaining licenses, permits and approvals required to harvest timber from Ontario's forests. The Red Rock Indian Band also participates in the management of this forest unit and has a seat on the management board.

18 2.1.2 <u>Great Lakes Power Transmission EWT LP ("GLPT-EWT")</u>

- 19 GLPT-EWT is a limited partner in EWT LP. GLPT-EWT's partners are Great Lakes Power
- Transmission Inc. ("GLPT") (general partners) and Brookfield Infrastructure Holdings (Canada)
- 21 Inc. ("BIH"). GLPT and BIH are also the partners of Great Lakes Power Transmission LP
- 22 ("GLPTLP") an Ontario licenced electricity transmitter. BIH is indirectly controlled by
- 23 Brookfield Infrastructure Partners LP ("Brookfield Infrastructure"). Through these relationships,
- 24 GLPT-EWT is part of Brookfield Infrastructure's Brookfield Power and Utilities Group (the
- 25 "Brookfield Utilities Group"). As such, EWT LP, through GLPT-EWT, benefits from and has
- 26 the ability to draw upon the breadth and depth of the Ontario and global transmission experience
- of the other members of the Brookfield Utilities Group.
- A schematic setting out GLPT-EWT's ownership structure and relationship to the Brookfield
- 29 Utilities Group is set out in Figure 2.3.

1

2

3

4

5

6

7

8

9

10

11

12

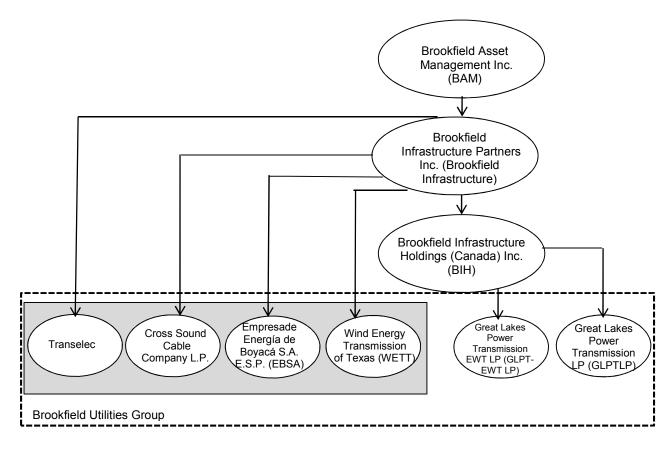
13

14 15

Figure 2.3: GLPT-EWT's Ownership Structure

1

2



- 3 A key member of the Brookfield Utilities Group is GLPTLP. GLPTLP is a licenced electricity
- 4 transmitter in Ontario. 4 Its facilities are located in the Algoma district of northern Ontario
- 5 extending north from Sault Ste. Marie to Wawa and east from Sault Ste. Marie to Hydro One
- 6 Networks Inc.'s ("HONI's") Mississagi TS. GLPTLP's system is a critical part of Ontario's bulk
- 7 power system and the IESO-controlled grid. GLPTLP's system is connected to the existing East-
- 8 West Tie Line through HONI's Wawa TS.
- 9 GLPTLP has direct knowledge and experience in operating and maintaining transmission
- 10 facilities in northern Ontario in terrain similar to that of the Project area. GLPTLP has also
- 11 constructed a significant transmission project in conditions similar to what will be encountered in
- 12 constructing the Project. GLPTLP completed the planning, design, permitting and construction

-

⁴ ET-2007-0649.

- of a new 164 km 230 kV overhead line between Sault Ste. Marie and Wawa (the "Transmission
- 2 Reinforcement Project"). The project included the completion of a class environmental
- 3 assessment and the Board's leave to construct pursuant to Section 92 of the Ontario Energy
- 4 Board Act (the "OEB Act"). The Transmission Reinforcement Project is one of the longest
- 5 electricity transmission lines to have been constructed in Ontario in recent years.
- 6 In general, GLPTLP also has experience with the Board's regulatory approval process. GLPTLP
- 7 has participated in a number of regulatory proceedings, including the Board's Renewed
- 8 Regulatory Framework for Electricity, 6 Cost of Capital for Ontario's Regulated Utilities, 7 as well
- 9 as making applications for the approval of just and reasonable rates under Section 78 of the OEB
- 10 Act. Post designation, EWT LP will have the benefit of GLPTLP's experience in the
- development, construction and operating of transmission facilities in the Project area.
- 12 The following provides an overview of the Brookfield Utilities Group's experience managing
- and overseeing regulatory processes and approvals for projects outside Ontario:
 - Texas: Wind Energy Transmission of Texas ("WETT"), a joint venture member of the Brookfield Utilities Group, is currently completing seven distinct electricity transmission lines in Texas, totaling approximately 370 miles (595 km) of 345 kV overhead lines and including six new substations. WETT identified the optimum line routes; secured easements from landowners; applied for and received Certificates of Convenience and Necessity (the Ontario equivalent would be a combined application to the Board for leave to construct and to the Minister of the Environment for approval of a provincial environmental assessment); designed the transmission lines and substations; engaged construction contractors; and managed the safe construction and commissioning of the new facilities. WETT has \$750 million in assets currently under construction, which are expected to be in service by 2013.
 - New York: Cross-Sound Cable Company, LLC ("Cross-Sound Cable"), a wholly-owned electrical transmission company providing 330 MW of transmission capacity from Connecticut to Long Island, NY via a 39 km long submarine high voltage direct current transmission cable. Cross-Sound Cable has assets of \$198 million, is operated under a

14

15

16

17 18

19

20

21

22

2324

25

2627

28

35306-2005 14465750.17

⁵ Ontario Energy Board, *Decision and Order*, RP-2003-0120/EB-2003-0162 (March 31, 2004).

⁶ EB-2010-0377.

⁷ EB-2009-0084.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 2 Page **9** of **28**

- 1 contract with the Long Island Power authority, and is regulated under the authority of the US Federal Energy Regulatory Commission.
 - <u>Chile</u>: The Brookfield Utilities Group holds an 18% interest in Transelec, which owns and operates the largest transmission system in Chile. Transelec's 8,200 km of transmission lines serve 98% of Chile's population. Transelec has assets of approximately \$5.0 billion and revenues of \$398 million.
 - <u>Columbia</u>: The Brookfield Utilities Group owns and operates distribution and transmission facilities in the Boyacá and Santander provinces of Columbia through EBSA, a wholly-owned electricity distribution franchise with assets of \$650 million. EBSA owns and operates 33,500 km of distribution assets, including 540 km of Regional Transmission lines (57 kV 220 kV) and 88 transformer stations.

12 2.1.3 <u>Hydro One Inc. ("Hydro One")</u>

- Hydro One is a company wholly-owned by the Province of Ontario. Hydro One's largest wholly-
- 14 owned subsidiary is HONI.

3 4

5 6

7

8

9

10

- 15 HONI owns and operates approximately 96% of the transmission system in Ontario, including
- approximately 29,000 circuit kilometres of high-voltage transmission lines (nearly 300 km of
- which is underground), 286 transmission stations and 26 interconnections with neighbouring
- 18 jurisdictions, making it one of the largest transmission systems in North America. HONI's
- transmission system operates at voltages of 500 kV, 230 kV and 115 kV, with minor lengths
- operating at 345 kV and 69 kV. HONI's transmission system is located on lands that are owned
- 21 either by HONI, the Ontario government or by other parties, including Aboriginal communities
- 22 with whom it has easement, or similar types of land occupation and use agreements. Electricity
- 23 transmission assets represent approximately \$10 billion or 56% of HONI's total assets of nearly
- 24 \$18 billion.
- 25 HONI's combined transmission and distribution business employs approximately 5,500
- permanent employees in a variety of management, technical, administrative positions. HONI's
- 27 technical expertise is evident from its demonstrated ability to plan, construct, operate and
- 28 maintain its transmission system safely, reliably and cost effectively. HONI's commitment to
- 29 ensuring public and worker safety, while recognizing its responsibilities with respect to its
- 30 stakeholders, the stewardship of critical provincial assets and the environment is also evident.

- 1 HONI also owns and operates facilities that are required for operations, maintenance, protection,
- 2 control and monitoring of its system, including an extensive telecommunication system,
- 3 protection and control equipment, as well as the Ontario Grid Control Centre (and its back-up
- 4 facility) for monitoring and controlling its transmission assets. As a member of the Northeast
- 5 Power Coordinating Council ("NPCC") and in accordance with its transmission license
- 6 requirements, HONI is required to comply with NPCC criteria and North America Electric
- 7 Reliability Corporation ("NERC") reliability standards.
- 8 Most importantly, HONI owns and operates the existing East-West Tie line and the transmission
- 9 stations to which the Project will connect. Post designation, EWT LP will have the direct
- 10 experience of HONI in the development, construction and operation of the Project.
- 11 HONI has extensive experience managing the development of large transmission projects in
- Ontario. The following projects have specific relevance due to their scope, complexity and recent
- 13 completion:

14

15

16

17

18

19

20

21

22

2324

25

26

27

Bruce to Milton Line: HONI managed the development and construction of a 180 km double-circuit 500 kV overhead transmission line from the Bruce Nuclear Generating Station in the Municipality of Kincardine to HONI's Milton Switching Station in the Town of Milton, along with modifications to several related transmission stations. This approximately \$750 million project runs through diverse natural areas, agricultural and residential areas, and was completed seven months ahead of schedule in 2012. HONI obtained early access rights pursuant to Section 98 of the OEB Act in August 2007⁹ and April 2008. HONI subsequently obtained leave to construct pursuant to Section 92 of the OEB Act on September 15, 2008. Of the 355 properties directly affected by the project, HONI reached voluntary settlements in respect of 308 or 87% of the properties and obtained authorization from the Board to expropriate the necessary land rights in respect of the remaining 47 properties on March 15, 2011. With respect to environmental approvals, HONI completed an individual environmental assessment in accordance with the Environmental Assessment Act (Ontario), which was approved on

⁸ http://www.hydroone.com/OurCompany/MediaCentre/Documents/NewsReleases2012/14_11_2012_Q3_Press_Release.pdf.

⁹ EB-2007-0051.

¹⁰ EB-2007-0920.

¹¹ EB-2007-0050.

¹² EB-2010-0023.

December 16, 2009.¹³ HONI consulted widely with numerous stakeholders, including eight First Nations and Métis communities. HONI also obtained numerous other permits and approvals necessary for construction of the project from a wide range of federal and provincial authorities¹⁴ and from the eleven different municipalities, towns and townships through which the route passes.

- Midtown Project: HONI managed the development and construction of three 115 kV circuits partly overhead and partly in an innovative rock tunnel to refurbish and reinforce the existing transmission system in densely populated midtown Toronto at an estimated cost of \$105 million. HONI obtained leave to construct from the Board on June 17, 2010. The Midtown Project also required an environmental assessment to be carried out pursuant to the *Environmental Assessment Act* (Ontario) and in accordance with the Class Environmental Assessment for Minor Transmission Facilities. HONI completed its environmental assessment process on June 30, 2010. This project is being carried out in several phases, beginning in Summer 2011 and with completion expected in Fall 2014.
- <u>Transmission System Capital Investments</u>: HONI managed more than \$1.4 billion in capital investments in 2011¹⁷ and managed more than \$1 billion of capital investments in the first nine months of 2012.¹⁸ These project investments improve transmission system reliability and performance; address an aging power system; facilitate new generation; and improve service to customers across Ontario.¹⁹
- Regulatory Processes and Approvals: HONI has extensive experience with regulatory processes and approvals in Ontario, including participating in the Board's Renewed Regulatory Framework for Electricity, Cost of Capital for Ontario's Regulated Utilities, as well as making applications for the approval of just and reasonable rates under Section 78 of the OEB Act. In addition, HONI's regulatory and approvals experience related to the Bruce to Milton project is discussed in Section 2.4.4 and Section 4.3.4.

6 7

8

9

10 11

12

13

14

15

16

17

18

19

20

21

22

2324

25

 $^{^{13}}$ $\underline{\text{http://www.hydroone.com/Projects/BrucetoMilton/Documents/Notice\%20of\%20Approval-\%20Bruce\%20to\%20Milton.pdf}.$

¹⁴ http://www.hvdroone.com/Projects/BrucetoMilton/Construction/Pages/ApprovalsandPermits.aspx.

¹⁵ EB-2009-0425

¹⁶ http://www.hydroone.com/Projects/Midtown/Pages/Approvals.aspx.

¹⁷ http://www.hydroone.com/OurCompany/MediaCentre/Documents/NewsReleases2012/02_10_2012_Year-End 2011 Financials.pdf.

 $^{{}^{18} \}underline{http://www.hydroone.com/OurCompany/MediaCentre/Documents/NewsReleases 2012/14_11_2012_Q3_Press_Re} \\ \underline{lease.pdf}.$

¹⁹ EB-2012-0031, Exhibit D1, Tab 3, Schedule 1, Table 1 (updated August 15, 2012).

²⁰ EB-2010-0377.

²¹ EB-2009-0084.

1 2.1.4 Experience Relevant to the Project

- 2 Together, EWT LP, its partners and their related entities have extensive experience preparing
- 3 and implementing effective and efficient project development plans for major transmission lines.
- 4 The relevance of EWT LP's experience can be organized around the following four key
- 5 attributes: location, size, technology, and permitting and approvals.

6 2.1.4.1 Location

- 7 Based upon the collective experience described above, EWT LP is very familiar with the
- 8 difficulty of constructing and maintaining transmission lines on the rocky Canadian Shield in
- 9 northern Ontario where access and construction is often made considerably more difficult due to
- 10 harsh topography and poor weather. GLPTLP and HONI are the only licenced transmitters in
- the Project area. EWT LP's experience comes from its partners and their related entities being
- located, living and working in the Project area and not just from desk-top studies and site visits.
- 13 EWT LP will possess an understanding of the particular challenges, including (i) the logistics of
- working in the area's steep slopes, frequent stream crossings, dense vegetation and limited
- vehicular access; (ii) the terrain, topography and soil conditions likely to be encountered; (iii) the
- need to use explosives and the related permitting requirements; (iv) the need to make proper
- arrangements for the accommodation of workers in areas where there are limited or no facilities;
- and (v) the limited availability of communications and the need to make special provisions for
- 19 the timely evacuation of medical emergencies.

20 2.1.4.2 <u>Project Size and Management</u>

- 21 The Project as described by the Ontario Power Authority (400 km and \$600 million) is entirely
- 22 manageable relative to the capacity of EWT LP's partners and their related entities, who own and
- operate over 40,000 km of electricity transmission lines on two continents. As a result, EWT LP
- 24 will have the appropriate people, policies and processes in place with the necessary capacity,
- 25 expertise and experience to effectively manage the development, construction and operation of
- 26 the Project.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 2 Page **13** of **28**

- 1 As indicated in Section 5 of the designation application, EWT LP has access to significant
- 2 capital resources required to develop, finance, construct, operate and maintain the Project. The
- 3 financing, construction, operation and maintenance of the Project will not have an adverse effect
- 4 on the creditworthiness or financial condition of EWT LP or its partners. The skills and
- 5 experience possessed by EWT LP will facilitate timely and efficient management and
- 6 development of the Project. As indicated in Section 7, EWT LP has established a detailed
- 7 schedule for the Project, with the development phase divided into tasks and subtasks with built-
- 8 in milestones and reporting and monitoring requirements. This corresponds to a detailed "bottom
- 9 up" budget for development and emphasis upon strong cost control management.

10 2.1.4.3 <u>Permitting and Approvals</u>

- 11 EWT LP possesses the strong experience and skills necessary to manage and obtain all necessary
- 12 permits required to develop, construct and operate the Project. This includes not just regulatory
- approvals, but also social acceptance of the Project.

http://www.hydroone.com/Projects/Nipigon/Pages/Approvals.aspx

- With respect to regulatory approvals, the project summaries also show an ability to complete the
- environmental assessment process under the *Environmental Assessment Act*. ²² As well, EWT LP.
- through its partners and their related entities, have significant expertise in seeking leave to
- 17 construct under the OEB Act²³ as well as numerous IESO system impact and connection studies.

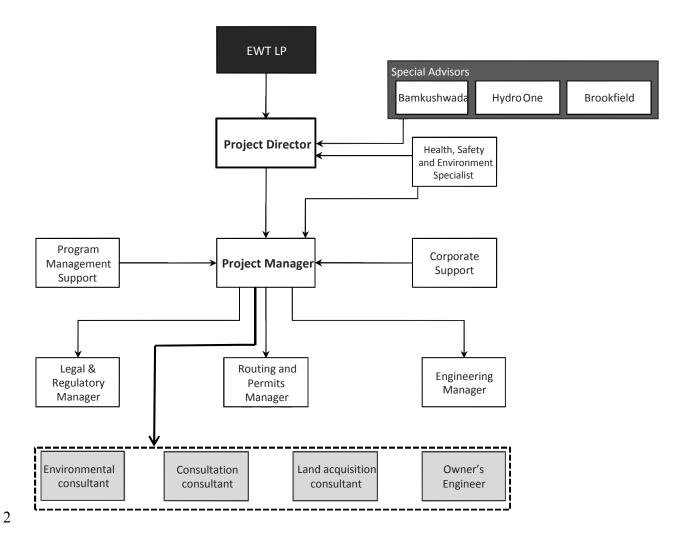
http://www.hydroone.com/Projects/BrucetoMilton/Documents/Notice%20of%20Approval-%20Bruce%20to%20Milton.pdf.; http://www.hydroone.com/Projects/Midtown/Pages/Approvals.aspx.; http://www.hydroone.com/Projects/Lambton/Pages/Approvals.aspx.;

²³ For example, HONI has in recent years brought applications to the Board pursuant to Section 92 of the OEB Act (a) for leave to construct 4.2 km of 230 kV transmission line and the installation of four circuit breakers at a new switching station in the City of Brampton, (b) for leave to construct in respect of the reinforcing of an existing 12 km, 115 kV single-circuit transmission line in Norfolk County (EB-2008-0023), (c) for leave to construct the Bruce to Milton project consisting of approximately 180 km of double-circuit 500 kV transmission line from Kincardine Township to the Town of Milton, along with modifications to three related transmission stations (EB-2009-0425), (d) for leave to construct the Midtown project consisting of three 115 kV circuits, partly overhead and partly in an innovative rock tunnel, to refurbish and reinforce the existing transmission system in midtown Toronto, and (e) for leave to construct upgrades to 70 km of 230 kV double circuit transmission lines in the west of London area (EB-2012-0082); GLPTLP – the Transmission Reinforcement Project (EB-2003-0162); Pic River Umbata Falls 30 km 115 kV line.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 2 Page **14** of **28**

- 1 As a result of the participation of BLP and its First Nations partners, EWT LP has access to and
- 2 brings to the Project the unique insight of having been both consultor and consultee with respect
- 3 to large scale power and infrastructure developments in the proposed Project area. This unique
- 4 perspective will help EWT LP manage the complex consultation activities associated with the
- 5 development of the Project. It has been incorporated into EWT LP's public and Aboriginal
- 6 consultation plan, as further described in Section 9 and Section 10.
- 7 2.1.5 <u>Development Phase Organizational Structure</u>
- 8 EWT LP's organizational structure for the development phase of the Project is shown in Figure
- 9 2.4.

Figure 2.4: Development Phase Organizational Structure



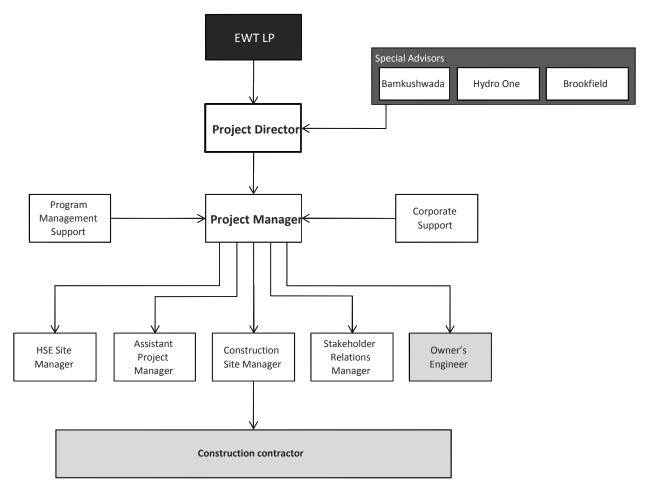
- 3 GLPT-EWT will be responsible for managing the development phase of the Project on EWT
- 4 LP's behalf. GLPT-EWT will be responsible for the provision and sourcing of all development
- 5 tasks and responsibilities. Post-designation, GLPT-EWT will also have the benefit from
- 6 GLPTLP's experience and resources.
- 7 Hydro One (through HONI, post-designation), the Brookfield Utilities Group and BLP will act
- 8 as special advisors to EWT LP. In addition, EWT LP has retained four experienced consultants –
- 9 Power Engineers Inc., AECOM Canada Ltd., Shared Value Solutions Ltd. ("SVS") and Altus
- 10 Group Inc. to provide specialized skills and advice to EWT LP.

- 1 The role of each consultant is described in Section 2.2. For a more detailed description of each
- 2 company's technical capabilities, please refer to Section 4.

3 2.1.6 Construction Phase Organizational Structure

- 4 EWT LP's organizational structure for the construction phase of the Project is shown in Figure
- 5 2.5.

6 Figure 2.5: Construction Phase Organizational Structure



- 8 As with the development phase, GLPT-EWT will be responsible for managing the construction
- 9 phase of the Project on EWT LP's behalf. EWT LP will enter into a management agreement with
- 10 GLPT-EWT for the provision of construction management services. Post-designation, GLPT-
- 11 EWT will also benefit from access to GLPTLP's experience and resources.

- 1 Hydro One (through HONI, post-designation), the Brookfield Utilities Group and BLP will
- 2 continue to act as special advisors to the GLPT-EWT management team. Power Engineers will
- 3 be the Owner's Engineer and provide construction management services. AECOM will provide
- 4 environmental monitoring services during construction. Altus and SVS will continue to act as
- 5 technical advisors and service providers as required.
- 6 EWT LP will engage a specialized construction contractor through a competitive procurement
- 7 process to construct the Project. The contractor will also be responsible for the procurement of
- 8 materials.

9 2.1.7 Operations and Maintenance Phase

- 10 EWT LP believes that it would not be cost effective to establish a dedicated NERC-certified
- operations team to operate the Project 24 hours a day, seven days a week, especially given that
- 12 the high voltage circuit breakers and protection equipment controlling the Project will be located
- in existing HONI switching facilities. As such, as discussed in the licencing proceeding, EWT
- 14 LP contemplates that ongoing operation of the facilities will be outsourced to HONI. Negotiation
- of the necessary agreements will occur if and when EWT LP is designated.
- In addition, GLPT-EWT will be responsible for putting in place a management agreement with
- 17 EWT LP for the provision of operations and maintenance management services. EWT LP
- believes it is premature to put in place firm arrangements for maintenance of the Project at this
- 19 time for two reasons. Firstly, line maintenance will not be required until 2019 at the earliest, at
- 20 which time the line is expected to be in commercial service, and much could change in the
- 21 intervening years that could affect the cost effectiveness of the various alternatives. Secondly,
- 22 the most cost effective way to maintain the new line will depend to a certain extent on its final
- design, which cannot be ascertained until development work, including public consultation, has
- been completed.

1 2.2 <u>Management Team</u>

- 2 To reduce Project cost and risk, EWT LP intends to maintain a consistent management team and
- 3 structure throughout the development and construction phases. EWT LP believes it will be most
- 4 cost effective for a single management team to manage the Project from development to
- 5 commercial operation as this will improve project continuity, allow for an earlier in-service date
- 6 by eliminating a time allowance for project handover, and reduce the risk of errors being
- 7 introduced when the Project transitions from the development team to the construction team.
- 8 Resumés for key individuals are provided in Appendix 2A.

9 2.2.1 <u>Development Management Team</u>

- The roles and responsibilities of the development management team, identified in Figure 2.4
- 11 Development Phase Organizational Structure, are described below.

12 2.2.1.1 <u>Project Director – Lloyd Andrew McPhee</u>

- 13 Mr. McPhee is President of EWT LP, Vice President and General Manager in the Brookfield
- 14 Utilities Group, and an officer of GLPT. Mr. McPhee has held management positions of
- increasing responsibility over the past 20 years. Amongst his current duties, Mr. McPhee is
- responsible for the day to day operational affairs of GLPT as its General Manager. Mr. McPhee's
- 17 resume is provided in Appendix 2A.
- 18 As Project Director, Mr. McPhee will have overall responsibility for delivering the development
- and construction of the Project on budget and on schedule. In addition, Mr. McPhee will be
- accountable for ensuring that the Project adheres to EWT LP's health, safety and environment
- 21 policies.

22 2.2.1.2 <u>Project Manager – Peter Bettle</u>

- 23 Mr. Bettle is Vice-President, Project Development for GLPTLP. Mr. Bettle has broad technical
- 24 and regulatory knowledge and international transmission development experience. Mr. Bettle's
- resume is provided in Appendix 2A.

- 1 As Project Manager, Mr. Bettle will be responsible for the day-to-day execution of the Project
- and will report to the Project Director. Mr. Bettle will be responsible for ensuring the Project is
- 3 undertaken in an orderly and cost effective manner as set out in EWT LP's development plan.
- 4 Mr. Bettle will be responsible for identifying project risks and for recommending changes to the
- 5 development plan as necessary to manage these risks. In addition, Mr. Bettle will be responsible
- 6 for ensuring that the Project is executed in accordance with EWT LP's health, safety and
- 7 environment policies.

8 2.2.1.3 Engineering Manager – Paul Steckley

- 9 Mr. Steckley is Director, Transmission in the Brookfield Utilities Group. Mr. Steckley has
- 10 extensive experience in in power system planning and economic evaluation analysis having
- previously worked for both California ISO (electricity system operator) and the former Ontario
- Hydro Power System Planning Division. Mr. Steckley's resume is provided in Appendix 2A.
- 13 As Engineering Manager, Mr. Steckley will be responsible for the performance of all technical
- and engineering studies associated with the Project.

15 2.2.1.4 <u>Legal and Regulatory Manager – Marcie Zajdeman</u>

- 16 Ms. Zajdeman is Vice President, Regulatory & Legal in the Brookfield Utilities Group. Ms.
- 27 Zajdeman is a practicing lawyer with special expertise in the duty to consult and land use
- planning for linear corridors. Ms. Zajdeman was previously Senior Legal Counsel at HONI and
- 19 has extensive experience with transmission projects. At HONI, Ms. Zajdeman was responsible
- 20 for the legal aspects of the delegated duty to consult under the Bruce to Milton Memorandum of
- 21 Understanding. Ms. Zajdeman's resume is provided in Appendix 2A.
- 22 As Legal and Regulatory Manager, Ms. Zajdeman will oversee all aspects of legal and regulatory
- compliance during the development of the Project.

1 2.2.1.5 Routing and Approvals Manager – Viggo Lundhild

- 2 Mr. Lundhild is currently Vice President, Transmission Development (US) in the Brookfield
- 3 Utilities Group. Mr. Lundhild sits on the Board of Managers of WETT and has primary
- 4 oversight of the operations of Cross-Sound Cable. Mr. Lundhild was General Manager of
- 5 GLPTLP from 2005-2006 and was responsible for the safe operation of 550 km of transmission
- 6 lines and 1700 km of distribution lines. Mr. Lundhild's resume is provided in Appendix 2A.
- 7 As Routing and Approvals Manager, Mr. Lundhild will be responsible for all consultation,
- 8 environmental assessment and land acquisition activities associated with the Project and will
- 9 oversee the work of AECOM, Altus and SVS.

10 2.2.1.6 <u>Health, Safety and Environmental Manager - Steve Taylor</u>

- Mr. Taylor is a Health, Safety and Environmental Specialist the Brookfield Utilities Group. Mr.
- 12 Taylor has been a health and safety specialist in northern Ontario for almost 20 years, most
- 13 recently in Brookfield's Ontario transmission business. Mr. Taylor's resume is provided in
- 14 Appendix 2A.
- 15 As Health, Safety and Environmental Manager, Mr. Taylor will support the Project Manager in
- 16 ensuring that the Project is developed in accordance with EWT LP's health, safety and
- 17 environmental policies. This role will initially be part-time but is expected to become full-time
- during the second year of the Project while field work is underway.

19 2.2.1.7 Special Advisors

- 20 EWT LP will be able to call on the Brookfield Utilities Group for technical advice. The
- 21 Brookfield Utilities Group has identified two special advisors to EWT LP:
- Mr. Jason Spreyer is Senior Vice President and Chief Financial Officer to the Brookfield
- 23 Utilities Group with financial responsibility over Brookfield electric utilities in North and
- South America, accountability for evaluating capital deployment opportunities within
- 25 Brookfield's utility businesses and responsibility for all accounting, reporting, treasury,
- tax and financing functions. His resume is provided in Appendix 2A.

- Mr. Brad Railing is currently Chief Operating Officer of Cross-Sound Cable. Mr.
 Railing's resume is provided in Appendix 2A.
- 3 Hydro One will also provide special advisors for the Project which could include HONI related
- 4 individuals. However, consistent with the Board's Phase 1 decision, Hydro One will not identify
- 5 these advisors until following designation.
- 6 In addition to being able to call on the Brookfield Utilities Group and Hydro One for technical
- 7 advice (including GLPTLP and HONI post-designation), the Project Director will be able to
- 8 obtain advice and assistance from BLP regarding Aboriginal consultation and environmental
- 9 assessment. BLP has identified Mr. Byron Leclair as a special advisor to EWT LP. During the
- 10 Project development phase, BLP will assist as follows:
- Supporting stakeholder consultation and any duty to consult with Aboriginal communities delegated to EWT LP;
- Organizing the First Nations and Métis communities to facilitate effective and efficient participation in the consultation process, including retaining a project coordinator and community based project liaison workers to assist in the delivery of the consultation plan;
- Formally receiving project information from EWT LP at the earliest possible stage and disseminating project information for Chiefs and Councils to ensure there are no delays in undertaking the Crown's duty to consult prior to issuing permits;
 - Performing preliminary assessments of human resource requirements during construction and, in conjunction with Employment and Training Officers and community Post-Secondary Education Directors, preparing education and training plans, including apprenticeships, for community youth interested in construction and operations and maintenance opportunities for employment;
- Assisting EWT LP and its environmental consultants in gathering preliminary inventories of traditional values in the study area as required to complete the environmental assessment;
 - Arranging project information sessions for Chiefs and Councils, communities and Aboriginal communities at large, including by hosting Aboriginal Information Forums in each of the participating communities;
- Sharing with EWT LP traditional and ecological knowledge of the Project study area by gathering community input regarding the Project, thereby helping EWT LP to complete environmental assessment studies expeditiously and cost effectively;

19

20

21

22 23

27

28

- Completing community resource assessments to identify community businesses and resources that may assist EWT LP in the field, including specialized consulting services such as environmental and engineering consulting services, guiding services, field equipment, and administrative and logistical support, which will help increase the safety and productivity of EWT LP and its consultants when working in the field;
 - Assisting EWT LP in the preparation of the Leave to Construct application; and
- Where appropriate, proposing alternative courses of action, amendments or accommodation agreements to address Aboriginal interests.

9 2.2.1.8 <u>Third Party Consultants</u>

6

10

<u>Engineering Consultant – Power Engineers</u>

- Power Engineers will work with EWT LP during the development phase of the Project and will
- 12 assist in overseeing and managing all aspects of Project engineering. In particular, Power
- 13 Engineers will assist in ensuring that the Project is designed to meet all relevant international,
- North American, Canadian and provincial standards, as applicable. Power Engineers is a global
- engineering consulting firm with over 30 years of experience providing services related to the
- transmission and distribution of electricity at all stages of the development process, including
- planning, permitting, design, construction, testing and commissioning, as well as maintenance
- testing over time. Power Engineers is based in Hailey, Idaho and employs more than 1,700
- employees in 33 offices throughout the United States, the United Kingdom and South Africa. Its
- transmission and distribution department employs over 675 staff, making it one of the largest
- such firms in North America. For additional information regarding Power Engineers' experience,
- please see Sections 4.1.2.1 and 4.3.1 and Appendix 4C.

23 Environmental Consultant – AECOM

- 24 AECOM will work with the Project Management Team to co-ordinate and implement all
- consultations, studies, field work, assessments and evaluations necessary for the completion of a
- 26 provincial environmental assessment. AECOM will work directly with BLP to facilitate
- 27 environmental assessments in Aboriginal communities and traditional land areas.

- 1 AECOM is a wholly owned subsidiary of AECOM Inc., which is a global provider of
- 2 professional technical and management support services to a number of sectors. In the power
- 3 sector, AECOM has worked with more than 300 power utilities in over 50 countries on more
- 4 than 27,000 km of transmission lines. Its transmission and distribution team includes engineers,
- 5 planners and environmental specialists who, together, provide a wide range of competencies that
- 6 are required to support the development and construction of electricity transmission facilities.
- 7 AECOM Inc. has approximately 45,000 employees in 130 countries, including 58 offices in
- 8 Canada. For additional information regarding AECOM's experience, please see Section 4.3.4
- 9 and Appendix 4C.

10 <u>Consultation Consultant – SVS</u>

- 11 SVS will work with the Project Management Team to coordinate, schedule, facilitate and
- document all public engagement activities associated with the Project on EWT LP's behalf,
- including, to the extent necessary, those procedural aspects of the Crown's duty to consult with
- 14 First Nations and Métis communities that the Crown may delegate to EWT LP.
- 15 SVS is a human environment consultancy that specializes in community consultation and
- engagement and communications. SVS staff are trained facilitators and have expertise and wide
- 17 range of experience in community engagement related to environmental assessment. SVS staff
- have managed numerous community engagement plans and programs in a variety of sectors.
- 19 SVS staff have designed, evaluated and managed feedback from surveys both at watershed and
- 20 national scales. A great deal of SVS's focus is on building community input into improving
- 21 planning and program management. For additional information regarding SVS's experience,
- please see Sections 4.3.5 and 10.2.2.1 and Appendix 4C.

23 <u>Land Acquisition Consultant – Altus</u>

- Altus will assist EWT LP during the development stage of the Project by providing (i) research,
- valuation and advisory assistance to acquire a contiguous right of way for the Project; and (ii)
- 26 geomatics mapping and survey services for Project siting and routing.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 2 Page **24** of **28**

- 1 Altus' Research, Valuation and Advisory team will assist the Project Management Team in
- 2 negotiating and acquiring the necessary easements, permits and consents for a contiguous right
- 3 of way. If after extensive negotiations it becomes necessary to expropriate easements for parts of
- 4 the Project, Altus will provide support during the expropriation process.
- 5 Altus is a Canadian provider of professional services in the real estate sector. Altus provides
- 6 services in areas that include research, valuation and advisory, cost consulting and project
- 7 management, realty tax consulting, geometrics and property asset management. Altus has over
- 8 1700 staff in 60 offices around the world, including 29 offices in Canada. For additional
- 9 information regarding Altus' experience, please see Section 4.3.2 and Appendix 4C.

10 2.2.2 Construction Management Team

- 11 As illustrated in Figure 2.5's Construction Phase Organizational Structure, the Project Director,
- the Project Manager, the Engineering Manager and the Special Advisors from the development
- management team will continue to act as part of the construction management team. In addition,
- 14 the construction management team will likely include one or more Health, Safety and
- 15 Environmental Managers, a Construction Site Manager and a Stakeholder Relations Manager,
- each as described below. The structure and identity of the construction management team will be
- 17 finalized once (i) the design of the line has been confirmed; (ii) the most appropriate construction
- methodology (crane, helicopter, manual, etc.) has been identified; and (iii) EWT LP has
- determined the most cost effective construction sequence. The engineering, environmental and
- 20 land acquisition consultants will assist the construction management team. The specific team
- 21 members will be identified closer to the expected start of construction in 2017. An overview of
- their positions is set out below.

23 2.2.2.1 Health, Safety and Environmental Site Managers

- 24 Given the physical length of the Project, it is likely the Project will be divided into multiple
- segments, with construction proceeding in parallel in the segments. In this event, it will not be
- 26 practical for a single person to supervise multiple construction sites, potentially hundreds of
- kilometers apart, in northern Ontario, especially in the winter months. In order to ensure there is

- adequate health, safety and environmental oversight at all Project construction sites, EWT LP
- 2 may appoint more than one Health, Safety and Environmental Site Manager.
- 3 The Health, Safety and Environmental Site Managers will be located on site and will support the
- 4 Project Manager and the Construction Site Manager. The Health, Safety and Environmental Site
- 5 Managers will be responsible for ensuring that all site work is undertaken in accordance with
- 6 EWT LP's health, safety and environmental policies. In addition, the Health, Safety and
- 7 Environmental Site Managers will be responsible for ensuring that EWT LP complies with any
- 8 conditions in its environmental permits.

9 2.2.2.2 <u>Construction Site Managers</u>

- As discussed in Section 2.2.2.1, it is likely that Project construction will be divided into multiple
- segments. In order to ensure there is adequate construction management oversight at all Project
- 12 construction sites, EWT LP may need to appoint more than one Construction Site Manager.
- 13 The Construction Site Manager(s) will be located on site and will be responsible for managing
- all site work to ensure that construction is proceeding according to schedule and in accordance
- with EWT LP's design specifications. The Construction Site Manager(s) will work closely with
- the specialized construction contractor, which will be selected through an open, transparent, fair
- and competitive process. The Construction Site Manager(s) will not, however, supervise the
- construction contractor's staff, as this will be the responsibility of the construction contractor's
- 19 management team.

20 2.2.2.3 <u>Stakeholder Relations Manager</u>

- 21 Although the consultation element of public engagement will have been completed during the
- development phase of the Project, EWT LP will continue to employ a Stakeholder Relations
- 23 Manager during the construction phase. During the construction phase, the Stakeholder Relations
- 24 Manager will be responsible for working with landowners to ensure that the construction teams
- obtain timely access to the right of way and that any construction damage is promptly remedied
- 26 to the landowner's satisfaction. In addition, the Stakeholder Relations Manager will be

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 2 Page **26** of **28**

- 1 responsible for keeping municipalities, First Nations and Métis communities and the general
- 2 public apprised of the Project status and making sure they know when construction work will be
- 3 taking place in their communities.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 2 Page **27** of **28**

1 2.3 Overview of EWT LP Experience

- 2 For an overview of the experience of BLP and the Participating First Nations, please see Section
- 3 2.1.1.
- 4 For an overview of the experience of GLPT-EWT and the Brookfield Utilities Group, please see
- 5 Section 2.1.2.
- 6 For an overview of the experience of Hydro One and HONI, please see Section 2.1.3.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 2 Page **28** of **28**

- 1 2.4 <u>Relevance of Experience</u>
- 2 For a discussion the relevance of EWT LP's partners' experience, please see Section 2.1.4.

PART A CAPABILITY OF THE APPLICANT

EXHIBIT 2 ORGANIZATION

Appendix 2A Management Team Resumés

Professional Resume of Lloyd Andrew McPhee

2 Sackville Road, Suite B, Sault Ste Marie, On, P6B 6J6 Email: AMcPhee@glp.ca

Summary

Employed in all aspects of operations with Great Lakes Power Limited / Brookfield Power for 39 years. Initially hired into field operations where primary focus was on distribution, transmission and generation activities. Promoted to management in 1993, since 1993 has held various management and senior management positions within the distribution, transmission and generation operations.

Professional Experience

Great Lakes Power Transmission, December 2009 to Present

Vice President and General Manager, December 2009 to Present

- Set strategic direction of operations and manage a senior management team responsible for the safe, reliable and environmentally friendly operation consisting of 7 transmission stations and 550 km transmission line in northern Ontario.
- Manage directly 5 reports and 45 indirect reports covering all and all aspects of operations including: engineering, planning, operations, system control, finance, regulatory and administrative functions.
- Maintain relationship with shareholders (Brookfield Senior Management), auditors (Internal and external), legal representatives, corporate finance, regulatory, interveners, trustee and bondholders.

Brookfield Renewable Energy Partners LP, November 2005 to December 2009

Vice President Operational Excellence, March 2009 to December 2009

- Responsible for promoting continuous operational performance enhancement within the company's operations in North America and Brazil
- Develop and promote the deployment of a Managed System for Operations Business Performance for North America and Brazil
- Continuously monitor operations performance relative to agreed upon performance metrics and benchmarks for North America and Brazil

Vice President US Operations, November 2007 to March 2009

- Reporting directly to the Chief Operating Officer for US Operations accountable for safety, environment, financial, regulatory and operational performance of all the generation assets in the United States.
- Generation assets include 101 Hydro Stations on 24 river systems, 1 Thermal Station, totaling 2009 MW of installed Capacity

Vice President Canadian Operations, December 2006 to November 2007

- Reporting directly to Executive Vice President Operations, North America accountable for safety, environment, financial, regulatory and operational performance for all distribution, transmission and generation operations in Canada.
- Generation assets under management include 32 Hydro Stations on 18 river systems, 1 Thermal Station, 1 Wind Farm, totaling 1,607 MW.

Professional Resume of Lloyd Andrew McPhee

2 Sackville Road, Suite B, Sault Ste Marie, On, P6B 6J6 Email: <u>AMcPhee@glp.ca</u>

Vice President Ontario Operations, November 2005 to December 2006

- Reporting directly to Executive Vice President Operations, North America accountable for safety, environment, financial, regulatory and operational performance for all distribution, transmission and generation operations in Ontario.
- Successfully managed and executed \$85 million transmission redevelopment project.
- Set strategic direction for Distribution rate applications which improved financial viability
 of the business through regulatory changes and significant approved capital replacement
 program.

Great Lakes Power Limited, December 1973 to November 2005

General Manager for Distribution and Transmission, February 2005 to November 2005

 Set strategic direction of both the distribution and transmission operations of Great Lakes Power. Manage a senior management team responsible for the safe, reliable and environmentally responsible operation consisting of 2300 km of distribution and transmission lines, 20 distribution and 15 Transmission stations supplying 11,000 customers.

General Manager - Ontario System Control Center, May 2004 to February 2005

- Responsible for IESO operational requirements for GLP Transmission System and all Ontario generation business units.
- Accountable to ensure the efficient dispatch of 1000 Megawatt capacity into the Ontario energy market
- Accountable for Ontario Energy Market and Regulatory compliance
- Accountable for SCADA and communications systems for Brookfield Power Ontario Operations

Operations Manager - Generation Division, October 2001 to May 2004

- Responsible for managing all generation division assets including System Control Operating Centre
- Lead GLP Operation's efforts in preparing for the Ontario de-regulated electricity market opening.

Various Operating & Maintenance Superintendent, March 1993 to October 2001

- Responsible for asset management and maintenance of 5 hydro stations on 2 river systems with an installed capacity of 203 MW and numerous distribution and transmission stations.
- Responsible for System Control Centre which operated the Generation and Transmission systems
- Supervision of technical staff of seventeen, who maintained these facilities.
- Supervision of technical staff of fourteen, who maintain these facilities, the microwave communication system and the corporate fleet of approximately one hundred vehicles

Great Lakes Power Limited, December 1973 to March 1993

 Numerous operations and maintenance positions in distribution metering, lines, electrical maintenance and system operations

Peter Bettle Vice President, Transmission Development

Peter Bettle has over 20 years of electric utility experience in Canada and abroad. His career experiences have provided a unique insight in to both power system development and operation, and electricity market development and operation. He has held several management roles of increasing responsibility over his career. He has also been involved as a technical expert in the planning, design and specification of power system facilities up to 275 kV in the United Kingdom, Middle East and South East Asia.

Mr. Bettle joined Brookfield in Nov 2004. As Vice President, Transmission Development, he is a senior manager and officer of Great Lakes Power Transmission LP with a lead role in the development of Brookfield's transmission initiatives in the Canada and near US. Prior to his employment at Brookfield, he has held positions at Bruce Power in Kincardine, Ontario (2001 – 2004), British Energy (UK) (1996 to 2001), and with international engineering consultancies. He started his career as an assistant distribution engineer with Eastern Electricity, the largest of the fourteen former public electricity suppliers in Great Britain.

Career Highlights:

- Most recently, Mr. Bettle has led EWT LP's program for the preparation of a transmission project development plan for the proposed new East-West Tie line. A key part of this role has been the management of the internal discipline experts and external consultants who together have scoped the individual elements of the plan, prepared cost and schedule estimates, identified project-specific risks and discussed new and innovative approaches. He has travelled extensively along the proposed project route and has met with a number of the key stakeholders, including the six directly affected First Nations, and also senior management and technical specialists from a number of potential powerline construction companies. As VP Development for Great Lakes Power Transmission, he initiated Brookfield's initial work on the project and was instrumental in the creation of the innovative First Nation partnership.
- In 2007/8, Mr. Bettle managed the development of Brookfield's proposed Toronto Third Supply project, a ±150 kV HVDC transmission cable under Lake Ontario as more fully described in the 2007 Integrated Power System Plan. In this role he commissioned telephone polling in both the project areas and across Ontario to gauge public opinion to this innovative technology. This was followed up with a series of public focus groups in Toronto and the Durham and Niagara Regions to determine attitudes to the project and assess communication strategies. The results were used to inform meetings over the following months with elected politicians, First Nation Chiefs, municipalities, federal and provincial agencies, and a number of other stakeholders including the Toronto Board of Trade and Toronto Economic Development Corporation. The success of his work is perhaps best demonstrated by the absence of critical public discourse in the local newspapers. Mr.Bettle is an experienced presenter and has presented in public at major conferences including CanWEA and APPrO, and in private to Ministers and their advisors.
- Over the past six years, Mr. Bettle has spent much time meeting with First Nation communities
 across Ontario to discuss plans for new electricity transmission lines and the opportunities for First
 Nation participation. He has at some time met or spoken with representatives from each of the
 First Nation communities in the project area, and has met in person with each of the Chiefs whose
 communities along the proposed new line. He was involved in the negotiations leading up to the
 formation of EWT LP.
- Mr.Bettle has extensive familiarity with the regulation of Ontario's electricity transmission system,
 having sat on the Technical Panel of the IESO Board for three years and led a number of GLPT's
 regulatory interventions including the OEB's Regulatory Treatment of Infrastructure, Cost of Capital
 and Integrated Power System Plan. As part of his duties within Brookfield, he has assisted in the
 evaluation of the regulatory aspects of a number of transmission projects both in Canada and the

- near US. As part of his previous duties with Bruce Power, he was responsible for relations with the Independent Electricity System Operator. He has previously appeared before the Régie de l'énergie concerning changes to Hydro Québec TransÉnergie's Open Access Transmission Tariff.
- Mr. Bettle joined British Energy at its privatization in 1996 as a specialist advising on the technical and commercial interfaces with the transmission company. He worked in the UK Electricity Pool lobbying for British Energy's position on gas/electricity market arbitrage, the opening of the competitive retail electricity market to 25 million domestic customers in 1998 and, ultimately, the new electricity trading arrangements. He also managed British Energy's successful accession to competitive Scottish Trading Arrangements. He came to Canada in April 2000 as a member of the due diligence team for the lease of the Bruce nuclear generating stations from Ontario Power Generation with special responsibility for assessing the long term availability and cost of transmission capacity on the Bruce to Milton and other 500 kV circuits. He stayed on to work with the Transition Team before joining Bruce Power in 2001 as Head of Strategy and Analysis in the marketing team. He successfully project managed the technical aspects of Bruce Power's entry in to Ontario's competitive electricity market in 2002 and was business manager for the trading platform.
- Prior to joining British Energy, Mr. Bettle was a consulting electrical engineer. He has performed power system studies for a number of major transmission developments including the interconnection of two separate transmission systems in Oman. He has also undertaken planning studies for a new 275kV transmission system in Brunei Darusslam; helped prepare contract documents for major facility refurbishment projects in Zimbabwe and the United Kingdom; and witnessed factory acceptance tests in China, Sweden and the United Kingdom. In 1994 he commissioned the 208 km Nam Ngum Luang Prabang electricity transmission project in PDR Laos.

Education:

 Mr. Bettle received his Bachelor of Science degree in Electrical Engineering from the University of Southampton and a Masters Degree in Business Administration from Cranfield University School of Management, both in the United Kingdom.

Other:

 Mr. Bettle is a Chartered Electrical Engineer, Member of the Institution of Engineering and Technology (UK), and a Graduate Member of the Chartered Institute of Personnel and Development, the world's largest Chartered HR and development professional body setting global standards for HR and support development of HR professionals.

Paul Steckley Director, Transmission Development

Paul N. Steckley has over 30 years of electric utility experience in power system planning and economic evaluation analysis that includes inter-provincial, inter-regional and inter-national power system operation and planning. His career experiences has provided a knowledge of the northeast and western North American power grids including NPCC (Ontario, Quebec, New York and New England), PJM, ECAR, WECC and ERCOT power systems and their electric industry restructuring issues. He has held several positions with responsibilities that included project planning, economic analyses, energy studies and the planning, design and specification of power system facilities up to 500 kV. Mr. Steckley has also been involved in consulting work abroad involving interconnection of countries in the Middle East, future planning of the Public Utilities Board of Singapore and Brookfield transmission assets in Chile, South America.

Mr. Steckley joined Brookfield in Nov 2006. As Director, Transmission Development he has a lead role in the development of various transmission initiatives in the US and Canada and well as supporting the Brookfield's efforts in renewable generation development. Prior to his employment at Brookfield, he has held positions at the California Independent System Operator (CAISO) in Folsom, CA (2005 – 2006), TransÉnergie US (1999 to 2005), New England Power Service Company, currently NGrid in Westborough, MA (1993 to 1999) and Ontario Hydro, Toronto, Canada, in Ontario Hydro's Power System Planning Division (1981 -1993).

Career Highlights:

- Mr. Steckley currently supports the development of various Brookfield transmission initiatives in the US and Canada in planning, engineering, interconnection and technical affairs. As part of his duties he participates in the preparation of the growth and development strategy and evaluation of new investment opportunities for the T&D group. Mr. Steckley was part of the team responsible for obtaining the award of approximately \$500 million in new transmission for Wind Energy Transmission Texas (WETT), a new electric utility in Texas. He also provides technical support to generation development group as needed and had provided technical study support on the proposed Aysen HVDC transmission project for a Brookfield affiliate Transelec in Chile, South America.
- During his time at the California Independent System Operator (CAISO) Mr. Steckley supported
 generator interconnection issues and the review and approval of generator and transmission
 expansion proposals in southern California. He was also the CAISO lead in the development of the
 approved Tehachapi Renewable Transmission Plan (TRTP) for interconnection of over 4500 MW of
 wind generation in the Tehachapi area as well as providing support to the Sunrise Powerlink and
 LEAPs development reviews performed by CAISO.
- For TransÉnergie U.S. Ltd. he managed technical studies associated with TransÉnergie US's projects in the Northeast US, such as the Cross Sound Cable HVDC interconnection (merchant transmission) between Connecticut and Long Island, NY. He was responsible for technical studies and to obtaining all technical approvals for interconnection of several project proposals. His additional responsibilities also included management of the OASIS site for the Cross Sound Cable HVDC. During this time he was member of the New England System Design Task Force and participated in task forces and working groups on system planning and interconnection processes in the New England, New York and Pennsylvania-New Jersey-Maryland (PJM) control areas.
- At New England Power Service Company (NESPCo), currently National Grid (NGrid), Mr. Steckley's responsibilities included evaluation of transmission and reinforcement requirements of the bulk power system, and proposed installation and/or retirement of generation facilities in the NESPCo service area. He managed and performed analytical studies, and provided technical representation on the New England System Design Task Force, the NPCC SS-38 Working Group (Inter-Area Dynamic Analysis) and NPCC System Studies Subcommittee (TFSS). He was also

- involved development of open access to transmission issues and strategies for New England Power. Mr. Steckley was lead engineer for system impact studies for a majority of proposed generation interconnection projects with the company, providing the analysis and documentation necessary for the required New England Power Pool (NEPOOL) regional approval.
- For Ontario Hydro in Toronto, Canada, Mr. Steckley held several positions with responsibilities in the Power System Planning Division that included project planning, economic analyses, energy studies, and the planning, design and specification of power system facilities up to 500 kV. Mr. Steckley represented Ontario Hydro on both inter-provincial and international working groups concerned with the steady-state and dynamic performance of Northeast Power Coordinating Council (NPCC) bulk power system. During this time the internal PSS/e power system software expert for System Planning Division and he performed/participated in numerous AC and HVDC transmission planning studies involving the NPCC area and gained both transmission operating and planning experience of the Ontario, Quebec (Ontario-Quebec HVDC link in the Ottawa area), New York, Michigan and New England bulk power systems. While at Ontario Hydro, Mr. Steckley also supported consulting work for Ontario Hydro International involving interconnection of countries in the Middle East and future planning analysis of the Public Utilities Board of Singapore.

Education:

Mr. Steckley received his Bachelor of Applied Science Engineering degree in Electric Engineering
from University of Waterloo, Ontario, Canada in 1981. Prior under-graduate education includes two
years of Honours Physics at York University, Toronto Canada and University of Waterloo.

Other:

- Mr. Steckley is Licensed Professional Engineer in the Province of Ontario (P. Eng) and a Registered Professional Engineer in the Commonwealth of Massachusetts (P.E.).
- IEEE Member
- TECHNICAL PAPERS: L.Ronström, B. D. Railing, J. J. Miller, P. Steckley, G. Moreau, P. Bard, J. Lindberg, Cross Sound Cable Project Second Generation VSC Technology for HVDC, [CIGRÉ Paris August 2004].

MARCIE ZAJDEMAN

STRENGTHS

- A knowledgeable and well-respected energy executive with a broad-ranging skill set and experience from public, private, and policy perspectives
- A recognized expert in the duty to consult with Aboriginal Peoples

EXPERIENCE

BROOKFIELD Vice President, Legal and Regulatory

AUG. 2008-PRESENT

- Part of Great Lakes Power's senior management team
- Provides legal advice and strategic and policy direction on sustainment matters, development initiatives and government relations for the Company's global utilities platform
- Advises the Company in Aboriginal law and supports the development and maintenance of strong relationships with Aboriginal Peoples
- Member of stakeholder working group on Regional Infrastructure Planning for OEB's Renewed Regulatory Framework for Electricity
- Responsible for regulatory matters, including rate filings, Board consultation processes and utility planning

HYDRO ONE NETWORKS INC. Senior Legal Counsel

MAY 1998-JULY 2008

- Extensively involved in major transmission projects, including the Bruce to Milton line,
 Niagara Reinforcement Project and Parkway Transformer Station; land use planning for linear corridors; and Aboriginal Relations
- Responsible, as per the Bruce to Milton MOU between the Crown and Hydro One Networks
 Inc. which delegated the procedural aspects of the duty to consult, for the legal aspects of the
 matters addressed in the MOU
- Responsible for the land acquisition templates which formed part of the Bruce to Milton leave to construct and involved in the development of the Land Acquisition Compensation Principles
- Legal advisor on Company's and Province's secondary land use programme; i.e. use of utility ROW for compatible public uses
- Member of working and steering committees interfacing with provincial and federal governments on Aboriginal permits and consultation
- Reported in Lexpert "Big Deals" as leading a team of internal and external counsel representing Ontario Hydro Energy Inc. in the sale of substantially all of its retail business to Union Energy Inc. on April 30, 2002

 Developed and wrote submissions for a novel and precedent-setting argument regarding easement land, which saved an estimated 15 to 20 million dollars on project costs for the Niagara Reinforcement Project

LAW SOCIETY OF UPPER CANADA Instructor and Marker for the Bar Admission Course

MAY 1998-DECEMBER 2004

- Acted as the instructor and facilitator for the Legal Research, the Legal Writing, the Real Estate, and the Administrative Law Units of the Bar Admission Course
- Marked the Research Memoranda, Opinion Letters, and Affidavits for the Bar Admission Course and marked Real Estate, Administrative, Family, Professional Responsibility and Civil Litigation Bar Admission Course exams

MCCARTHY, TETRAULT Associate

FEBRUARY 1997-FEBRUARY 1998

- Research Lawyer
- Responsible for legal research and writing in all areas of the law using Canadian, English and American manual and electronic sources
- Prepared memoranda dealing with novel, complicated and sophisticated issues
- Prepared facta and opinions
- Advisor to other lawyers in the firm with regard to strategy for dealing with legal problems
- Participated in student and firm educational programmes

BUTTERWORTHS CANADA LTD. Lawyer and Product Development Editor

JUNE 1995-JANUARY 1997

- Assessed legal trends and directions to develop "new business" publications in the areas of corporate and commercial law, conceptualized the scope of the publications, found highprofile authors, negotiated publishing agreements and assessed manuscripts
- In 1995 and 1996, surpassed revenue targets for the signing of "new product/new business" publishing contracts

SMITH, LYONS, TORRANCE, STEVENSON & MAYER Associate

FEBRUARY 1993-AUGUST 1994

• Fully responsible for various residential and commercial real estate files, mortgage financing and remedies, estate planning and conveyancing, landlord and tenant applications, lease constructions and reviews, power of sale transactions, and rental reviews

SMITH, LYONS, TORRANCE, STEVENSON & MAYER Student-At-Law, Articling Placement

JUNE 1991-JUNE 1992

· Gained exposure in all areas of law

EDUCATION

ACADEMIC ACHIEVEMENTS

- Called to the Ontario Bar in February, 1993
- LL.B. and J.D., Osgoode Hall Law School, 1991

ACADEMIC HIGHLIGHTS

- Chosen to represent Osgoode Hall Law School in the 1991 Gale Constitutional Law Moot Court Competition and in the 1990 Niagara International Law Moot Court Competition: ranked as one of the top 10 individual oralists
- Dean's Honour List, University of Western Ontario, 1988
- C.L. Burton Open Scholarship, University of Toronto, 1987
- Faculty Scholar, University of Toronto, 1987
- Woodhouse English Scholarship, University College, University of Toronto, 1986
- Recipient of North Toronto Professional & Business Women's Association Award, 1986
- Valedictorian & English Award & Ontario Scholar, Wm. Lyon Mackenzie Collegiate Institute, 1986

BOARDS AND SPEAKING AND WRITING ENGAGEMENTS

BOARDS

Director of *Ontario Energy Association*, an association of leaders in the energy field whose core functions are to connect, advocate, research, educate and bring clarity and balance to the complex issues of the energy sector

Director of **Association of Power Producers in Ontario**, an association representing more than 100 companies involved in the generation of electricity in Ontario, including generators and suppliers of services, equipment and consulting services

Past President of *Universal Youth Foundation*, a registered Canadian charity committed to providing "hope through education" to children and youth locally and in the developing world

PRESENTATIONS AND PANELS

"Put it in Writing": Best Practices for Aboriginal Consultation and Accommodation in Transmission Projects in Canada, presented at the Annual International Right of Way Conference, Calgary, June 2010

"Putting Things into Perspective": What is Needed for Companies to Invest in the Energy Industry in Ontario, moderated panel at the Annual Ontario Energy Association Conference, Niagara Falls, September 2011

"Challenges in Project Siting and the Advent of NIMBYism": Are Effective Stakeholder Engagement Strategies Enough to Move Ontario's Green Energy Forward?, moderated panel at Canadian Institute's Ontario Power Perspectives Conference, Toronto, April 2012

WRITING

Contributor to *Women's Post*, Canada's leading national publication for women in business

RESUME

Viggo M. Lundhild

EMPLOYMENT HISTORY

Brookfield Utilities Group (US)

V.P. Transmission Development (US)

2010 to Present

Responsibilities

- Board of Managers lead member representing Brookfield's interest in Wind Energy Texas Transmission (WETT). This is a new Utility in Texas which was awarded 375 miles of 345 kV transmission with six substations. Board duties include providing direction on the creation of the utility, and scope, schedule, and cost oversight of approximately \$800 million in construction.
- Oversight of the operations of Cross Sound Cable, a HVDC transmission line running between Long Island and Connecticut.
- Development of new transmission projects in the US

Brookfield Renewable Power (US)

V.P. National System Control Center, U.S. Operations

2008 - 2010

Responsibilities

- Construction and implementation of a centralized system control platform for all Brookfield Power's generating assets in the U.S. (102 powerhouses)
- Implementation of an ABB Network Manager SCADA solution
- Hiring and training replacement operators
- Overall Information Technology solutions for U.S. Operations of Brookfield Power

Brookfield Renewable Power (Canada)

General Manager of Sault Hydro Operations

2004 - 2005, 2007 - 2008

Responibilities

 Responsible for the safe operation of six hydroelectric stations and one 100 MW combined cycle gas turbine co-gen plant in Sault Ste. Marie, ON, including finance, administration, engineering, and operations.

Great Lakes Power Ltd

General Manager of Great Lakes Power (T&D)

2005 - 2006

Responsibilities

 Responsible for the safe operation of Brookfield's Transmission and Distribution system (550km of TX and 1700km of Dist with 11,500 customers) including finance, administration, engineering, regulatory, and operations.

RESUME

Stephen M. Taylor

EMPLOYMENT HISTORY

Great Lakes Power Transmission

Health, Safety & Environmental Specialist 2010 - present

Responsibilities:

- Health, Safety & Environmental policy / procedure maintenance and development
- Incident investigation & reporting
- Accident / Incident statistical administration & reporting
- Contractor Safety Prequalification & Orientation
- Safety & Environmental training co-ordination & delivery
- Safety & Environmental auditing
- Public Safety liaison & promotion
- Joint Health & Safety Committee co-ordination & resource
- Environmental Leadership Team co-ordination & resource
- Ministry of Labour & Ministry of the Environment liaison
- WSIB contractor account administration / claims administration
- Safe Workplace Associations (WSPS, IHSA, WSN) liaison

Ontario Lottery and Gaming Corporation (OLG)

Contractor Safety Coordinator 2004 - 2010

Responsibilities:

- Development and implementation of Contractor Safety Program (policies, procedures, training & documentation)
- Development of Contractor Orientation Program
- Contractor Safety Prequalification and Orientation
- Contractor / OLG personnel liaison
- Develop OLG contract language for Contractor Safety Program (RFP's, RFI's, RFQ's, PO's, Agreements)
- Administration of Contractor WSIB requirements (Clearance Certificates, Letters of Exemption, Contractor Registration)
- WSIB contractor account administration
- WSIB liaison

St. Marys Paper Ltd.

Safety Supervisor 1998 - 2004 Safety & Training Coordinator 1994 - 1998

Responsibilities:

- Development, scheduling and implementation of safety training programs
- Safety program / policy development and administration
- Hazard identification, accident investigation & prevention
- Administration of injury / incident statistics
- Purchasing health & safety equipment, services & training programs
- Ministry of Labour & Safe Workplace Associations liaison

- Joint Health & Safety Committee administration
- Preparation & administration of safety budget
- Physical demands analysis, independent medical evaluation coordination
- Ergonomic assessment coordination
- Construction project safety coordination
- WSIB claims management coordination of injured worker / union / supervision /
- WSIB relations
- WSIB Appeals & WSIAT claims administration
- Light / modified duty program development & administration
- Development & administration of designated substances control programs
- Administration of medical surveillance programs and medical records
- Medical practitioner liaison (M.D., Chiropractor, Physiotherapist, Dentist, REC)
- Development & administration contractor safety orientation & reference materials
- Safety orientation trainer (employee & contractor)
- Liability & property damage insurance claims administration (third party)
- Vacation relief for weekly indemnity and LTD claims administration
- Hiring committee coordination & participation
- Mill security administration
- Employee and community relations i.e. corporate social functions, safety promotions, Health & Safety Fair, Safe Community Partnership Program, Community Day Activities, Heart & Stroke Association activities

EDUCATION

- Laurentian University (Algoma)
- Bachelor of Arts Degree History, Political Science minor
- Fanshawe College of Applied Arts & Science
- Diploma Urban Affairs Real Estate / Business Administration
- Sault College of Applied Arts & Science (HRPAO)
- Certificate Human Resource Management

HS&E Specific Training:

URM (Utility Risk Management)

- Certified Safety Auditor Program
- Certified Environmental Auditor Program
- Various workshops i.e. Risk Management, Job Safety Planning, Accident / Incident Investigation

CSSE (Canadian Society of Safety Engineering)

- Consulting Skills
- Applied Risk Communication
- Obligations & Liabilities

WSIB (Workplace Safety & Insurance Board)

- Level One & Level Two Certification (18 modules)
- Transportation of Dangerous Goods (I H & S A)
- Work Protection Code (I H & S A)
- Various Workshops i.e. Ergonomics, Back care

Environmental

- Bennett Jones LLP Environmental Regulation & Compliance
- Willms & Shier LLP Dealing with Industrial Air & GHG Emissions
- Golder Associates Managing Certificates of Approval & Permits

Other

- Quetico Centre Innovative Leadership Certificate
- St. John Ambulance Standard First Aid & CPR Certificate
- WHMIS Certificate
- Fall Arrest / Fall Restraint Certificate
- Computer Software Programs M.S. Word, Excel, Power Point, H.R.I.S., Lotus Notes
- Sault Ste. Marie Safe Communities Partnership Standard Safety Orientation Certificate

AFFILIATIONS

- Associate Algoma Regional Human Resources Professional Association
- Associate Sault Ste. Marie Labour-Management Health & Safety Committee (Infrastructure Health & Safety Association)
- Member Workplace Safety & Prevention Services Northern Ont. Division Volunteer & Partners In Prevention Conference Committee member
- Member Canadian Society of Safety Engineering

Bradley D. Railing, P.E. Chief Operating Officer

Bradley D. Railing's 34 years of electric utility experience includes 17 years direct experience with independent transmission projects around the world, and experience at two electric utilities, including 12 years at New England Electric System (NEES) and 3 years at Allegheny Energy. His extensive experience encompasses technical feasibility studies, conceptual design, technical specifications, project construction estimates, O&M budgets, administration of contracts, field commissioning, management, and operations and maintenance training for electricity transmission projects. He has also provided commercial support for contract administration and management of transmission assets.

Career Highlights:

- Mr. Railing is presently the Chief Operating Officer of Cross Sound Cable, a member of the Brookfield Utilities Group. He is responsible for the general management of the company. Mr. Railing also provides commercial and technical support to other members of the Utilities Group regarding HVDC and other T&D issues. Mr. Railing provided technical, commercial and operations support to the recently completed Trans Bay Cable project (US, 2010, 400MW). The Trans Bay Cable operations group was established by and is presently managed by Cross Sound Cable.
- As Vice President of Projects for TransÉnergie US Ltd., Mr. Railing was responsible for project implementation; EPC contract administration; commissioning, operations and maintenance for all TransÉnergie US projects; as well as support of project development. He handled these duties for the Directlink Project (Australia, 2000, 3x60 MW), Cross Sound Cable (US, 2002, 330 MW) and Murraylink (Australia, 2002, 220 MW). These were all ABB, HVDC Light, VSC based projects requiring significant and, in some cases, innovative new rights of way, and completion of local state and federal permitting.
- He provided technical and commercial expertise on independent transmission project development in the U.S., South America, Australia, and New Zealand while at the New England Electric System. (NEES).
- He was the NEES project engineer and commissioning engineer for the Quebec / New England, Phase II, multi-terminal upgrade of the Comerford HVDC station and the construction of the Sandy Pond HVDC converter stations. Mr. Railing also coordinated an AC reinforcement project to relocate two 115 kV lines from single circuit towers to a double circuit tower.
- Mr. Railing has authored numerous technical papers for IEEE, CIGRÉ and EPRI.

Education:

- Associate of Arts degree in Electrical Engineering Technology from Hagerstown Junior College, 1978
- Bachelor of Science degree in Electrical Engineering Technology from Rochester Institute of Technology, 1984
- Master of Engineering degree in Electric Power Engineering from Rensselaer Polytechnic Institute, 1986.

Other:

- Registered Professional Engineer in The Commonwealth of Massachusetts
- Member of the IEEE Power Engineering Society
- Member of CIGRÉ



Specific HVDC and T&D Projects

2006 to present (CSC Operations LLC)

Cross Sound Cable – Management of the day to day operations of the business.

LIPA RFP – Brookfield team member for response to LIPA's 2010 RFP for power supply via a new HDVC transmission project.

MAPP HVDC Project - Consulting to Pepco Holdings Inc on technoology and O&M issues

Trans Bay Cable Project - Babcock & Brown Project team member for EPC contract support, project implemnetation and O&M contract development from 2006 to 2010. Management of O&M contract from 2009 to present.

Path 15 – Participated on Babcock & Brown acquistion evaluation team.

1998 to 2006 (TransEnergie US)

Harbor Cable Project – Technical and commercial support to develop the EPC contract and permit filings.

New Jersey Cable Project - Technical and commercial support to develop the EPC contract and permit filings. EPC contract negotiation for the converter stations.

Lake Erie Link - Technical and commercial support to develop the EPC contract and permit filings.

Cross Sound Cable Project – Project Manager for the EPC contract, design and engineering review, QA/QC manager, commissioning manager and O&M plan.

Murraylink - Project Manager for the EPC contract, design and engineering review, QA/QC manager, commissioning manager and O&M plan.

Directlink - Project Manager for the EPC contract, design and engineering review, QA/QC manager, commissioning manager and O&M plan. Worked on site in Australia as the TEUS Project Manager from Jan – Dec 2000.

US to Quebec Cross Border Projects - Technical and commercial support to develop the EPC contract and permit filings.

1986 to 1998 (New England Electric System, NEES Global Transmission

Long Island Cable Project – Drafted the technical specification for the EPC contract and participated on the project team to develop a proposal for LIPA.

Block Island Cable Project – Developed a cable route and converter stations sites for an HVDC Light transmission system between RI and Block Island. Technical specification of the AC network interface equipment and the converter stations.



South Morang 330 kV Series Capacitors, Victoria Power Exchange, Australia – Member of the technical and commercial team with NEES Global and ABB to develop a proposal for a response to an RFP.

Trans Power New Zealand / Hybrid HVDC Link – Consulting assignment to advise on project structure for

QA/QC, site management and commissioning. Develop a data acquisition system to measure and record AC and DC parameters. Write a training manual and operator competency review for the data acquisition system.

Sandy Pond and Comerford HVDC Converter Station O&M Support – Managed several projects to upgrade and repair main circuit equipment including a converter transformer repair, repairs to 450 kV voltage dividers and retrofit of the valve cooling system.

South America – Participated with ABB on the design and specification of a new modular type of HVDC converter station for back-back configurations. Technical specification of the AC network interface equipment and the converter stations. A member of the project development team on several HVDC transmission and back-back proposals in Brazil, Argentina and Paraguay.

Quebec / New England, Phase II, Multi-terminal HVDC Project – Project engineer assigned to support the EPC contract for the Sandy Pond HVDC Converter Station and the upgrades of the Comerford HVDC Converter Station. Project engineer assigned to coordinate several AC reinforcement projects including the relocation of two 115 kV lines onto a single double circuit tower. Senior project engineer assigned to manage the site construction, factory QA/QC, site commissioning and hand-over to O&M.

NEES T&D System – Project engineer for several substation and power plant projects including substation expansions, steam turbine water induction protections, power plant low voltage supply stability enhancements and studies to retrofit variable speed drives on forced induction fan motors.



Technical Publications:

- 1. J.K. Nelson, J. Sollia DeMacedo, B.D. Railing, "Divergent Field Behavior of SF-6 Subjected to Steep Fronted Surges", Conference Record of the 1986 IEEE International Symposium on Electrical Insulation, Washington, DC, June 9-11, 1986, pp 151-154.
- 2. J.A. Donahue, D.A. Fisher, B.D. Railing, P.J. Tatro, "Performance Testing of the Sandy Pond HVDC Converter Terminal", (92 WM 216-2), <u>IEEE Transactions on Power Delivery</u>, January, 1993, pp 422-428.
- 3. J.A. Donahue, B.D. Railing, "Multi-Terminal Commissioning of the Sandy Pond HVDC Converter Terminal," CIGRÉ International Colloquium on High-Voltage Direct Current and Flexible AC Power Transmission Systems, September 29 October 1, 1993, Conference Paper 3.3, pp. 3.3-1 to 3.3-12.
- 4. Y. Allard, D. Soulier, J.J. Cochrane, B.D. Railing, "Multiterminal Operations Experience Hydro-Québec / NEPOOL Phase II HVDC Network", CIGRÉ International Colloquium on High Voltage Direct Current and Flexible AC Power Transmission Systems, September 18-19, 1995, Conference Paper 6.4.
- 5. J. VanCoevering, J.P. Stovall, R.L. Hauth, P.J. Tatro, B.D. Railing, B.K. Johnson, "The Next Generation of HVDC Needed R&D, Equipment Costs, and Cost Comparisons", EPRI Conference on the Future of Power Delivery, April 9-11, 1996, Washington, DC.
- 6. J.J. Miller, B.D. Railing, G. Moreau, J. Wasborg, Y. Jaing-Hafner, D. Stanley, "The Directlink VSC Based Project", CIGRE 2002 39th Session, Paper No. 14-018, August 25-30, 2002, Paris, France.
- 7. A.Ericsson, M.Jeroense, J. Miller, L. Palmqvist, B. Railing, P.Riffon, "HVDC-Ligh Cable Systems The Latest Projects", NORD-IS 03, Nordic Insulation Symposium, Tampere, June 11-13, 2003.
- 8. J.J. Miller, B.D. Railing, G. Moreau, C. Clarke, B. Williams, I. Matsson, A. Ericsson, "Murraylink, The Longest Underground HVDC Cable in the World", CIGRE 2004, Paper No. B4-103, Paris, France.
- 9. J.J. Miller, B.D. Railing, P. Steckley, P. Bard, G. Moreau, L. Ronstrom, J. Lindberg, "Cross Sound Cable Project Second Generation VSC Technology for HVDC", CIGRE 2004, Paper No. B4-102, Paris, France.
- S. Dodds, B.D. Railing, K. Akman, B. Jacobson, T. Worzyk, B. Nilsson, "HVDC VSC (HVDC Light) Transmission – Operating Experiences, CIGRE 2010, Paper No. B4-203-2010, Paris, France.



Jason M. Spreyer, CPA, MBA

EDUCATION

2000 – 2003 Boston University

Master of Business Administration, Area of Concentration – Corporate Finance.

1991 - 1995 University of Massachusetts at Dartmouth

Bachelor of Science - Accounting

TECHNICAL SUMMARY

Proficient in PeopleSoft financials, Excel, Word, and PowerPoint.

PROFESSIONAL AFFILIATIONS

Member of Massachusetts Society of Certified Public Accountants, 1999 Member of American Institute of Certified Public Accountants, 2002

EXPERIENCE

BROOKFIELD RENEWABLE POWER, INC., GATINEAU, QC

11/08 – present

Brookfield Renewable Power is an owner, operator and developer of predominantly hydroelectric power generating facilities, operating a portfolio of more than 165 stations representing over 4,100 megawatts of capacity in the United States, Canada and Brazil.

Senior Vice President and Chief Financial Officer - Brookfield Utilities

9/11 - present

- Financial responsibility over Brookfield electric utilities in North and South America
- Accountable for evaluating capital deployment opportunities within Brookfield's utility businesses
- Responsible for all accounting, reporting, treasury, tax and financing functions

Senior Vice President – Corporate Finance

11/09 - 9/11

Reporting to the CFO, the primary responsibilities are to oversee the accounting, external and internal reporting, financial planning and analysis and business processes for the Company. Specific accomplishments include the following:

- Tasked with re-building finance organization to better align the team with the business objectives.
- Sponsor of Company wide replacement of ERP tool and upgrading of Company's business processes.
- Assumed responsibility and successfully transitioned Company to IFRS from Canadian GAAP in 2010.
- Provided financial reporting and accounting guidance in completing Brookfield Renewable Energy Partners public offering in 2011.
- Support organization in many capital raising initiatives, providing insight into legal, tax and finance solutions.

Chief Financial Officer – US Operations

11/08 - 11/09

Responsible for managing the finance organization of approximately 40 individuals within the United States. Primary functions focused on procurement, tax, treasury, accounting and internal and external reporting.

- Oversaw tax planning initiatives resulting in state and federal cash tax savings of approximately \$3.4 million.
- Identified and managed effort to centralize procurement functions, focusing on singular process and obtaining transparent information in supporting value added initiatives.
- Supported integration of development organization into US Operations and responsibilities, including the refocusing of business objectives and investments.
- Member of Board of Managers and Joint Ownership Committee on several investments within the United States.
- Worked as a member of the team completing due diligence on the Company's first wind development project in the United States.
- Prepared and recommended solutions to management service agreement contracts and services to support growth of organization.
- Led effort to review accounting and reporting financial statements to streamline auditing efforts and focusing in on process and quality of work product.

 Supported analysis of business growth opportunities, including making recommendations on both positive and negative investments.

THERMAL NORTH AMERICA, INC., BOSTON, MA

7/06 - 11/08

Thermal North America, Inc. ("TNAI" or the "Company"), through its subsidiaries, The Trigen Companies, is a leader in combined heat and power generation, serving 1,100 customers in 11 cities from 22 central plants.

Vice President and Controller

Oversee the accounting, external and internal reporting, financial compliance, internal controls, taxation and information system applications for the Company with approximately \$400 million in revenues and \$660 million in assets reporting to the Chief Financial Officer. Specific accomplishments include the following:

- Tasked with building an accounting and tax organization to address the Company's deficiencies in the reliability of financial information and reporting.
- Hired a team of accounting professionals tasked with the execution of the improvement plan.
- Leveraged similarities in the plant business with geographical locations to streamline the accounting department
 design to minimize redundancy in the department and to ensure consistency in the accounting for transactions
 across all plants.
- Assisted in the refinancing of the Company in October 2006.
- Supported the acquisition of a central chilled water plant in Atlanta and performed the purchase accounting on the acquisition of a central district energy system located in Los Angeles and Las Vegas.
- Oversaw the completion of the external valuation required in accordance with SFAS 144, Business Combinations, and reviewed the accounting team work in completing the purchase accounting. Completed the purchase accounting within 3 months of the acquisition of the chilled water plant in Atlanta.
- Oversee the Information Systems Applications group implementation projects aimed at improving efficiency, reliability and transparency of financial information.
- Worked as a member of the Transaction team tasked with supporting the due diligence and negotiating the sale of the Company to Veolia Energy North America, Inc. ("Veolia").
- Currently working on the transition plan and identifying the areas of risk and concern as we approach the close of the transaction in December.

INTERGEN SERVICES, BURLINGTON, MA

07/03 - 07/06

InterGen is a joint venture between AIG and Ontario Teachers' Pension Fund competing worldwide in the Independent Power Producer Industry.

Director of Accounting and Business Support

(02/04 - 07/06)

Responsible for the accounting, structuring and internal documentation of InterGen's divestiture, development and acquisitions for the Investment and Portfolio Management team as well as accounting oversight of each of the operational projects reporting to the corporate controller.

- Key member of the Transaction close team involving the \$1.75 billion sale of InterGen to AIG and Ontario Teachers Pension Plan. Responsibilities included the following:
- Responsible for the restructuring of InterGen as required in the conditions precedent to closing the portfolio sale. Responsibilities included managing all of the functional areas (i.e. legal, tax, finance and treasury) in completing the transactions, calculation of the fair value of assets excluded from the transaction, preparing and presenting the restructuring plan to all levels of senior management including the Supervisory Board of Directors and completing all of the accounting necessary in recording the transactions within the consolidated financial statements.
- Corporate lead on managing the purchase accounting as required under SFAS
- Worked as part of a team that successfully completed the restructuring and refinancing of an existing project in
 Mexico in conjunction with supporting the acquisition of an additional interest in the project during February 2006.
 Responsibilities included providing accounting guidance to the project controller, completing internal governance
 requirements for the restructuring, assisted in the review of the fair value calculations required in restructuring the
 project ownership structure.
- Managed the accounting, structuring and business support for individual divestiture transactions that completed during 2004.
- Worked with the Investment and Portfolio Management team in putting together Board Papers, Value Assurance Reviews and communicating the accounting impacts of divestiture and development transactions.
- Worked within a team in the successful reorganization and partial divestiture of our three power plants located in Turkey.
- Led the 2003 audit of a joint venture in a project in Singapore in accordance with Singapore GAAP.

 Worked with Project Controller of a power project in China on the correct accounting for the refinancing of US functional based debt.

Americas' Controller (7/03 - 2/04)

- Prepared accounting policy and procedure for the timely and accurate financial reporting in accordance with US GAAP for the North American and Latin American power plants during 2003 upon entering commercial operations.
- Analyzed and prepared the guidance for the accounting treatment of the Long-Term Maintenance Service Agreements for InterGen assets.
- Prepared impairment models in accordance with SFAS 144 for merchant power plants in North America and Latin America. Audit time spent reviewing the models during 2003 was significantly less than previous reporting periods.

CALPINE CORPORATION, BOSTON, MA

11/99 - 7/03

Calpine Corporation was a Fortune 500 Company competing in the Independent Power Producer Industry with revenues of \$7.5 billion and total assets of \$23.2 billion in 2002.

Accounting Manager (06/01 - 07/03)

- Responsible for the preparation, analysis and application of GAAP to all assets in the eastern division.
- Generate and consolidate financial statements consisting of approximately 15 operational power plants, and 11 projects in construction or development with approximately \$5.5 billion in assets and \$2.1 billion in revenues for reporting to senior management.
- Worked extensively with SFAS 133 in consistent application of DIG C16 to fuel commodity contracts.
- Performed analysis of power plant contracts in determining the need for recording impacts of asset retirement obligations in accordance with SFAS 143.
- Conducted monthly forecasts of power plant profitability for senior management.
- Managed a staff of 8 professionals.

Accounting Supervisor (11/00 - 6/01)

- Built an accounting department to support the many acquisitions of power plants Calpine had conducted during 2000.
- Supported the acquisition of three Northeast power plants consisting of assets of approximately \$450 million, and the immediate refinancing of the assets via a sale-leaseback transaction.
- Supported the accounting for a divestiture of a non-strategic equity interest in a power plant, including the design of the purchase and sale to allow for Calpine to record revenue on a deferred basis.
- Led the initiative to reduce the number of days to close the books in the organization from 10 to 5 business days. Through this effort, the eastern group was able to successfully and accurately report results within 4 business days.

Senior Accountant (11/99 – 11/00)

- Supported Calpine's extensive growth through acquisition of power plants in the Northeast and Florida.
- Supported and accounted for Calpine's acquisition of 7 operational power plants applying APB 16, totaling approximately \$500 million in total assets.
- Transitioned the accounting operations, including project financing reporting requirements, opening of new project cash accounts to support ongoing operations, and the accounts payable functions.
- Performed all monthly close entries along with Regional Controller in reporting financial results to senior management.
- Prepared financial statements in accordance with GAAP, and coordinated the first audit of the financial statements of the Eastern region locally.

WOLF & COMPANY, P.C., BOSTON, MA

9/97 - 10/99

Senior Accountant

- Responsible for conducting and supervising audit engagements.
- Prepared financial statements in accordance with GAAP for clients ranging from \$2 million to \$75 million in revenues.
- Worked extensively in auditing and preparing SEC documents related to an initial public offering.
- Performed audits on employee benefit plans, Form 5500.
- Supervised staff ranging from 1 to 4 in conducting audit engagements.

Staff Accountant

- Conducted audit procedures and prepared financial statements in accordance with GAAP, in addition to preparing tax returns for clients.
- Performed audit procedures on clients ranging from \$2 million to \$55 million in revenues in a diverse industry base.
- Began leading engagements within 6 months of hire.
- Prepared tax returns on Forms 1040, 1060 and 1120.

PART A CAPABILITY OF THE APPLICANT EXHIBIT 3 FIRST NATION AND MÉTIS PARTICIPATION

3. First Nations and Métis Participation

2 3.0 Overview

1

- 3 A transmitter's success in developing and constructing the proposed East-West Tie Line (the
- 4 "Project") will depend largely on its ability to involve affected Aboriginal communities in the
- 5 Project. EWT LP's approach to Aboriginal participation focuses on (i) direct equity
- 6 participation; (ii) broader community economic participation; and (iii) the facilitation of the
- 7 permitting and environmental assessment processes.
- 8 With respect to direct equity participation, EWT LP is unique. It is a partnership between First
- 9 Nations, an investor-owned utility and a publicly-owned utility formed specifically to develop,
- 10 finance, construct, own and operate the Project. It is an outstanding example of how First
- Nations and the private sectors can properly combine their individual strengths to work together
- in a new relationship that provides financial and socio-economic opportunities for Aboriginal
- communities and benefits to ratepayers.
- 14 In accordance with the Ontario Energy Board's (the "Board's) filing requirements, this section
- includes the following:

23

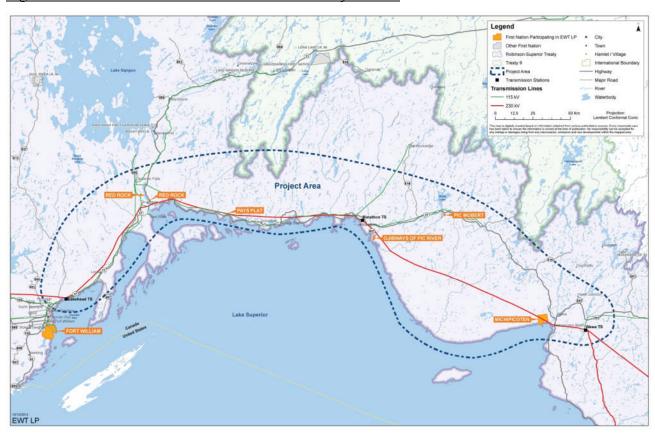
- A description of EWT LP's established Aboriginal participation arrangements (3.1),
- including details on the Aboriginal communities that will be participating in the Project
- 18 (3.1.1), the nature of their participation (3.1.2) and the benefits arising from their
- 19 participation (3.1.3); and
- A description of EWT LP's plans for additional Aboriginal participation (3.2), including
- for participation in the provision of goods and services (3.2.1) and in the environmental
- assessment and permitting processes.

1 3.1 <u>Established Participation Arrangements -- BLP's Equity Interest in EWT LP</u>

2 3.1.1 Participating First Nations Communities

- 3 As described in Section 2, the Participating First Nations equally hold the limited partnership
- 4 interests in BLP, which in turn holds one third of the limited partnership interests in EWT LP.
- 5 The Participating First Nations are Fort William First Nation, Red Rock Indian Band, Pays Plat
- 6 First Nation, Ojibways of the Pic River First Nation, Pic Mobert First Nation and Michipicoten
- 7 First Nation. They each have traditional territories that are likely to be directly impacted by the
- 8 Project. Their communities are all located within 40 km of the existing East-West Tie line. As
- 9 shown in Figure 3.1.1, no other First Nations community is located closer to the proposed Project
- area than those of the Participating First Nations.

11 Figure 3.1.1 First Nations Communities in the Project Area



Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 3 Page **3** of **11**

1 3.1.2 <u>Nature of BLP's Participation</u>

extended to Thunder Bay) and also Hydro One.

It has taken EWT LP's partners almost three years to negotiate and agree on how the Participating First Nations will participate in EWT LP. This was first initiated by the five Participating First Nations located between Wawa and Nipigon following the Minister of Energy and Infrastructure's letter of September 21, 2009. In that letter, the Minister asked Hydro One Inc. to complete certain activities in anticipation of the government's new feed-in tariff program and demand for renewable connections, including the planning, development and implementation of twenty transmission projects. One of these projects was a new 230 kV East-West Tie between Nipigon and Wawa. These Participating First Nations voluntarily chose to organize as one group and enter into arrangements with Brookfield through Great Lakes Power Transmission LP. This group was later joined by Fort William First Nation (when the line was

In asserting their desire to participate in both the governance and economics of the Project, the Participating First Nations selected their partners and developed a partnership based on trust, respect and equality. Such a relationship cannot be replicated without first taking the time necessary to establish mutual trust and respect; and even then, there is no assurance that any other parties could establish the same degree of mutual trust and respect that EWT LP and the Participating First Nations now enjoy. Indeed, the relationship is not simply a product of time, but also the result of a commitment to shared values. For transmitters that have not made similar participation arrangements, there is a real risk they will not be able to do so, or that they will only be able to do so if they first take a similar amount of time to develop the necessary relationships, and then only if their vision for the Project aligns with that of the Participating First Nations. The initiative already undertaken by EWT LP in this regard cannot be underestimated.

-

¹ In late September 2010, the Michipicoten First Nation issued a press release stating that five Participating First Nations had signed a letter of intent with GLPT to work together to form an equal joint venture for the Project.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 3 Page **4** of **11**

- 1 The Participating First Nations' economic participation in EWT LP does not prejudice or
- 2 derogate from their Aboriginal or Treaty rights, including their right to be consulted by the
- 3 Crown during the development of the Project.

4 3.1.3 Benefits of BLP's Participation

5 3.1.3.1 <u>Benefits to Participating First Nations</u>

- 6 The participation of BLP in EWT LP offers considerable benefits to the Participating First
- 7 Nations. The first benefit is financial. BLP is obligated to provide its share of equity to EWT
- 8 LP in consideration for BLP's limited partnership interest. On a per partner basis, this equity
- 9 contribution is estimated to be \$80 million.² As an equal partner, BLP will share equally in the
- 10 risks and the expected returns on that equity. Further discussions on EWT LP's financial
- arrangements are set out in Section 5. Given that EWT LP plans on financing the Project
- through project level financing at a 60/40 debt to equity structure (see Section 5.4), and assuming
- a rate of return on equity of 9%, the return on the investment of BLP is estimated to be \$7
- million in year one.
- 15 Beyond this financial benefit, the Participating First Nations also benefit through their
- participation in the governance of EWT LP. No one partner can make decisions on behalf of
- 17 EWT LP. Therefore, the Participating First Nations, through BLP, will continue to have
- significant control over the development of the Project in their traditional territory. BLP will
- also chair the board of EWT LP's general partner on a rotating basis and will be fully involved in
- 20 EWT LP's activities throughout the Project. The Participating First Nations, through BLP, will
- 21 therefore have a leadership role in the ultimate development, construction and operation of the
- 22 Project in conjunction with Hydro One Inc. and Great Lakes Power Transmission EWT LP.
- 23 EWT LP represents something more to the Participating First Nations than more typical forms of
- 24 First Nation participation, such as job opportunities or funding for local initiatives. Like the
- 25 other EWT LP partners, BLP is a project proponent, has a stake in the Project and has an equal

.

² Based on a one-third share of \$600 million at 40% equity.

- and indivisible share and ownership of the partnership assets. In effect, through BLP, the
- 2 Participating First Nations have an equal and indivisible stake in the success or failure of EWT
- 3 LP and its development activities.

4 3.1.3.2 Benefits to Ratepayers

- 5 The equity participation of BLP in EWT LP offers many benefits for Ontario ratepayers. These
- 6 benefits, which arise at no incremental cost to the ratepayer, assist in minimizing Project cost and
- 7 delay risk. For example:
- Because EWT LP is exposed to the risk of cost disallowance for permitting delays and cost overruns during development, the Participating First Nations have an incentive to ensure that EWT LP's plans for routing, consultation and environmental review are comprehensive and properly managed. These shared risks help to ensure the Project is developed cost-effectively and in adherence to the Project schedule.
- Members from the Participating First Nations have the largest source of cultural and traditional knowledge in the Project area. Their early participation in the Project planning process, and their availability to participate in development work, especially the environmental assessment, significantly lowers the risk of cost overruns and delays as compared to the alternative where a designated transmitter planned and developed the Project without this important local expertise.
- 19 Furthermore, EWT LP will continue to benefit from the existing relationships of its 20 partners, including through BLP, with the majority of the landowners, municipalities and agencies in the Project area. These relationships, which have been developed over many 21 22 decades, will facilitate EWT LP's understanding of key issues that may affect the 23 location, design and construction of the Project. This knowledge will reduce Project costs and more importantly the risk that the Project overlooks or fails to properly 24 25 incorporate important issues that ultimately result in necessary permits being delayed or 26 denied.
- 27 The Participating First Nations have experience being consulted in the development of 28 major infrastructure in the Project area. From the outset of the development phase, they 29 will be able to draw on this experience to assist other potentially affected Aboriginal communities participate in the consultation and environmental assessment processes and 30 31 so develop a better understanding of the Project. The early and more thorough sharing of information may reduce the need to subsequently raise issues in a Board proceeding, the 32 33 environmental assessment or other permitting process. This has the potential to reduce 34 the cost to ratepayers and maintain the timeliness of the Project by helping ensure that

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 3 Page **6** of **11**

- any issues raised by the Aboriginal communities will be addressed in a timely and appropriate way.
- 3 In addition, the Participating First Nations are perhaps best placed to determine whether 4 EWT LP has made adequate plans for Aboriginal consultation. EWT LP has collaborated 5 with the Participating First Nations from the inception of their participation in preparing 6 the Aboriginal consultation plan (see Section 10) with the goal of developing a plan that 7 will enable EWT LP to fully discharge any procedural aspects of the Crown's duty to 8 consult that may be delegated to it. In this regard, EWT LP's consultation plan has been 9 reviewed and unanimously approved by its partners, including by the Participating First 10 Nations through BLP. This significantly reduces the risk that a defect in EWT LP's 11 consultation results in necessary permits being delayed or denied, or in a judicial review 12 of the Project.
- Finally, as discussed further in Section 2, some of the Participating First Nations have extensive experience in developing infrastructure projects in the Project area. This experience has informed EWT LP's plans below for additional Aboriginal participation in a way that helps ensure that the knowledge and capacity of Aboriginal communities in the Project area can be used, where possible, to reduce Project costs and to expedite the Project schedule.

19

1 3.2 <u>Planned Participation Arrangements -- Community-Based Participation</u>

- 2 3.2.1 <u>Economic Participation Goods and Services</u>
- 3 EWT LP will invite suitably qualified and experienced Aboriginal-owned or controlled
- 4 businesses and individuals who are interested in providing goods and services relevant to the
- 5 development and future construction of the Project to contact EWT LP after designation so they
- 6 can be included in the appropriate procurement activities. Where all applicable technical and
- 7 professional standards are met, and the costs are commercially reasonable, then EWT LP will
- 8 give priority with respect to employment, training and commercial opportunities to Participating
- 9 First Nation community members and to businesses owned or controlled by a Participating First
- 10 Nation or its members.
- However, EWT LP notes that this does not preclude other non-participating First Nations and
- 12 Métis communities from competing to provide goods and services (e.g. for goods and services
- that the Participating First Nations may not be able to provide or may only be able to provide at a
- higher cost), and thus benefitting from economic participation in EWT LP's development and
- 15 construction of the Project. Where all applicable technical and professional standards are met,
- the costs are commercially reasonable, and Participating First Nations community members or
- businesses owned or controlled by a Participating First Nation or its members are not selected to
- provide the goods or services in question, then EWT LP will give priority with respect to
- 19 employment, training and commercial opportunities to non-participating Aboriginal community
- 20 members and to businesses owned or controlled by a non-participating Aboriginal community or
- 21 its members.
- 22 EWT LP's competitive procurement processes will match community resources and assets to
- 23 Project needs in order to maximize the efficiency of Project execution and enhance Aboriginal
- participation in the Project. In this regard, EWT LP will:
- Complete community resource assessments identifying, among other things, Aboriginal
- community businesses which may assist EWT LP. These businesses will be invited to
- 27 participate in EWT LP's competitive procurement processes. These businesses may
- provide specialized consulting services such as environmental and engineering consulting

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 3 Page **8** of **11**

- services, guiding services, field equipment, administrative and logistical support, as well as a variety of other services relating to forestry management and planning, forestry harvesting and clearing, fire services, remote field office services, human resources, power line services and health and safety services.
- Facilitate sourcing from Aboriginal community businesses and members by structuring bidding and work requests to better align with the capacities of qualified Aboriginal community businesses and members.
- Pre-qualify Aboriginal community businesses and members for the provision of certain goods and/or services. Provide feedback on any gaps in qualifications and information on how to remedy those gaps and become more competitive bidders.
- Provide lead time for Aboriginal community businesses and members to develop or enhance their ability to qualify and compete for the opportunity to provide the goods and services in question.
- Hold workshops for Aboriginal community businesses and members on bidding
 procedures for the provision of goods and/or services to facilitate their effective pursuit
 of business opportunities. Offer to provide feedback to unsuccessful bidders to facilitate
 more effective future bids.
- Require bidders on major contracts to include plans for Aboriginal content and/or participation, as applicable, in their bids and give particular consideration to such plans when evaluating bids. Monitor the implementation of Aboriginal content and participation plans by successful bidders.
- Ensure Aboriginal businesses and members are kept informed of contracting and employment opportunities during the construction of the Project by collaborating with First Nation Economic Development and Employment Officers.
- 25 In matching Aboriginal community resources to Project needs, EWT LP expects to improve
- value to ratepayers. The familiarity of these communities and their businesses with the physical,
- 27 cultural and economic environment in northern Ontario, and their geographic proximity to the
- 28 Project area, operates to make these service providers the most cost effective option in many, if
- 29 not most, instances.
- 30 Furthermore, EWT LP and its partners have agreed to help members of Participating First
- Nations develop expertise in system operations and control by providing workshops on a regular
- basis explaining the job of an electrical system operator and the path to obtaining the necessary
- 33 qualifications; creating one or more internships; and by providing scholarships for post-

- secondary education of up to \$15,000 a year for a minimum of five years which may be extended
- 2 following an assessment of the success of the scholarships.
- 3 EWT LP will report to the Chiefs and Councils of the Participating First Nations the results of
- 4 EWT LP's Aboriginal employment and contracting efforts.
- 5 3.2.2 Participation in the Permitting and Environmental Assessment Processes by BLP and the
- 6 <u>Participating First Nations</u>
- 7 BLP and the Participating First Nations have agreed to support EWT LP as reasonably requested
- 8 in any interaction with other Aboriginal communities with respect to the Project -- including with
- 9 respect to property, environmental and permitting matters -- and in any interaction and
- 10 communication with federal, provincial and local governments agencies. In this regard, BLP
- will be using its inherent knowledge and experience to consult as a Project proponent and have
- direct input into the process. For example, EWT LP will draw on the specific experience of BLP
- and the Participating First Nations in:
- organizing the Participating First Nations to participate effectively and efficiently in the
- 15 consultation process, which will include retaining a Project coordinator and community
- based Project liaison workers to assist in the delivery of the consultation plan.
- formally receiving Project information from EWT LP at the earliest possible stage and
- disseminating Project information for Chiefs and Councils to ensure there are no
- unnecessary delays in carrying out the procedural aspects of the Crown's duty to consult.
- performing assessments of human resource requirements for various Project stages to
- 21 identify ways in which Aboriginal communities may assist EWT LP in completing the
- 22 environmental assessment process and in implementing the mitigation measures
- 23 developed through that process.
- assisting EWT LP and its consultants in gathering preliminary inventories of traditional
- values in the study area as required to complete the environmental assessment.
- arranging for Project information sessions for Chiefs and Councils, municipalities and
- Aboriginal communities at large, by hosting Aboriginal Information Forums in each of
- 28 the participating communities.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 3 Page **10** of **11**

- providing EWT LP with traditional and ecological knowledge of the Project study area
 by gathering community input regarding the Project.
- assisting EWT LP in completing the terms of reference for the environmental assessment
 expeditiously and cost effectively.
- working closely with EWT LP and its consultants while they undertake field studies during the implementation of EWT LP's development plan.
- where appropriate, proposing alternative courses of actions, amendments or accommodation agreements to address Aboriginal interests.
- 9 This input will be essential for the timely development of the Project. It will ensure that the important local knowledge of Aboriginal communities will be incorporated into the
- 11 environmental assessment and permitting processes in the most efficient and effective way
- 12 possible.

13

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 3 Page **11** of **11**

1 3.3 <u>Conclusion</u>

- 2 EWT LP's approach to Aboriginal participation focuses on many aspects, including (i) direct
- 3 equity participation; (ii) broader community economic participation; and (iii) the facilitation of
- 4 the permitting and environmental assessment processes. As a result, EWT LP is an outstanding
- 5 example of First Nations and the private and public sectors combining their individual strengths
- 6 for the benefit of ratepayers.

PART A CAPABILITY OF THE APPLICANT EXHIBIT 4 TECHNICAL CAPABILITY

4. Technical Capability

2 4.0 Overview

1

- 3 EWT LP's team has the technical capability and resources required to effectively engineer, plan,
- 4 construct, operate and maintain the proposed East-West Tie Line (the "Project"). In describing
- 5 its technical capabilities, EWT LP considers not only its technical, engineering and construction-
- 6 related capabilities but also its capabilities in carrying out activities that include procurement,
- 7 permitting, regulatory approvals, stakeholder consultations and project management, all of which
- 8 will be key ingredients in the success of the Project.
- 9 In accordance with the Ontario Energy Board's (the "Board's") filing requirements, this section
- includes the following:
- Resources and Capabilities (4.1);
- Resumés for Key Technical Team Personnel (4.2);
- Relevant Experience (4.3), including Design and Engineering of New Transmission Lines
- 14 (4.3.1), Acquisition of Land Use Rights (4.3.2), Acquisition of Permits (4.3.3), Obtaining
- Environmental Approvals (4.3.4), Community Consultation (4.3.5) and First Nation and
- Métis Consultation (4.3.6);
- Adherence to Good Utility Practices (4.4); and
- Anticipated Challenges and Plans for Addressing Them (4.5).

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 4 Page 2 of 23

4.1 <u>Resources and Capabilities</u>

1

- 2 As described in the context of its organizational plan in Section 2, EWT LP is structured in a
- 3 manner that enables it to access and draw upon very significant financial, technical and human
- 4 management expertise that will support its development, construction, operation and
- 5 maintenance of the Project. These include internal EWT LP resources, the resources of its
- 6 partners Great Lakes Power Transmission EWT LP, Hydro One Inc. and Bamkushwada LP, and
- 7 the resources of its partners' related entities including the Brookfield Utilities Group, the
- 8 Participating First Nations and, post designation, Great Lakes Power Transmission LP
- 9 ("GLPTLP"), Hydro One Networks Inc. ("HONI"). Also available to EWT LP are the resources
- and expertise of its third party contractors, including in particular Power Engineers Inc. ("Power
- 11 Engineers"), AECOM Canada Ltd. ("AECOM"), Shared Value Solutions ("SVS") and Altus
- Group Inc. ("Altus"), and any subcontractors or other specialized contractors and advisors that
- 13 EWT LP or its contractors may retain in connection with the Project.
- 14 EWT LP's internal and external resources form EWT LP's project team (the "Project Team").
- 15 The resources and capabilities available to EWT LP internally and through each of its partners
- and their related entities are described in Section 4.1.1 below. The resources and capabilities of
- 17 EWT LP's main third party contractors are described in Section 4.1.2. Section 4.1.3 describes
- 18 how these various resources will be allocated to each of the activities associated with the
- development, construction, operation and maintenance of the Project.

20 4.1.1 Resources and Capabilities of EWT LP's Partners

21 4.1.1.1 <u>Great Lakes Power Transmission EWT LP ("GLPT-EWT")</u>

- 22 GLPT-EWT is a member of the Brookfield Utilities Group. The Brookfield Utilities Group has
- an ownership interest in a number of utility ventures and has significant experience developing
- 24 and managing the construction and ownership of major transmission facilities in North America
- and internationally. Examples of Brookfield Utilities Group's relevant experience and financial
- resources are described in Section 2.1.2 and Section 5.1.2.

1 4.1.1.2 <u>Hydro One Inc. ("Hydro One")</u>

- 2 Hydro One's largest wholly-owned subsidiary is Hydro One Networks Inc. ("HONI"), which
- 3 owns and operates approximately 96% of the transmission system in Ontario. Key to the Project
- 4 is the fact that HONI owns the existing East-West Tie line and the transmission stations to which
- 5 the Project will connect. HONI's combined transmission and distribution business employs
- 6 approximately 5,500 permanent employees in a variety of management, technical and
- 7 administrative positions. HONI's technical expertise is evident from its demonstrated ability to
- 8 plan, construct, operate and maintain its transmission system safely, reliably and cost effectively.
- 9 HONI's commitment to ensuring public and worker safety, while recognizing its responsibilities
- with respect to its stakeholders, the stewardship of critical provincial assets and the environment
- 11 is also evident. HONI owns and operates facilities that are required for the operation,
- maintenance, protection, control and monitoring of its transmission system, including the Ontario
- 13 Grid Control Centre. Examples of HONI's relevant experience and financial resources are
- described in Section 2.1.3 and Section 5.1.1.

15 4.1.1.3 <u>Bamkushwada LP ("BLP")</u>

- BLP is a limited partnership the partners of which are the six First Nations whose traditional
- 17 territories are proximate to the proposed Project area. Through the Participating First Nations,
- 18 BLP has a significant level of experience and expertise with respect to the geographic area,
- 19 environmental attributes and traditional and cultural values. As residents in the Project area, the
- 20 Participating First Nations also have a unique capability to work with local stakeholders and
- 21 other First Nations who may be potentially affected by the Project.
- 22 Some of the Participating First Nations have extensive experience in development projects in the
- proposed Project area. Through these Participating First Nations, BLP has experience in forestry
- 24 management and planning; energy project approvals processes, including the Board's leave to
- 25 construct process; environmental assessment processes and various other provincial and federal
- 26 approvals processes. For examples of projects developed, owned and/or operated by
- 27 Participating First Nations, please see Section 2.1.1.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 4 Page **4** of **23**

1 4.1.2 <u>Resources and Capabilities of Third Party Contractors</u>

2 4.1.2.1 Power Engineers

- 3 Power Engineers is a full-service, multidiscipline global engineering consulting firm providing
- 4 services to all types of electric utilities, transmission companies, independent power producers,
- 5 mining clients, commercial and industrial clients, generation plants, and governmental agencies.
- 6 Power Engineers employees more than 1,700 employees in 33 offices internationally, and its
- 7 transmission and distribution department employs over 675 staff, making it one of the largest of
- 8 its kind in North America.
- 9 Power Engineers has experience providing services related to the transmission and distribution of
- 10 electricity at all levels of the development process, including planning, permitting, design,
- 11 construction, testing and commissioning. These services include:
- High voltage and extra high voltage transmission line design overhead & underground;
- High voltage and extra high voltage substation and switch station design;
- System studies;
- System planning;
- Routing;
- Utility automation;
- Testing, commissioning and energization;
- Geographic information systems;
- Construction management and inspection; and
- Project Management.
- For examples of this experience, please see Section 4.3.1 and Appendix 4C.
- 24 Power Engineers will assist EWT LP with transmission line engineering and design, substation
- design (if necessary), system and network studies, routing, material and equipment procurement,
- 26 construction management and program management.

1 4.1.2.2 <u>AECOM</u>

- 2 AECOM Inc. is a global provider of professional technical and management support services to a
- 3 broad range of markets, including transportation, facilities, environmental, energy, water and
- 4 government. AECOM Inc. has approximately 45,000 employees in 130 countries, including 58
- 5 offices in Canada.
- 6 AECOM Inc. has worked with more than 300 power utilities in over 50 countries on more than
- 7 27,000 km of transmission lines. Its transmission and distribution team includes engineers,
- 8 planners and environmental specialists who together provide the full set of competencies
- 9 required within the electricity supply industry to develop and construct major electricity
- transmission lines. AECOM Canada Ltd. ("AECOM") is a wholly owned subsidiary of AECOM
- Inc. For examples of this experience, please see Sections 4.3.4 and 10.2.2.2 and Appendix 4C.
- 12 AECOM will assist EWT LP with completion of the environmental assessment and other
- regulatory approvals, and with the environmental monitoring during the construction phase.

14 4.1.2.3 <u>SVS</u>

- 15 SVS is a human environment consultancy that specializes in community consultation and
- 16 engagement and communications. SVS staff are trained facilitators and have expertise and wide
- 17 range of experience in community engagement related to environmental assessment. SVS staff
- have managed numerous community engagement plans and programs in a variety of sectors.
- 19 SVS staff have designed, evaluated and managed feedback from surveys both at watershed and
- 20 national scales. A great deal of SVS's focus is on building community input into improving
- 21 planning and program management. SVS staff have extensive experience working in and with
- Northern Ontario Aboriginal and non-Aboriginal communities. SVS has a speciality service
- 23 offering Aboriginal traditional knowledge and land-use studies and mapping. For examples of
- SVS's experience, please see Sections 4.3.5 and 10.2.2.1 and Appendix 4C.

- 1 SVS will assist EWT LP in undertaking consultations with First Nations and Métis communities
- 2 and other stakeholders during the development process. In addition, SVS will assist with ongoing
- 3 community consultations during Project construction.

4 4.1.2.4 Altus

- 5 Altus is a Canadian company that provides independent, professional real estate services. Altus
- 6 has a staff of over 1,700 in 14 countries worldwide, including 29 offices in Canada. Altus
- 7 provides professional services in five interrelated disciplines: research, valuation and advisory;
- 8 cost consulting and project management; realty tax consulting; geomatics; and ARGUS Software
- 9 (proprietary software for property asset management). For examples of Altus's experience,
- please see Section 4.3.2 and Appendix 4C.
- Altus will assist EWT LP with the acquisition of land rights for the Project, geomatics software
- and surveying for project siting.

13 4.1.3 Allocation of Resources to Project Activities

- 14 The resources and capabilities dedicated to each activity associated with developing,
- 15 constructing, operating and maintaining the Project are detailed in the Sections that follow. For
- an overview diagram of EWT LP's project activities during the development phase of the
- 17 Project, please see Appendix 4A.

18 4.1.3.1 Design & Engineering

- 19 EWT LP's Project Manager will coordinate, manage and oversee the delivery of design and
- 20 engineering services. Power Engineers will provide the design and engineering services to the
- 21 overall Project, with a particular focus on system/network analysis and engineering and the
- design and engineering of lines and towers.
- 23 Power Engineers employs 90 people dedicated to system/network analysis and engineering. A
- team of approximately three professionals, including senior project engineers, will be dedicated
- 25 to carrying out system studies, network analysis and related engineering activities. In addition,

- 1 Power Engineers employs over 180 people dedicated to transmission line engineering. Three to
- 2 six transmission line engineers and designers of varied experience are expected to be dedicated
- 3 to the Project. Additional staff with specialized skills in visualization techniques, program
- 4 management and routing will contribute to the Project as required.

5 4.1.3.2 Material and Equipment Procurement

- 6 EWT LP plans to select a specialized construction contractor to construct the Project. The
- 7 construction contractor will be selected through a competitive bid process. EWT LP expects to
- 8 enter into a fixed price contract under which the construction contractor would have
- 9 responsibility for procuring all materials and equipment needed to construct the Project, based on
- 10 EWT LP's Project design. The specific resources dedicated to material and equipment
- procurement will be determined by the construction contractor, subject to the specifications and
- 12 quality stipulated by EWT LP, and reviewed and agreed to by EWT LP through the competitive
- 13 procurement process.

14 4.1.3.3 <u>Permitting and Regulatory Approvals</u>

- 15 Permitting and regulatory approvals for the Project will include, but not be limited to, activities
- related to provincial environmental assessment, other environmental and land use permits and
- 17 approvals required for project development, permits to access and construct on Crown land,
- leave to construct from the Board, and permits and approvals that are required for the
- 19 construction phase.
- 20 Under EWT LP's management and oversight, AECOM will work to undertake and ensure the
- 21 completion of all studies, field work, assessments and evaluations necessary for the completion
- of all necessary environmental assessment requirements.
- 23 The AECOM environmental assessment team will consist of a project lead and approximately 25
- 24 experts covering the key disciplines including planning, socio-economic studies, cultural studies
- and natural resources. Additional staff support will be brought in as necessary during the in-field
- data collection periods. In addition, AECOM's environmental assessment team will be assisted

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 4 Page **8** of **23**

- by subcontractors with specialist expertise in areas including heritage assessments, archaeology
- 2 and ungulates, such as caribou.
- 3 Other permitting and approvals required for project development will be the responsibility of
- 4 EWT LP's internal legal and regulatory compliance resources and may include specialized
- 5 external counsel and consultants as required.
- 6 Through the construction contracting process, EWT LP will ensure that its construction
- 7 contractor is responsible for obtaining and maintaining all permits and approvals required for
- 8 construction and for the delivery of materials and equipment to site, as well as for complying
- 9 with any conditions of approvals obtained by EWT LP. With assistance from AECOM as on-site
- 10 environmental monitor, EWT LP will oversee the work of the construction contractor to ensure
- such obligations are met and to ensure that the construction contractor complies with any
- 12 conditions that may be imposed in EWT LP's environmental approvals, including the
- environmental assessment, and its leave to construct approval.

14 4.1.3.4 Land Rights Acquisition

- 15 The acquisition of land rights is a critical component of the Project. Under EWT LP's
- management and coordination, Altus's Research, Valuation, Advisory and Acquisition team will
- be tasked with negotiating and acquiring the necessary easements or other land rights, as well as
- any permits and consents that may be needed for a contiguous right of way. If after extensive
- 19 negotiations and obtaining leave to construct it is nevertheless necessary to expropriate
- 20 easements or other land rights for parts of the Project, Altus will provide support to EWT LP and
- 21 its legal counsel during the course of the expropriation process. The Altus team will include
- 22 experts in land rights valuation and land acquisition, survey teams (as required) and GIS experts.
- 23 With EWT LP's oversight and coordination, Altus will design and implement a project-specific
- 24 methodology for land rights acquisition including definitive land acquisition compensation
- 25 principles.

- 1 EWT LP will utilize surveying technologies, including:
- Static GPS for setting up a control network;
- Real Time Kinematic (RTK) GPS for staking out centerline hubs, power pole structures, right-of-way boundaries and substation piles; and
- 5 3D laser scanning for modeling substation sites.
- 6 4.1.3.5 <u>Consultation with Aboriginal Communities and Other Stakeholder Communities</u>
- 7 As discussed in Section 2, BLP will provide advice and assistance to EWT LP regarding
- 8 consultations with Aboriginal communities and other local communities, including engaging
- 9 Aboriginal Liaison Officers in each directly affected Aboriginal community.
- 10 In addition, EWT LP, with assistance from SVS, will coordinate, schedule, facilitate and
- document all public engagement associated with the Project, including, to the extent necessary,
- 12 those procedural aspects of the Crown's duty to consult with First Nations and Métis
- communities that the Crown may delegate to EWT LP.
- 14 4.1.3.6 Construction and Construction Management
- 15 As noted, construction will be performed by a specialist construction contractor working under
- 16 EWT LP's management and oversight. EWT LP will contract with a construction company that
- has the demonstrated capability, including suitably skilled and experienced workers, to complete
- 18 construction of the Project in accordance with EWT LP's specifications. The construction
- 19 contractor will be responsible for the execution of all construction activities, thereby transferring
- 20 construction risk from EWT LP to the entity best able to cost effectively manage it and,
- 21 ultimately, away from ratepayers.
- 22 EWT LP will monitor and oversee the construction contractor in the performance of the work to
- ensure that safe methods of work are being employed and that the Project remains on budget, on
- schedule and to specification.

- 1 The task of construction management will also include environmental monitoring during
- 2 construction. EWT LP will look to use suitably experienced First Nations community members
- 3 from BLP to provide local expertise and to lower costs for ratepayers. In addition, AECOM as
- 4 on-site environmental monitor will assist EWT LP during the construction phase to ensure that
- 5 EWT LP and its construction contractors comply with all regulatory requirements relating to the
- 6 environment, including conditions of regulatory approvals.

7 4.1.3.7 Operations and Maintenance

- 8 Post designation, EWT LP plans to enter into an agreement with HONI for the provision of
- 9 operating services. These services would be provided by HONI to EWT LP on a fully allocated
- 10 cost basis and relate to the use of HONI's Ontario Grid Control Centre.
- 11 EWT LP will be responsible for ongoing maintenance responsibilities for the Project following
- 12 construction. In the future, EWT LP may consider having these activities outsourced to other
- 13 licenced transmitters and suitably qualified and experienced resources from Participating First
- 14 Nations and other local third party vendors should economic circumstances warrant. This
- decision will depend on a number of factors, including the final design of the line, its proximity
- 16 to other existing transmission lines, and the availability of cost effective resources from
- 17 alternative service providers including HONI or GLPTLP or related entities.

18 4.1.3.8 Project Management

- 19 Project management requires, among other things, the accurate and effective management of
- 20 information and processes that ensure quality communications. EWT LP's Project Team will
- include the development and construction management teams described in Section 2.

1 4.2 Resumés for Key Technical Team Personnel

- 2 Resumés for key members of EWT LP's internal team members are set out in Appendix 2A of
- 3 Section 2. Resumés have been included in Appendix 4B for the following key external team
- 4 personnel.

Name	Role / Title	Company
Erik Ruggeri	Overhead Transmission Line Project Engineer	Power Engineers
Holger Peller	Substation Project Manager	Power Engineers
Stan Sostrom	Substation Project Engineer	Power Engineers
Jon Leman	Electrical System Studies Engineer	Power Engineers
Jon Jablonsksi	Procurement Specialist	Power Engineers
Chris Mercer	Project Material Specialist	Power Engineers
Ross Pritchard	Program Manager Lead	Power Engineers
Mohanbir Mehta	Program Manager	Power Engineers
Peter Catchpole	Engineering Project Manager	Power Engineers
Larry Henriksen	Network Studies Project Engineer	Power Engineers
Roberto Behncke	Senior Project Engineer (tower design)	Power Engineers
Daniel Doucet	EVP, Right of Way Services	Altus Group
David Simes	Director, Head of National Right of Way Initiative	Altus Group
Jay Wong	Director, Expert Services	Altus Group
Mark Andrew Menzel	GIS Analyst	Altus Group
Norm Dickson	Lead, Geospatial Information Technology	Altus Group
Robin Comfort	Senior Director, Right of Way Acquisition	Altus Group
Ian Dobrindt	Senior Environmental Planner	AECOM
Blair Shoniker	Senior Environmental Planner	AECOM
Marvin Stemeroff	Energy & Power Industry Leader - Canada	AECOM
Deborah L. Sinclair	Senior Aquatic Scientist	AECOM
Dennis J. Gregor, PhD	Water and Natural Resources Practice Coordinator	AECOM
Cameron (Cam) Baker	Senior Geologist	AECOM
Nicola Lower	Senior Aquatic Biologist	AECOM
D. Stephen (Steve) Davies	Senior Hydrogeologist	AECOM
Donald R. Richardson, PhD	Managing Partner	SVS
Jeremy Shute	Managing Partner	SVS

1 4.3 <u>Relevant Experience</u>

10

11

12

13 14

15

16

17

18

19

20

21

- 2 4.3.1 <u>Design and Engineering of New Transmission Lines</u>
- 3 EWT LP's Project Team has extensive experience developing, designing and engineering new
- 4 transmission lines. This experience is described in Sections 2.1.2 and 2.1.3.
- 5 As noted, EWT LP has engaged Power Engineers to assist in the design, engineering and
- 6 construction management for the Project. In the past five years, Power Engineers has engineered
- 7 thousands of kilometres of overhead transmission lines and has acted as construction manager
- 8 for hundreds of kilometers of overhead lines. Two projects of particular relevance have been
- 9 identified below, and a more comprehensive list is included in Appendix 4C.
 - Rio Tinto Alcan Transmission Line Repair: Constructed between 1951-1955, the Rio Tinto Alcan line is 287 kV and approximately 88 km long in the coastal mountains of British Columbia. While working on the line between 1993 and 2009, Power Engineers developed great experience and appreciation of very rugged and remote access issues, deep snow, snow creep, avalanches, mud and rock slides, helicopter work and managing poor weather scheduling.
 - Tyee Transmission Line Rebuild: Power Engineers designed and engineered the
 rehabilitation of a poorly performing 138 kV line in southeast Alaska for the
 Alaska Energy Authority. The line suffered unplanned outages due to poor
 original design criteria and heavy snow loads on the long spans. During the
 reconstruction, Power Engineers developed special construction techniques to
 limit damage to the very soft soils in rugged and remote locations.

22 4.3.2 Acquisition of Land Use Rights

- 23 The timely acquisition of land rights is essential for the Project. After designation, EWT LP will
- 24 have the benefit of HONI and GLPTLP's experience of owning and operating electricity
- 25 transmission facilities in northwestern Ontario. HONI and GLPTLP are familiar with the
- 26 different types of land rights that need to be acquired to support an electricity transmission
- 27 project and have recent experience negotiating and acquiring land use rights in Ontario. In
- addition, BLP and the Participating First Nations are familiar with the challenges of acquiring,

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 4 Page **13** of **23**

- 1 owning, controlling and managing land use rights in northern Ontario, particularly in the
- 2 traditional First Nations territories in the Project area.
- 3 BLP, through some of the Participating First Nations, also has significant land right acquisition
- 4 experience. These Participating First Nations have acquired land necessary for the construction
- 5 of various civil works, including dams, intake and power house structures, and for the
- 6 construction of transmission lines required to interconnect these energy projects to the provincial
- 7 power grid. Given the importance of land acquisition to the success of the Project, EWT LP has
- 8 also engaged Altus to assist in the acquisition of land rights for the Project. Altus has extensive
- 9 experience with land rights acquisition for major projects. Three projects of particular relevance
- have been identified below, and a more comprehensive list is included in Appendix 4C:
 - Bruce to Milton Reinforcement: Between 2007 and 2011, a team of eight Altus staff completed over 200 market value appraisals associated with HONI's 180 km, 500 kV Bruce to Milton electricity transmission line in southern Ontario. Appraisals were performed on a variety of property types including farms, rural residential, vacant land and future residential development land. The work required approximately 13,000 person hours of effort and was essential to the successful completion of the new line. Appraisals were key to the acquisition of land and Altus's experience included negotiations with individual landowners with respect to the siting of the line.
 - South Foothills Transmission Project and North Foothills Transmission Project: In 2009, Altus completed land valuation analyses to establish land acquisition costs for these two proposed 240 kV transmission lines in southern Alberta totaling 220 km.
 - ATCO Electric, Northwest Alberta: Altus performed a variety of essential services associated with land acquisition, including the compilation of digital base mapping, all rights of way and vegetation control easements associate with 226 km of 240 kV transmission lines. Field survey services were provided to complete the control and centreline survey prior to construction as well as identifying all crossings and proximities that affected the right of way. These mapping and survey services will be required for the Project, which will be of similar operating voltage and length.

11

12

13

14

15

16

17

18 19

20

21

22

23

24

25

26

27

28

29

30

31

¹ For examples of Participating First Nations' experience, please see Section 2.1.1.

1 4.3.3 Acquisition of Permits

- 2 Post designation, EWT LP will have the benefit of the experience of GLPTLP and HONI in
- 3 acquiring, maintaining and renewing government and government agency permits required for
- 4 the development, construction and operation of electricity transmission lines in Ontario,
- 5 including Section 28(2) permits under the *Indian Act*.
- 6 GLPTLP and HONI also have extensive experience making regulatory applications to the Board
- 7 for licences, rates, facilities, mergers and acquisitions; to the Independent Electricity System
- 8 Operator for modifications and additions to the provincial grid system; and to government
- 9 agencies for the permits required to operate electricity transmission facilities in Ontario.

10 4.3.4 Obtaining Environmental Approvals

- Given the length and operating voltage of the proposed Project, EWT LP believes that the
- 12 Project will trigger an individual environmental assessment under Ontario's Environmental
- 13 Assessment Act. Post designation, EWT LP will have the benefit of the experience of HONI and
- 14 GLPTLP in conducting environmental assessments, including for electricity transmission
- 15 facilities in northwestern Ontario.
- 16 HONI's Bruce to Milton project is the only major electricity transmission line in Ontario to have
- been subject to an individual provincial environmental assessment in recent years. Given the
- scope and scale of the Bruce to Milton project, extensive environmental studies and public
- 19 consultation were required. The environmental assessment was ultimately approved in December
- 20 2009. In addition, in September 2010 HONI completed a class environmental assessment for the
- 21 refurbishment of 70 km of an existing 115 kV transmission line (Circuit A6P) between the City
- of Thunder Bay and the Township of Nipigon in the proposed Project area. As a result, HONI
- 23 has recent and highly-relevant environmental assessment experience regarding electrical
- 24 transmission lines in Ontario.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 4 Page **15** of **23**

- 1 Class environmental assessments² were completed for GLPTLP's Transmission Reinforcement
- 2 Project, a 164 km 230 kV transmission line between Sault Ste. Marie and Wawa, in the proposed
- 3 Project area. These processes include many of the same features as the individual environmental
- 4 assessment such as identification of need, consideration of alternatives, analysis of
- 5 environmental and social impact, identification of mitigating measures, and public consultation.
- 6 The environmental studies revealed that the most serious environmental impact would likely be
- 7 the effect of stream crossing on fish habitat during construction.³ This will also likely be an
- 8 important issue for the Project. The environmental assessment for the Transmission
- 9 Reinforcement Project included public open houses and consultation with 22 agencies, including
- 10 the following, many of which will also be key agencies for consultation during the
- 11 environmental assessment for the Project:
- Ontario Ministry of Natural Resources
- Ontario Ministry of the Environment
- Ontario Ministry of Transportation
- Department of Indian and Northern Affairs (now Aboriginal and Northern Affairs) Canada
- Department of Fisheries and Oceans (Canada)
- Environment Canada
- Canadian Coast Guard
- Town councils
- Regional conservation authorities
- The environmental assessment process in Ontario also requires the completion of a wide range of
- 23 specialist studies in areas as diverse as surficial geology, silviculture, hydrogeology, aquatic
- biology, archaeology and botany. Completion of these studies is outside the abilities of most

_

² The assessments were completed in accordance with the protocol as approved by the MOE; see http://www.hydroone.com/Projects/Midtown/Documents/class_ea.pdf.

³ See EB-2003-0120, Exhibit B, Tab 2, Schedule 7.

- transmission companies so it is common practice to rely on specialist expert consultants. EWT
- 2 LP has engaged AECOM to lead the environmental assessment process for the Project, subject to
- 3 EWT LP's oversight. AECOM has extensive environmental assessment experience, certain
- 4 examples of which are listed below, and a more comprehensive list is included in Appendix 4C:
 - Columbia Valley Transmission Line: In 2009, the British Columbia Hydro and Power Authority ("BC Hydro") contracted AECOM to initiate baseline studies and an overview environmental assessment for the 230 kV, 130 km Columbia Valley Transmission Line in Eastern British Columbia. AECOM conducted all the biophysical studies along the proposed corridor; developed constraints mapping in support of selecting a final alignment; undertook an environmental and socio-economic assessment of the project; developed environmental baseline studies; developed the environmental management plan for project construction; vetted the environmental protection plans prepared by the contractors; and provided a quality control function for the environmental monitoring of the clearing and construction of the right of way. AECOM also provided advice to BC Hydro regarding the federal environmental assessment process, the provincial environmental assessment process, and the federal and provincial permitting process for this project.
 - <u>James Bay Hydroelectric Power Complex</u>: AECOM was responsible for the studies and designs regarding five 735 kV transmission lines for the delivery of approximately 10,000 MW of electricity from James Bay hydroelectric stations to the Montréal region. The linear distance from James Bay to Montreal is approximately 900 km, and the total length of the lines was approximately 6,000 km. AECOM was responsible for ecological and environmental studies; corridor selection, determination of right-of-way widths; determination of loading; design of towers, foundations and anchors for guyed towers; selection of conductor and shield wire and associated hardware; tower spotting; and the preparation of drawings and specifications for procurement and construction contracts.

4.3.5 Community Consultation

5

6

7

8

9

10

11 12

13

14 15

16

17 18

19

20

21

22 23

24

25

26

27

28

29

- 30 Effective community consultation is critical to the success of major infrastructure projects. The
- 31 failure to consult properly and incorporate feedback into the decision making process, whether
- by the proponent or a government agency, may result in the termination, delay or relocation of
- large scale infrastructure projects. In light of this, EWT LP has prioritized a bottom-up,
- 34 community-centric consultation process.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 4 Page **17** of **23**

1 Throughout the consultation process, EWT LP will be supported by resources from BLP whose

2 partners have strong relationships with key local stakeholders. For example, the Pic River First

Nation, a member of BLP, has nurtured a close relationship with the Town of Marathon,

culminating in the execution of the Friendship Treaty. The Friendship Treaty confirms the shared

commitment to open communication, cooperation and environmental protection. EWT LP

anticipates that these relationships will facilitate and expedite community consultation. For

additional information on EWT LP's consultation experience and consultation plans, please see

8 Sections 3, 9 and 10.

3

4

5

6

7

11

12

13

14

15

16

20

22

24

9 BLP through the Participating First Nations also has direct consultation experience related to the

development of the Umbata Falls Generating Station noted in Section 2.1.1. BLP's experience

performing consultation in the Project area and among the local Aboriginal and other stakeholder

communities will be particularly relevant to the Project. BLP's unique experience as consultor

and consultee will benefit ratepayers by allowing EWT LP to better understand and resolve

community concerns efficiently and in a mutually satisfactory manner. For example, BLP is

familiar with the most effective ways to provide notice to the local communities and the local

facilities that would be most appropriate to host large open house meetings. BLP will be

17 available to assist EWT LP in the Project consultation process.

18 In addition, HONI has experience engaging in community consultations in connection with

19 various transmission projects, including the reconstruction of the existing A6P 115 kV

transmission line between Thunder Bay and Nipigon in the Project area and the 186 km 500 kV

21 Bruce to Milton Transmission Reinforcement Project. HONI conducted community consultation

in Northern Ontario and developed consultation techniques such as hosting open houses at

23 various points along the project length rather than at a central location. ⁴ HONI will be available

to advise EWT LP on consultation for the Project post-designation.

As noted in Section 2.2.1.10, EWT LP has engaged SVS to assist in facilitating and coordinating

26 community consultations for the Project. SVS staff have significant experience in public

⁴ See http://www.hydroone.com/Projects/BrucetoMilton/Pages/Public%20Consultation.aspx.

- 1 consultation, an example of which is listed below, and a more comprehensive list is included in
- 2 Section 10.2.2.1:

- Walker Environmental Group, Oxford County Ontario Landfill Individual Environmental Assessment: Members of SVS staff have provided strategic advice and assistance on public and Aboriginal consultation to Walker Environmental Group since 2009 during the pre-feasibility and site selection phase of a project for a new landfill. SVS staff also conducted a detailed stakeholder analysis and local government interests scan during this time period. Since the public launch of the environmental assessment process in 2011, they have staffed public open houses as conflict management personnel, designed and managed a public consultation database using Staketracker software, conducted media and publically available social media monitoring, and helped design and facilitate a Community Liaison Committee.
- Magnetawan First Nation Traditional Knowledge and Land-Use Study for the Ministry of Transportation ("MTO") Highway 69 Expansion project (with AECOM Canada Ltd.): SVS has led, designed, and conducted a traditional knowledge and land-use study involving video interviews and participatory GIS (geographic information system) interviews. Interviews were conducted with a cross section of the community including elders, youth, women, trappers, hunters and fishers, and traditional healers. Information from the study was used to provide input to a consultation process with MTO for the Highway 69 Expansion project. SVS also provided advice to AECOM and MTO on how the study results could be incorporated into the Federal Environmental Assessment report for the project.
- Red Sky Métis Independent Nation: In 2011, SVS staff led and conducted a Traditional Knowledge and Land-Use Study for the Red Sky Metis Independent Nation ("RSMIN") involving video interviews and participatory GIS interviews. Interviews were conducted with a cross section of the community including elders, youth, women, trappers, hunters and fishers, and traditional healers. Information from the study was used to provide input to a consultation process with Stillwater Canada regarding the Marathon PGM Metals Joint Panel Review Environmental Assessment. SVS is currently assisting RSMIN with peer reviews of environmental assessments and other permitting and approvals documents from Stillwater Canada, and providing assistance to RSMIN with their participation in panel review hearings.

33 4.3.6 First Nation and Métis Consultation

- 34 Please see Section 10.2 for a comprehensive overview of EWT LP's experience undertaking
- 35 consultation with First Nation and Métis communities.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 4 Page **19** of **23**

1 4.4 Adherence to Good Utility Practices

- 2 EWT LP's partners are related to two existing transmitters: HONI and GLPTLP. EWT LP will
- 3 model its practices, to the extent applicable, on the practices of HONI and GLPTLP, which have
- 4 operated in good standing in Ontario for many years and in accordance with good utility practice.
- 5 For the areas identified in the Board's filing requirements, EWT LP will proceed as follows:
 - <u>Design and Engineering</u>: EWT LP will continue to follow the same design and engineering standards as apply to HONI and GLPTLP, including the Board's Transmission System Code and the reliability standards and criteria of the Northeast Power Coordinating Council and the North American Electric Reliability Corporation. All transmission lines will comply with CSA C22.3 No. 1-10 Overhead Systems.
 - <u>Material and Equipment Procurement</u>: EWT LP will adopt GLPTLP's Procurement Procedure policy which was filed with the Board in GLPTLP's June 29, 2012 rate application (EB-2012-0300; Exhibit 4, Tab 2, Schedule 5, Appendix A). A copy of this procurement policy is included in Appendix 4D.
 - <u>Right-of-Way and Other Land Use Acquisitions</u>: When acquiring land rights, EWT LP will draw upon Hydro One's Land Acquisition Compensation Principles, filed in HONI's April 2008 Bruce to Milton Transmission Reinforcement Project leave to construct application.⁵ A copy of these Land Acquisition Compensation Principles is included in Appendix 4E.
 - <u>Licensing and Permitting</u>: As described in Section 2, HONI and GLPTLP have fulfilled numerous licensing and permitting requirements. EWT LP will follow the same high standard of licensing and permitting practices.
 - <u>Consultations with First Nations, Métis and Other Communities</u>: EWT LP will draw upon the advice and expertise of BLP and the Participating First Nations to execute the First Nations, Métis and Public Consultation Plan as set out in Appendix 10A.
 - Construction, Operation and Maintenance, and Project Management: EWT LP will follow the same high standards of construction management, operations and maintenance, and project management as HONI and GLPTLP. HONI's and GLPTLP's expertise in construction management, operations, maintenance and transmission project management is evident from their demonstrated ability to plan, construct, operate and maintain safely, reliably and economically their respective transmission systems, as described in Sections 2.1.2 and 2.1.3.

35306-2005 14465362.14

⁵http://www.hydroone.com/Projects/BrucetoMilton/Documents/HydroOne_Land_Acquisition_Compensation_Principles.pdf.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 4 Page **20** of **23**

- <u>Safety</u>: EWT LP will adopt the GLPTLP Health and Safety Policy, the Brookfield Safe Work Management System, and the Brookfield Contractor Safety Management Policy, included in Appendix 4G. These policies prioritize health and safety, the guiding factor in Hydro One's health and safety policies as well.
 - <u>Environmental Compliance</u>: EWT LP will adopt the GLPTLP Environmental Policy, included in Appendix 4H, which is consistent with the spirit of Hydro One's environmental policy.
 - Regulatory Compliance: HONI and GLPTLP have been regulated by the Board for a number of years, and EWT LP will adhere to the same high standards of regulatory compliance.

5

6 7

8

9 10

1 4.5 <u>Anticipated Challenges and Plans for Addressing Them</u>

- 2 The purpose of this Section is to describe some of the key challenges that will need to be
- addressed in order to achieve the required capacity and reliability for the Project, and EWT LP's
- 4 plans for addressing these challenges through the electrical design, structural design and
- 5 construction of the Project.
- 6 EWT LP believes the key challenges will be the terrain, weather, communications and species at
- 7 risk. These are discussed below.

8 4.5.1 Terrain and Weather

- 9 The terrain and weather are the same as those existing at the time of construction of the original
- 10 East-West Tie line. With today's improved technology and building materials, these challenges
- will be more easily overcome. However, as a result of the terrain and climate in the region, the
- 12 Project area is susceptible to rime ice loadings, high intensity winds and very low temperatures.
- 13 Careful attention to the effects of the low temperatures and to unbalanced loads on conductors of
- shedding ice will be important. This includes recognition of the effects of certain structure types
- placed at the crest of large hills and the mixing of very long and short spans in rolling terrain.
- 16 EWT LP understands that the circuits on the existing East West Tie line may have an
- 17 unattractive outage rate. This is likely due to lightning strikes in combination with poor
- 18 grounding, given the rocky terrain in the area. Regardless of the reason for this poor
- 19 performance, the Project will be designed to have a lower susceptibility.
- 20 Concerns regarding the difficult terrain in the region and other concerns related to geography are
- 21 as follows:
- Anticipated difficulties in obtaining permitting through Pukaskwa National Park;
- Accessing suitable existing road networks for construction and operation;
- Achieving separation from denser land use near Thunder Bay; and

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 4 Page 22 of 23

- Protecting against concurrent (all circuits) forest fire destruction or lightning storm damage.
- 3 Certain locations are only accessible in particular seasons. For example, in spring the freshet can
- 4 result in road washouts. Moreover, access to certain locations or the ability to undertake certain
- 5 activities at particular times may be restricted due to sensitive wildlife periods, night-time noise
- 6 concerns or dust control. Similarly, some activities will require certain weather conditions or will
- 7 only be able to be performed at a specific time of day. Also, some locations within the Project
- 8 area will have unpredictable weather, either on a day-to-day basis or on a seasonal basis. All of
- 9 these factors will present challenges to the Project schedule.
- To address and manage these challenges, EWT LP will ensure that it has selected the appropriate
- project design features and engaged a construction contractor with the necessary skill sets and
- 12 equipment to allow for unplanned adjustments to the project schedule. This may entail
- 13 transferring work teams to other Project locations when a particular location or locations are
- inaccessible for a period of time. EWT LP has developed a construction schedule that divides the
- 15 Project into three Sections Wawa to Marathon, Marathon to Nipigon and Nipigon to Lakehead -
- with construction work occurring in all three Sections in parallel. If construction personnel are
- set up for similar work in each of these three Project Sections, short term assignments between
- the Sections to accommodate delays or access issues in any one Section will help keep overall
- 19 Project construction progress on a tight schedule.

20 4.5.2 Communications

- 21 EWT LP recognizes the importance of effective communications for information, data sharing
- and record keeping on large projects, especially where there are many engaged parties (such as
- 23 stakeholders) spread over a geographically vast area and encompassing a wide variety of
- 24 perspectives. Miscommunications and the failure to communicate can be detrimental to a
- 25 project's chances of success.
- 26 EWT LP will configure and implement an array of communication tools and channels to keep
- team members, stakeholders, affected landowners, First Nations, Métis and other communities

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 4 Page **23** of **23**

- 1 informed of the development and construction plans for the Project. These tools will include
- 2 reports, newsletters, a project website and similar.

3 4.5.3 Species at Risk

- 4 Species at risk will be identified and evaluated during the environmental assessment. The
- 5 Ministry of Natural Resources has officially designated 30 species at risk in the Boreal forest that
- 6 comprises the majority of the Project area.⁶ For example, the Lake Superior Coast and Lake
- 7 Superior Uplands Linkage, which are within the Project area, are identified as the southern
- 8 extreme of the forest-dwelling woodland caribou habitat. The woodland caribou is designated as
- 9 'threatened' under Ontario's Endangered Species Act. EWT LP will therefore need to consider
- the implications of the Project on caribou habitat, noting in particular the potential effects of
- 11 linear features such as transmission lines on caribou persistence through predator travel
- 12 corridors.
- 13 Significant experience regarding environmental assessment and species at risk assessment is
- available to EWT LP from its partners, their related entities and its consultants. For example,
- 15 GLPTLP often encounters species at risk such as wood turtles along its existing transmission
- lines. EWT LP plans to follow a conservation-focused approach with respect to the woodland
- caribou and any other at risk species (e.g. Whip-poor-will) that may live within the proposed
- 18 Project corridor. It will ensure that the findings of the environmental assessment study are
- developed into a mitigation plan accepted by the Ministry of Natural Resources.
- 20 In addition, EWT LP's Environmental Consultant, AECOM, has significant experience
- 21 regarding species at risk and will assist in developing a plan to mitigate impacts to the woodland
- 22 caribou and other species at risk in the Project area.

⁶ Ministry of Natural Resources, Species at Risk - Boreal Forest, http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/276502.html; and Ontario Regulation 230/08 - Species at Risk in Ontario List.

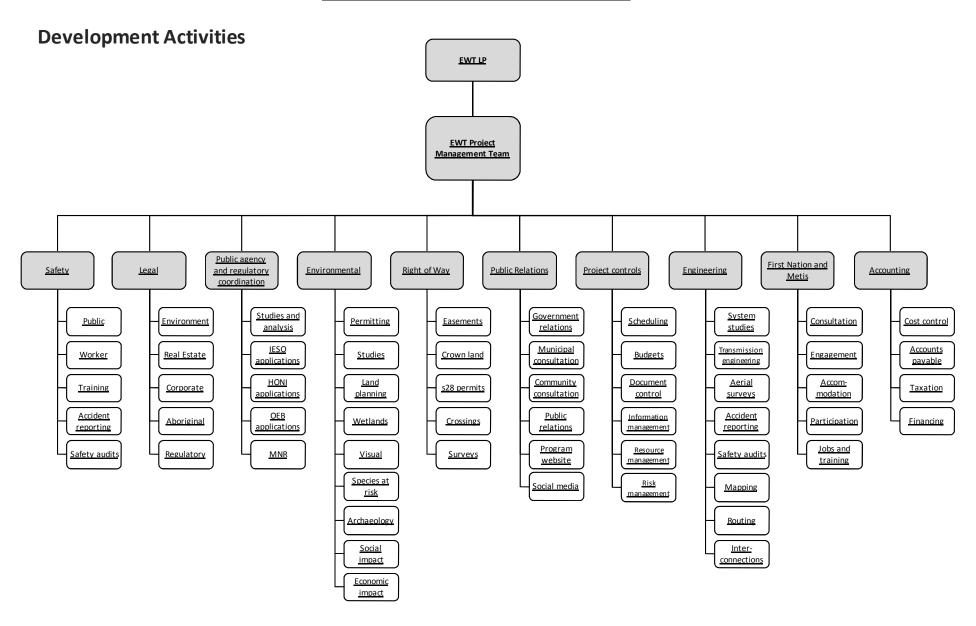
Ontario Ministry of Natural Resources, *Ontario's Woodland Caribou Conservation Plan*, http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@species/documents/document/277783.pdf.

PART A CAPABILITY OF THE APPLICANT

EXHIBIT 4 TECHNICAL CAPABILITY

Appendix 4A EWTLP Development Phase Project Activities Diagram

Appendix 4A – Development Phase Activities



PART A CAPABILITY OF THE APPLICANT

EXHIBIT 4 TECHNICAL CAPABILITY

Appendix 4B Technical Team Resumés



Erik Ruggeri



Professional Qualifications and Memberships

NOFFS

P.E., Civit: Idaho

P.E., Civil: Texas

P.E. Structural: Utah

Tu Beta Kappa

Sigma Pr Sigma (national physics honor society)

ASCE

SEE

Overhead Transmission Line Project Engineer

21 Years of Industry Experience

Mr. Ruggeri has extensive experience in civil and structural design for transmission lines in the 69 kV to 500 kV voltage range. His experience is wide ranging and encompasses all aspects of transmission line design including lattice steel, steel pole, concrete and wood structure design, foundations, conductor selection, sag and tension, transmission line surveys, structure siting and environmental compliance. He has designed new transmission lines, rebuilds of existing lines, and thermal upratings projects from 69 kV to 500 kV. He has extensive knowledge of PLS-CADD, and is also experienced in dynamic analysis and finite element modeling, specializing in analysis of EHV steel transmission towers.

Selected Project Experience

- ALCAN Smelters & Chemicals LTD, Cross Rope Support Replacement, Kemano-Kitimat 300 kV Line. British Columbia Oncor Electric Delivery, Morgan Creek Comanche 345 kV Line, Texas
- Toba Montrose General Partnership, Toba Inlet 230 kV Transmission Line, Canada
- Rio Tinto Alcan, Kemano-Kitimat 287 kV Line Catenary 2 Installation Project, British Columbia, Canada
- Taccma Power, Tacoma Upgrade Project. Washington
- Brazos Electric Cooperative, 14 Segment Uprating Project, Texas
- American Transmission Company, Columbia to N Madison 345 kV Transmission Line Rebuild, Wisconsin
- PB Americas, Alaskan Way Viaduct Replacement, Washington
- NextEra Energy Resources, Blythe Energy Julian Hinds 230 kV Transmission Line California
- American Electric Power, San Miguel-Lobo 345 kV Transmission Line, Texas
- Coos-Curry Electric Cooperative, Gold Beach to Brookings 230 kV Transmission Line Rebuild, Oregon
- TransAlta, Big Hanaford 500 kV Substation, Washington
- PowerTel Utilities, Millinocket-Chestnut 115 kV Line, Maine
- Vermont Joint Owners, 735 kV Structure Modeling and Review, Vermont
- Salt River Project, 500 kV Tower Analysis, Arizona
- Austin Erergy, Austrop Fayette 345 kV Line. Texas

Areas of Specialization

- 69 kV 500 kV transmission line design, including line layout, tower structural analysis and foundation design
- Mathematical modeling of dynamic systems
- Structural and seismic design for heavy equipment, vibrating machinery, and tall support structures
- Perturbation theory and vibrational analysis
- Uprating projects including structural modifications and construction techniques

Education

M.S., Aeronautics and Astronautics, University of Washington, 1991

B.S., Mathematics, University of Puget Sound, 1989

B.S., Physics, University of Puget Sound, 1989



Holger Peller



Substation Project Manager

20 Years of Industry Experience

Mr. Peller is the Director of POWER's Substation Business Unit, managing 275 people in 17 offices across the U.S. In this role, he is responsible for managing major clients, senior personnel recruiting, project and client resource allocation, contract negotiations, project coordination with other POWER business units, and the overall quality control process for substation projects. Mr. Peller's background is substation design, and during his career he has overseen the design and construction of many new substations and substation modifications/additions as well as handling program manager responsibilities for large suites of projects. He has performed quality control and design reviews and has been directly involved in the creation of substation physical layouts, grounding design, one-line and three-line diagrams, control schematics, and annunciator and SCADA schematics for projects through 500 kV. He has been responsible for the detailed design of relay protection schemes, microwave systems, power line carrier, fiber optic, and tone communication for the implementation of relaying and transfer trip schemes. He has also been involved in the testing and energization of station facilities.

Professional Qualifications and Memberships

NCEES

P.E. Flectrical: Rhode Island

P.E., Electrical: Idaho

2.E., Electrical Oklahoma

P.E. Electrical Texas

Selected Project Experience

- San Diego Gas and Electric, Imperial Valley 500/230 kV Substation Transformer Additions, California
- San Diego Gas and Electric, Miguel 500 kV GIS Substation, California
- Padoma Wind Power, LLC, San Juan Mesa Balance of Plant Wind Farm, New Mexico
- Brazos Electric Cooperative, Hugo to Valley South 345 kV Project, Texas
- Caithness Energy, Blythe Energy 230 kV Switchyard, California
- Oncor Electric Delivery, Crez 345 kV (20) Projects, Texas
- Bryan Texas Utilities, Atkins Substation Project, Texas
- Homer Electric Association, Pebble Project Power Supply, Alaska
- PB Americas, Alaskan Way Viaduct Replacement, Washington
- Babcock and Brown. Wessington Springs Wind Project Engineering, South Daledts
- Western Farmers Electric Cooperative, Anadarko Substation Upgrade, Oklahoma
- American Electric Power, Various Substation Design Projects, Multiple States

Areas of Specialization

- Substation physical arrangement
- Project scheduling
- Breaker installations
- AC and DC station service load
- Substation automation
- EHV up to 500 kV
- SCADA
- Transformer installations
- Communication schemes
- Fluent in German
- Cost estimating
- Relaying schemes
- Capacitor bank installations
- Metering
- requirements

Education

Bachelor of Science, Electrical Engineering, Gonzaga University, 1992



Stan Sostrom

PROJECT ENGINEER



Substation Project Engineer

33 Years of Industry Experience

Mr. Sostrom is recognized as one of POWER's leading specialists for substation engineering and project management. His broad experience covers all aspects of a substation project from initial studies through design, construction, testing, commissioning and maintenance. As a Project Engineer/Design Engineer, Mr. Sostrom brings deep technical skill to a variety of projects including those using leading-edge technologies such as battery energy storage systems (BESS), STATCOM, and static var compensators (SVC). He often functions in a QA/QC role responsible for quality control and adherence to standards. As a Project Manager, he has successfully guided some of POWER's most challenging assignments. These challenges have included aggressive schedules, technical complexity, and stringent design requirements. In addition to project roles, Mr. Sostrom also is successful under a variety of contract delivery methods, whether POWER's role is as an EPC prime, owner's engineer, or contracted engineer. Whether a substation project's demands are technical or managerial in nature, Mr. Sostrom applies the needed expertise to achieve successful results.

Professional Qualifications and Memberships

EEE

Selected Project Experience

- PacifiCorp, Gateway West Transmission Project, Western US
- Central Maine Power Company, Maine Power Reliability Program, Maine
- PacifiCorp, Gateway South Transmission Project, Western US
- Northeast Utilities, Glenbrook STATCOM, Connecticut
- Northeast Utilities, Middletown Substation Breaker Replacement and Relay Upgrades, Connecticut
- Northeast Utilities, Bunker Hill EPC Substation, Connecticut
- Morenci Water and Electric Company, Morenci 345 kV Interconnection, Arizona
- PECO Energy, 230 kV Buckingham Substation Capacitor Bank Addition, Pennsylvania
- Public Service of New Hampshire, Scobie Pond 345 kV Substation Upgrade, New Hampshire
- Public Service of New Hampshire, Jackman Substation Upgrade, New Hampshire
- Morenci Water and Electric Company, Southwest Transmission Cooperative Greenlee 345-230 kV Substation, Arizona
- Central Maine Power Company, South Gorham 345 kV Substation Expansion, Maine
- Morenci Water and Electric Company, Copper Verde Transformer Addition,
- Entergy, Hartburg 500 kV Substation Expansion, Texas
- Exelon Corporation, Goodings Grove 345 kV Substation Upgrade, Illinois
- San Diego Gas and Electric, Otay Mesa Substation, California
- Western Area Power Administration, 500 kV Series Capacitor Banks, California
- Idaho Power Company, 230 kV Substations, Idaho
- Puget Sound Power & Light, DuPont Substation, Washington
- Bonneville Power Administration, SCADA and SEMR Projects
- Western Area Power Admin., Flagstaff 345kV Substation, Arizona



Jon Leman

P.E.



Professional Qualifications and Memberships

HEER

PES

P.E. Electrical Idaho

Electrical System Studies Engineer

11 Years of Industry Experience

Mr. Leman is an electrical engineer with experience in analysis and design of AC and DC power delivery systems. He has performed various transmission studies to specify and evaluate the electrical design of HV and EHV lines. As project engineer he has successfully provided leadership and technical guidance for large study projects. He has training in power system modeling, protection and relaying, power system planning, fault analysis, transient analysis, are hazard analysis, and grounding. He has also served in the United States Navy as an instructor of electrical engineering.

Selected Project Experience

- TransWest Express, 600 kV HVDC Transmission Line, Multiple States
- NorthWestern Energy, Mountain States Transmission Intertie Electrical Studies, Multiple States
- CapX2020, Fargo-St. Cloud 345 kV Transmission Project, Minnesota
- Kenny Construction Company, 500 kV Trans Allegheny Interstate Line, Multiple States
- Clean Line Energy Partners, Plains & Eastern HVDC Line, Multiple Locations
- Brazos Electric Cooperative, Hugo to Valley South 345 kV Project, Texas
- Tesoro, Golden Eagle 230/15 kV Switching Station, California
- Central Maine Power Company, Heywood 115 kV Switchyard and Transmission Interconnection, Maine
- Mirant, Arc Flash Hazard Analysis, Multiple Locations
- First Wind, Milford Wind Corridor Project, Utah
- South Texas Electric Cooperative, Bakersfield to Big Hill CREZ 345 kV Transmission Line, Texas
- Caithness, Dixie-Valley 230 kV Line Rating Study, Nevada
- Pebble Mine, 230 kV Transmission line, Alaska
- Werner West Substation, Grounding System Design & Analysis, Wisconsin
- Master's Thesis, Real-Time Simulation of DC Fault Dynamics
- Bryan Texas Utilities, East Substation Capacitor Inrush, Texas

Areas of Specialization

- Transmission System Analysis
- Distribution System Analysis
- Transient Analysis
- · Arc Hazard Analysis
- Fluent in Spanish
- Reactive Compensation
- Insulation Coordination
- Short Circuit Analysis
- Power System Protection and Relaying
- Load Flow Analysis
- Substation
 Grounding Analysis

Education

Master of Science, Electrical Engineering, University of Idaho, 2010 Bachelor of Science, Electrical Engineering, University of Idaho, 2001 Power System Protection and Relaying, University of Idaho, 2005



Jon Jablonsksi

CPN



Professional Qualifications and Memberships

Certified Purrhasing Manager

Procurement Specialist

21 Years of Industry Experience

Mr. Jablonski has experience in supply chain management and contract administration for all facets within the power generation, T&D, EPC and consulting business. Mr. Jablonski also has experience specializing in transportation, logistics and expediting relating to principal agency relations, and leasing agreements for all modes of transportation. He has performed procurement and contract administration services for geothermal. T&D line and substation, smart grid applications, SCADA, facilities and EPC projects.

Selected Project Experience

- Ram Power, Polaris Energy Nicaragua, San Jacinto-Tizate Geothermal Power Plant, Leon, Nicaragua
- Frozen Food Processor, Design-Build Robotic Palletizing for Frozen Soup Product, Midwestern US
- Leading Coffee Manufacturer, Roaster Train Preliminary/Final Engineering and Construction Management, Western US
- Idaho Transportation Department, Phase 1 Intelligent Transportation System (ITS) Signalization Project, Pocatello, Idaho
- Güris Holding, Germencik Dual-Flash 47 MW Geothermal, Turkey
- Mitsubishi Heavy Industries Olkaria II 64 MW Geothermal, Rift Valley, Kenya
- Edison Mission Energy, Muddy Creek 138 kV Switchyard, Wyoming
- City of Mesa, West Loop ITS Fiber Installation, Mesa, Arizona
- Chevron, 46 kV Substation, Flawaii

Areas of Specialization

- Development of approved procurement procedures
- Procurement schedules
- Contract logistics and transport services
- Project closeout

- Material tracking and
 expediting
- Receiving, warehousing, and inventory control
- Export / import documentation
- Preparation of requisitions and purchase orders
- Bid analysis and procurement negotiations
- Bid document and bid package preparation

Education

Bachelor of Finance, Villanova University, 1975



Chris Mercer

Project Material Specialist

31 Years of Industry Experience

Mr. Mercer is a project material specialist with extensive experience in providing material packages for transmission, distribution and substation projects up to 500 kV for numerous construction contractors, consulting engineers and utilities. He has performed material sourcing and expediting for delivery of project materials to specified and often remote jobsites. His responsibilities have included design, bidding, purchasing, shipping, and receiving for small and large scale jobs. Mr. Mercer is adept in coordination and troubleshooting of material handling between designers, manufacturers, suppliers, and final construction sites.

Selected Project Experience

- Edison Mission Energy, Mountain Wind I Transmission Upgrades, Wyoming
- Edison Mission Energy, Mountain Wind II Transmission Line Rebuild, Wyoming
- Central Maine Power Company, South Gorham 345 kV Substation Expansion, Maine
- · First Wind, Milford Wind Corridor Project, Utah
- Southern California Edison, NextEra Sagebrush 220 kV Line Reroute, California
- Reunion Power, Idaho Wind Partners I Wind Farm Projects, Idaho
- NV Energy, One Nevada (ON Line) Transmission Project Quality Assurance, Nevada
- · UPC Wind, Transmission Line, Utah
- Alaska Electric Light & Power, Dorothy Lake 138 kV Transmission Line, Alaska
- Alaska Energy Authority, 230 kV Intertie Project, Alaska
- LMEC/DEC Constructors, LMEC/DEC Energy Center 115 kV/230 kV Interconnect Project. Pittsburg, California
- Wilson Construction, Hermiston 500 kV Power Project, Oregon
- PG&E National Energy Group, Harquahala 500 kV Project, Arizona
- Idaho Power Company, Brownlee-Paddock 230 kV Transmission Line, Idaho
- Mirant, Apex 500 kV Interconnection, Nevada
- Public Service Company of New Mexico, Afton 345 kV Switchyard, New Mexico
- Salt River Project, Rudd 230 kV Transmission Line, Arizona
- Midway-Sunset 230 kV Transmission Line, California Phelps Dodge, Morenci Mine 44 kV Project, Arizona

Areas of Specialization

- Material sourcing
- Material troubleshooting
- Material handling

Education

Master of Arts, Geography, Oxford University, 1967



Ross Pritchard

CPN



Program Manager Lead

29 Years of Industry Experience

Mr. Pritchard serves as POWER's Director of Program Management for the company's Power Delivery Division. Ile has proven abilities in leadership, management, contract negotiating, estimating, scheduling, procurement and construction management activities. He has specialized experience successfully managing multiple concurrent projects for multi-year Design Build, EPC and Program Management service contracts. Previously. Mr. Pritchard has served as Burns & McDonnell's Design-Build Construction Operations Manager.

Professional Qualifications and Memberships

California Class "A' Engineering

Class "A" General Contractor, Pikes Peak Region, Colorado

Building Unlimited & Heavy (All Classifications) & Buildings, Arkansos

General & Heavy Construction, Louisiana

General Building, Municipal, Public Works & Heavy Construction, Mississippi

General Building – Unlimited, North

General Construction, South Carolina

Heavy Highway, Virginia

OSHA 10-Hour Construction Safety & Health

OSHA 30 Hour Construction Safety & Health

Selected Project Experience

Following is a list of projects Mr. Pritchard managed while with previous employers:

- Program Management of EPC Transmission Line Projects
- Electrical Substations
- Data Collection Centers
- Navy Fueling Projects
- Energy Services California Prison Project
- Environmental Projects
- Process Facilities (Food, Oil and Chemical)
- Underground Utility Projects
- Civil Projects
- Navy Laboratory Design Project
- Navy Training Centers
- Navy Aircraft Hangar
- Navy Air Traffic Control Tower
- Energy Service Projects
- Military Aircraft Testing Facility
- Military Aircraft Coating Facility
- Plating Shop
- Power Cenerating Facility
- Waste Water Treatment Plant
- Electrical Substations
- Combined Cycle Power Generating Facility
- Program Management of Airport Terminal Renovations
- Horizontal Collector Well
- Cooling Tower
- Fuel System Upgrades
- BHA Technologies Manufacturing Facility US Airways, Aircraft Maintenance Facility
- Ryder Logistics, Distribution Center
- MetoKote Painting Facility
- Walker Systems, Inc. Manufacturing Facility
- · Rohr Manufacturing, Road Work
- Universal Sound Stage



Areas of Specialization Program

- management EPC contract negotiations
- Project management
- Construction management

Education

Bachelor of Arts, University of Arkansas, 1983



Mohanbir Mehta

Program Manager

33 Years of Industry Experience

Mr. Mehta specializes in the management and execution of large program efforts in the power delivery industry, with project experience in the U.S., Canada, India, Middle East, and other locations worldwide. His accomplishments include transmission line, substation, and SCADA projects, including those involving advanced technologies such as SVC, HVDC and gas-insulated substations. Mr. Mehta is skilled at navigating technically and logistically complex projects, coordinating multiple project participants, assembling and directing project execution teams, and resolving conflicts for successful project completion. He brings technical expertise in control systems engineering along with design and project engineering experience from different projects and industries.

Professional Qualifications and Memberships

Six-Sigma Green Belt & Teach the Trainer

AREVA Project Management SAP 101

Selected Project Experience

- Manitoba Hydro, 115 kV SVC at Ponton Substation, Canada
- National Grid, Brayton Point Feeder Substation. Rhode Island
- Holy Cross Energy, 115 kV GIS Substation, Colorado
- Northeast Utilities: Glenbrook Substation, Connecticut.
- Maharashtra State Transmission Company, Fransmission Line Program, India
- Qatar State Electrical, Greenfield Substation Program, Qatar
- Anglo American, 130 MVAR SVC, Brazil
- Egyptian Electric Company, USAID Substation Project, Egypt
- Manitoba Hydro, Dorsey Bi-Pole/Substation, Canada

Areas of Specialization

- Program / Project management for large power delivery projects
- International project management
- Control systems engineering

Education

Bachelor of Science, Honors Degree, engineering, Lanchester Polytechnic (University of Coventry), 1979



Peter Catchpole

P.ENG



Engineering Project Manager

41 Years of Industry Experience

Mr. Catchpole is a Senior Project Manager with broad experience in all facets of transmission system projects. He has held various engineering management positions throughout his career, including assignments as overall Project Manager for transmission projects, as well as Manager of POWER's transmission line design group. In these roles he has been responsible for successfully organizing and directing teams of engineers, project control/scheduling, cost estimating, construction management, and the other subject matter expertise needed to design, procure and construct transmission line and substation projects. Mr. Catchpole's project experience for transmission line projects includes experience in the areas of transmission line siting, design of transmission lines and substations, ROW acquisition, procurement, preparation of construction bid specifications (EPC and Design-bid-build), procurement, and construction management.

Prior to joining POWER in 1992, Mr. Catchpole held various positions in Ontario Hydro and Great Lakes Power and was responsible for various transmission line and substation projects and standards development. Additionally, Mr. Catchpole owned and operated his own engineering design company. His experience and creative outlook have allowed the development of a deep and valuable insight into design principles and the engineering-construction relationship. He has world-wide contacts with respect to transmission line issues and is a sought after participant in CIGRE proceedings. Mr. Catchpole was instrumental in the development and organization of POWER's Power Delivery Design Conference, which attracts utility participants from across the US and Canada and various parts of the world. The conference is now in its 20th year, includes overhead & underground transmission line, substation, and electrical system relaying and studies topics & presentations. Much of the success and popularity of the conference is due Mr. Catchpole through application of his organizational and leadership talents.

Professional Qualifications and Memberships

IEEE

ASCE

CIGRE (Specific roles have included: Faint Working Group, Line Up Rating Technologies, and Committee Chair for Sate Use of Carts on Aged Constructors)

P.Eng., Civi: Octario P.Eng., Civi: Alberta

P. Eng., Civil: British Columbia

Selected Project Experience

- PacifiCorp, Gateway South Transmission Project, Western US
- Rio Tinto Alcan, Kemano-Kitimat 287 kV Line Catenary 2 Installation Project, British Columbia, Canada Northern States Power, Minnesota-Manitoba Transmission Upgrade Project
- ALCAN Smelters & Chemicals LTD, Kemano-Kitimat 300 kV Line Modifications, BC
- Alaska Energy Authority, Tyee 138 kV T-Line Improvement Project, Alaska
- U.S. Army Corps of Engineers, Hartha-Al Qut 400 kV Transmission Line Restoration, Iraq
- · Sierra Pacific Power Company, Falcon to Gonder 345 kV Line, Nevada
- Sierra Pacific Power Company, ENTi 500 kV Line, NV and Falcon-Gonder 345 kV Line, Nevada
- Transpower, North Island 400 kV Line, New Zealand
- Alberta Electric System Operator, Edmonton-Calgary 500 kV Line, AB, Canada



- Nebraska Public Power District, Pauline-Moore 345 kV Transmission Line, Nebraska
- Nebraska Public Power District, Grand Island-Moore 345 kV Transmission Line, Nebraska
- W23K & K24G Design Criteria, ON, Canada
- Oncor Electric Deliver, Morgan Creek Comanche 345 kV Line, Texas
- Tacoma Power, Tacoma Narrows 230 kV Upgrade Project, Washington
- Power Tel Utilities, Prince Wind Farm 230 kV Transmission Line, ON, Canada
- PowerTel Utilities, Erie Shores 115 kV Transmission Line, ON, Canada
- MEC Engineering, Costa Sur-Auguas Buenas 230 kV Transmission Line, Puerto Rico
- Chugach Electric Association, Southern Intertie Project, Alaska
- · San Diego Gas and Electric, Valley-Rainbow 500 kV Interconnect, California
- Great Lakes Power, Anjigami #2 230 kV Transmission Line Replacement, Canada
- Sunoco, Inc./Citizen's Power & Light, St. Clair River Crossing 320 kV Feasibility Study, Michigan and ON, Canada
- Miramor Con Mine, Bluefish Hydro Expansion Project, Northern Territory, Canada

Areas of Specialization

- Project Management
- Design of conductor systems, structures and foundations
- Analysis of line strengths and capacities
- Site selection
- Lines and stations arrangement and layout
- Cost estimating
- Material selection and specification
- Specification and contract writing
- Construction management
- Project engineering
- Procurement

Education

Bachelor of Science, Civil Engineering Queens University of Kingston, 1971 ECE Course, Computer Aided Structural Engineering, University of Toronto, 1985

Human Factors Engineering, Harvard University, 1986 ECE Course, Transmission Line Design, University of Wisconsin, 1993



Larry Henriksen P.E.



Network Studies Project Engineer

43 Years of Industry Experience

Mr. Henriksen has been responsible for a broad range of electric power system engineering activities at the detailed design, supervisory, and management levels. In addition to his design and management experience at POWER, he has served as Chief Engineer for an electric utility, and Director of Systems and Services for a major manufacturer of electrical relays. Mr. Henriksen maintains a technical focus on electrical system protection and related electrical studies activities in addition to participating in planning and special projects. His experience includes electrical system protection; transmission and substation planning, design, and construction; transmission line routing, siting and permitting; distribution system protection, expert testimony, installation and operation of computer-based SCADA systems; distribution engineering; electrical systems studies; testing and commissioning; project management and budgeting; specification and procurement of major electrical equipment; right of way; construction management and inspection; and establishing maintenance and operations procedures.

Professional Qualifications and Memberships

IEEE

P.E. Electrical: Idaho

P.E. Electrical: Washington

Selected Project Experience

- PacifiCorp, Gateway West Transmission Project, Western US
- Great Basin Transmission South/NV Energy, One Nevada 500 kV Transmission Line, Nevada
- PacifiCorp, Gateway West Transmission Project, Western US
- TransWest Express, 600 kV HVDC Transmission Line, Multiple States
- NorthWestern Energy, Mountain States Transmission Intertie Electrical Studies, Multiple States
- Public Service of New Hampshire, Scobie Pond 345 kV Substation Upgrade, New Hampshire
- PB Americas, Alaskan Way Viaduct Replacement, Washington
- Sulphur Springs Valley Electric Cooperative, Fort Huachuca Substation Relay Replacement, Arizona
- Southwest Transmission Cooperative, Hackberry 230/69 kV Substation, Arizona
- Entergy, Plum Point 500 kV Transmission Line Interference Analysis, Arkansas
- Nebraska Public Power District, 345 kV Electric Transmission Reliability (ETR)
 Project, Nebraska
- First Wind, Milford Wind Corridor Project, Utah
- Public Service Company of New Mexico, Afton 345 kV Switchyard, New Mexico
- Interstate Construction, Pastoria 230 kV Switchyard, California
- Mirant, Apex 500 kV Interconnection, Nevada
- Entergy, Hartburg 500 kV Substation Expansion, Texas
- Western Power, Western States 500 kV Intertie AC vs DC Evaluation, Idaho
- Calaveras County Water District, Collierville-Bellota 230 kV Transmission Line, California
- Idaho Power Company, Midpoint Borah 345 kV Transmission Line Reliability Assessment, Idaho
- Citizens Utilities Company, 230 kV Kingman Havasu Transmission Project, Arizona



Areas of Specialization

- Project Management
- Electrical system protection
- Transmission and substation planning, design, and construction
- Transmission line routing, siting and permitting
- Installation and operation of computer-based SCADA systems
- Establishing maintenance and operations procedures
- Right of way
- Specification and procurement of major electrical equipment
- Electrical systems studies
- Protective relaying

- Construction management and inspection
- Project management and budgeting
- Testing and commissioning
- Distribution engineering
- Expert testimony

Education

Masters of Engineering , Electrical Engineering, University of Idaho, 2001 Bachelor of Science, Electrical Engineering, Washington State University, 1975 Bachelor of Science, General Engineering, Idaho State University, 1968

Publications

- With Jon Leman, P.E. and Brian Berkebile, P.E., POWER Engineers. "Fault Current Rating of Optical Ground Wires", POWER Transmission Line Conference, 2008
- With Patrick Bradshaw and Vincent Duong, Public Service Company of New Hampshire, Vernon Padaca, P.E., POWER Engineers. "Protection System for a 115 kV Double-Wye Fuseless Undergrounded Capacitor Bank", Georgia Tech Protective Relaying Conference, 2006
- With Daren Phelps, Calpine Corporation; Greg Rauch, Schweitzer Engineering Laboratories; and Aaron Wilson, POWER Engineers. "Three Terminal 230 kV System Protection and Restoration at Calpine's Creed and Goose Haven Energy Centers," Western Protective Relaying Conference, Spokane, Washington, 2003
- With David Gardner. "Value Engineering Strategies for Wind Generation Projects," IBC Wind Conference, Boston, 2002

Roberto Behncke



PH.D



Professional Qualifications and Memberships

IEEE

ASCE

CIGRE

AISC

Senior Project Engineer

32 Years of Industry Experience

Dr. Behncke has extensive overhead transmission line and tower design experience on projects ranging from 132 kV to 765 kV. He has been responsible for the design and testing of lattice steel towers and has developed techniques for structural optimization of guyed towers, including the cross rope suspension configuration. Dr. Behncke also has experience in optimized transmission line design, where special techniques are used to determine cost effective design parameters with the inclusion of all the typical constraints and design requirements. He is familiar with the latest software for tower, conductor system and transmission line modeling and analysis. A native of Argentina, Dr. Behncke has worked on projects around the world and as an engineering consultant in South Africa and the United Kingdom.

Selected Project Experience

- Cuarta Linea 500 kV, 1,300 km Transmission Project (with Chainette towers), Argentina
- Alicura 500 kV, 1,650 km Transmission Project, Argentina
- Camden/Duhba 400 kV, 600 km (with Chainette towers), South Africa
- ESKOM, 765 kV, 900 km Alpha-Beta Transmission Line, South Africa (with Chainette Towers)
- National Grid UK, Multiple Consulting Projects for high voltage international project
- NorthWestern Energy, MSTI 400 mile, 500 kV Transmission Line, Montana and Idaho
- Manitoba Hydro, 500 kV Transmission Line Restoration Program, Canada
- Confidential Client, 500 kV Transmission Line Restoration Project, Minnesota
- TransWest Express, 600 kV, 725 miles HVDC Transmission Line, Multiple States
- NV Energy, One Nevada 500 kV, 200 mile Transmission Line Prelim. Engineering, Nevada
- Great Basin Transmission Line-South, One Nevada 500 kV Transmission Line,
 Nevada
- San Diego Gas & Electric, Valley-Rainbow 500 kV Interconnect, California
- IEC Corporation, LADWP/IEC Multiple Lines LiDAR Mapping & Modeling, California
- US Army Corps of Engineers, Hartha-Al Qut 400 kV Transmission Line Restoration, Iraq

Areas of Specialization

- Design and testing of steel towers
- Design of conductor systems, structures and foundations
- Project engineering
- Optimized transmission line design
- Material selection and specification
- Transmission line modeling
- Analysis of line strengths and capacities

Education

PhD, Structural Mechanics, University of Witwatersrand, South Africa, 1992 M.S. Civil Engineering, University of Witwatersrand, South Africa, 1986 B.S. Electromechanics, National Technological University, Argentina, 1976

Daniel M. Doucet MRICS, AACI, P.App



Executive Vice President

28 Years of Industry Experience

Daniel has over 28 years experience as a real estate appraiser. His work as a generalist began in Eastern Canada covering all four Maritime Provinces. Since joining Altus, Daniel has been involved in numerous high profile assignments in Ontario as well as British Columbia. Although having appraised all types of properties his specialty is litigation and Expropriation assignments, vacant land, agricultural and special purpose properties. Daniel's has been declared an expert witness before various courts and tribunal in the field of real estate appraisal.

Daniel has spoken at a number of industry conferences on the subject of land valuation techniques such as the Subdivision Development Approach.

Daniel is currently a member of the Expropriation Practice Group of the Altus Group Research, Valuation and Advisory Division and is lead of Altus's new National Right of Way Initiative.

Professional Qualifications and Memberships

Member of the Royal Institution of Chartered Surveyors (MRICS)

Accredited Appraiser (AACI) - Appraisal Institute of Canada

Member of the International Right of Way Association

Member of the Ontario Expropriation Association

Selected Project Experience

A sample of projects completed within the last 18 months include:

- MTO over 40 valuation assignment for the 407 East Expansion
- Hydro One Bruce to Milton Reinforcement Project, over 100 appraisals from 2007 to 2010
- Peel District School Board valuation of over 50 future school sites for Education Development Charge negotiations
- Hydro One Valuation of rural farm properties for lease renewals
- Land Valuation for national Developer in the GTA Over 40 properties
- Ontario Realty Corporation Valuation of Huronia Regional Centre, Orilla
- Public Works & Govt. Services Canada Market Analysis and Studies

Committee Work

Altus Group – Management Committee for Research, Valuation and Advisory ("RVA") Division

Altus Group - Expropriation Practice Group

Education

Farming Technology Diploma

Member of the Royal Institution of Chartered Surveyors (MRICS)

Accredited Appraiser (AACI)

David M. Simes

B. COMM (HONS), AACI, P.APP., MRICS, CCIM





Director

27 Years of Industry Experience

Dave is currently Director, Land, Industrial and Multi-Family Divisions, Altus Group, Calgary RVA and is Head of Altus National Right of Way Initiative

This position involves the preparation of a variety of valuation and consulting services to new and existing clients, partnering with other business units to explore synergy opportunities, managing and providing leadership to a small to mid size valuation team, working in partnership with Senior Directors to implement strategies and business plans developed by Management to achieve the Business Unit's strategic goals.

Dave was Broker/Owner of a national real estate brokerage franchise in Manitoba for 17 years before moving to Alberta in 2004. He has five years experience instructing in the Business Administration Diploma Program, University College of the North, The Pas MB.

Most recently, Dave has appeared as an expert witness in front of the Land Compensation Board regarding expropriation in the Victoria Park area of the City, and served as an expert witness in recent Court of Queens Bench Trial.

Further recent engagements as an expert witness include valuation for litigation of several high profile failed projects in Calgary's Beltline, as well as several high profile failed resort developments in Alberta and British Columbia.

Professional Qualifications and Memberships

AACI, P.App., Appraisal Institute of Canada

MRICS, Member Royal Institute of Chartered Surveyors

CCIM, Certified Commercial Investment Member

International Right of Way (IRWA) Member

Urban Land Institute Member

Alberta Expropriation Association Member

Selected Project Experience

Altalink SFTP 60 km ROW, NFTP 160 km ROW, Southern Alberta Province of Manitoba, Trans Canada Highway Expropriation, Winnipeg MB Genesis Lands Portfolio Analysis, AB and BC Walton Northpoint Lands, Fee Simple and UDI, Calgary AB Walton Arizona Lands, Fee Simple and UDI, Arizona, USA Husky Kodiak Lands, Lloydminster AB ATCO Pipeline ROW, Rocky View County AB Bow River Utility Site, City of Calgary Enmax Transmission Line Relocation, Calgary AB Hydro One Project, Kenora ON Resort At Copper Point, Calgary AB Three Sisters Mountain Village Resort, Canmore AB Silvertip Resort, Canmore AB Gateway Midtown Condominium Project, Calgary AB Astoria on Tenth Condominium Project, Calgary AB Arriva 42 Condominium Project, Calgary AB Keynote Condominium Project, Calgary AB The Drake Condominium Project, Calgary AB London at Heritage Station, Calgary AB Jumping Point Residential Development, Cochrane AB TRC Ranch Residential Development, Cochrane AB Lakepoint Residential Development, Chestermere

Altalink BMW Line, 250 km ROW, Southern Alberta





Professional Qualifications and Memberships

Current 2nd Vice President Toronto Chapter, of the International Right of Way Association

Accredited Appraiser, Appraisal Institute of Canada (AACI)

Professional Land Economist (PLE) Association of Ontario Land Economist

Senior Member(SR/WA) of the International Right of Way Association

Member of the Ontario Expropriation Association

Education

Bachelors of Arts (BA). York University

Appraisals Institute of Canada (AACI)

International Right of Way Association (SR/WA)

Director, Expert Services

23 Years of Industry Experience

Mr. Wong has over twenty three years of experience in providing acquisition and valuation advisory services to clients within the private and public sectors.

Jay has experience in appraising a wide range of real estate types. More recently he has worked for a Municipality acquiring land interest in a major urban transportation infrastructure project. He has experience in acquisition, valuation as well as review of appraisals for expropriation matters.

Selected Project Experience

Highway 7

Markham, ON Managed the acquisition and expropriation of a major urban linear project on Highway 7 for York Region's VIVA's Bus Rapid Transit.

Acquisition consisted of partial taking of both fee simple and easement interest for the road widening project.

Region of Peel

Peel, ON Valuation and advisory for the acquisition and expropriation of lands along The Gore road, a regional urban roadway for road widening purposes.

Eglinton-Crosstown LRT-Light Rapid Transit

Foronto, ON

Valuation and advisory to
the City of Toronto for
the acquisition and
expropriation of lands for
a major urban transit
renewal project. (full
buyout as well as partial
taking from private
owner for a hydro

Middleton Avenue

easement)

Markam, ON
Valuation and advisory to
the City of Markham for
the disposition of land
with respect to the
Midland Avenue
extension.

MetrolinxWhitby

Whitby, ON Research and advisory to Metrolinx for the Whitby rail yard regarding possible damage to property value to affected owner.

Metrolinx GO-Transit

Mississauga, ON Negotiation and advance purchase appraisal of land for Metrolins GO-Transit commuter stations.

Region of Peel

Peel, ON Valuation and advisory for the acquisition and expropriation of lands for road widening purposes.

Mark Andrew Menzel

B. GEOSPATIAL SCIENCE



GIS Analyst

Mark brings proven skills to achieve project deadlines and work with multiple stakeholders.

His experience includes installation and administration of ESRI software and advanced spatial analysis. Mark has also trained in Python Scripting and Geoprocessing using Model Builder.

Education

Geographic Information Systems, B.GeoS, University of South Australia

Selected Project Experience

- BHP Web Mapping Portal Adelaide, Australia Create mapping portal for display of site plans and drill hole data
- Project Expenditure Visualization -Adelaide, Australia Analyze, display and report on current and past expenditure on transport projects
- Plan Data Capture System-Adelaide, Australia Develop processes for capture of development proposals into the GIS

Areas of Specialization – GIS and Surveying

- Proficient in ArcGIS 9.2 10 and extensions:
 - · Network Analyst
 - Spatial Analyst
 - Schematics
 - Topology validation and editing
 - Model Builder
 - 3D Analyst
 - JTX/WMX
- SDE geodatabases administration, including versioned editing and replication
- Python scripting
- Basic Flex and Silverlight development
- Database SQL queries

- Digital image enhancement
- Site selection
- Map enhancement/optimization for web mapping services
- G.P.S. data acquisition
- Installation of ArcGIS Desktop, ArcGIS Server and Image Server extension, ArcSDE, Dekho and Microsoft SOL Server
- ArcGlobe
- ArcPad 8.0
- IntegraphGeomedia
- Integraph G/Technology
- MapInfo

Norm Dickson



Director, Infrastructure

20 Years of Industry Experience

Norm has overseen the western Canadian operation of the Infrastucture group including right of way planning, land information systems and site aquisition activities related to telecom and transmission projects.

Mr. Dickson has provided numerous solutions for clients focusing on practical and effective GIS solutions. Most recently, Mr. Dickson has worked as the primary Geospatial Infrastructure Architect for the Government of Newfoundland. Mr. Dickson's strength is understanding business requirements and being able to translate those into geospatial architecture that will meet the needs of the business.

Education

University of Calgary

Selected Project Experience

- GIS System Design Architect for Government of Newfoundland and Labrador Geospatial Infrastructure design project.
- Build IT infrastructure from scratch; 20+ servers and 150+ workstations in 4 offices.
- Design Distributed Application infrastructure for centralized system and data support.
- Develop and implement all annual IT business plans, capital and operating budgets.
- Design and implement Project Tracking database and field data collection, realtime and billings infrastructure.
- Provide strategic IT direction characterized by Innovative and cost effective solutions that both improve efficiencies and enable business units to achieve their initiatives.
- Act as business analyst/liaison between IT and nine regional and eight professional/technical departments.
- Responsible for the analysis, scoping, development, management, and implementation of numerous in-house database applications, as well as internal applications and custom commercial applications for Oil and Gas clients.

Areas of Specialization

- Workflow Analysis / Dataflow / Activity Diagramming
- Application Development Management
- Requirements Engineering,
 Requirements Development and
 Evolution
- Data Development
- Application Design
- IT Infrastructure planning and Implementation
- Spatial and Non-Spatial Data Analysis
- Geodatabase Design Specification

Robin Comfort

PLE





Senior Director, AGI

22 Years of Industry Experience

Mr. Comfort is a Senior Director at Altus Group Limited with 22 years of experience in real estate and urban planning including; right of way and site acquisition, land development, municipal access agreements and municipal approvals. He has lead and managed various large scale right of way and site acquisition projects including national fibre optic and wireless network builds that have required the procurement of hundreds of rights of way, land, licences, leases, easements, municipal access agreements, permits and approvals needed for the installation of various types of telecom intrastructure. Prior to joining Altus, Mr. Comfort was a Director of Right of Way / Municipal Access for Bell Canada and previously 360networks / Group Telecom, Mr. Comfort also previously work for the Ministry of Municipal Affairs and was responsible for provincial approvals of municipal and regional official plans, secondary plans and other provincial plans including Minister's Zoning Orders, Provincial Parkway Belt West Plan, Provincial Policy Statement, Niagara Escarpment Plan, Alternative Design Standards and Pickering Airport Zoning Order.

Professional Qualifications and Memberships

Ontario Professional Planners Institute and Canadian Institute af Planners

International Right of Way Association

Association of Ontario Land Economists (PLE)

Ontario Expropriation Association

Canadian Urban Institute

Selected Project Experience

- Wind Mobile Wireless Site Acquisition and Land Use Approval Program 2010 -Current
- Bell Mobility National Wireless Site Acquisition Program Land Use Approval Program 2010 - Current
- Alcatel Wireless Site Acquisition Program Alberta. BC -2010 -2012
- Telus Wireless Western Site Acquisition and Land Use Approval- 2010 -Current
- Walton Land Appraisal (15 parcels) Niagara, Ontario
- Orlando Corporation land appraisal Highway 10 widening Brampton, Ontario
- K.J. Beamish Land Expropriation Highway 400 widening King City, Ontario
- Right of Wav Negotiations and Toronto Build (ExteNet)- Toronto, Ont.
- Bell Vancouver to Whistler 2010 Olympic Network Build B.C.
- Bell Alberta Supernet Right-of-Way Administration Alberta
- 360networks National Fibre Optic Build Row/Site Acquisition program Canada

Areas of Specialization

- Right of Way Project Management
- Right of Way Acquisition
- Land Valuation & Appraisal
- Wireless Site Acquisition
- Right of Way & Real Estate Budgeting
- Telecom Agreement Negotiation
- Municipal Access Agreements
- Due Diligence
- Document Record

 Management
- Urban Planning
- Permits and Approvals
- Land Development
- Crossing Agreements

Education

Bachelor of Environmental Studies (Honours),

Urban and Regional Planning Degree. University of Waterloo, Waterloo, Ontario, 1988 British Planning Methods, Exchange Program, Brookes University, Oxford, England, 1988



lan Dobrindt, MCIP, RPP, CEP

Senior Environmental Planner

Education

BA, Geography, Wilfrid Laurier University, 1990

Years of Experience

With AECOM: 9 With Other Firms, 14

Professional Associations

Canadian Institute of Planners
Ontario Professional Planners Institute
Registered Professional Planner
Ontario Society for Environmental
Management
Canadian Certified Environmental
Practitioner

Training and Certifications

Municipal Class Environmental Assessment Process Course - Ministry of the Environment Mr. Dobrindt has conducted a variety of municipal, provincial, and federal environmental assessments for highways, roads, and bridges; water, wastewater, and stormwater management infrastructure; and waste management facilities throughout Ontario. He has extensive knowledge of various environmental and planning legislation, policies, and guidelines, including the Environmental Assessment Act, Canadian Environmental Assessment Act, and Planning Act.

Mr. Dobrindt is also a project manager responsible to manage the environmental team (fisheries, noise, archaeology, agriculture) and public consultation programs on individual and class EA projects. Tasks under these programs include preparing written and visual display materials, conducting public information centres/workshops/meetings, follow-up responses/discussions, and issues resolution.

Mr. Dobrindt has authored a variety of documentation for required environmental and planning approvals, including transportation environmental study reports, environmental study reports, justification studies, study designs, preliminary design and environmental assessment studies, environmental screening documents and reports, and environmental synopses and summaries. Often, the results of these reports and studies are presented to municipal committees and councils for their adoption and approval.

Project Experience

Individual Environmental Assessments

Southeast Collector Trunk Sewer Environmental Assessment
Highway 407 East Completion Environmental Assessment
Western Vaughan Transportation Improvements Environmental Assessment
Warwick Landfill Expansion Environmental Assessment
Pine Valley Corridor Environmental Assessment Terms of Reference
Peterborough County, City Landfill Site Search Environmental Assessment

Peterborough County, City Landfill Site Search Environmental Assessment County of Victoria, Long-Term Waste Disposal Environmental Assessment Niagara North Waste Management Club, Long-Term Waste Disposal Environmental Assessment

Grimsby, Lincoln, Pelham, and West Lincoln Board of Waste Management, Long-Term Waste Disposal Environmental Assessment

Essex County/City of Windsor Landfill Site Search Environmental Assessment Toronto Solid Waste Environmental Assessment Plan

Pembroke & Area Landfill Site Search Environmental Assessment

Provincial Highway Class Environmental Assessments

Highway 401 Expansion Preliminary Design and Class Environmental Assessment from Highway 3 to Provincial Road

Highway 115/7A/28 Interchange Structure Preliminary/Detail Design and Class Environmental Assessment

Highway 401 Detail Design and Class Environmental Assessment from Warden Avenue to Allen Road

Highway 7 Detail Design and Class Environmental Assessment from Georgetown Westerly 10.3 kilometers to Acton

Highway 3 Preliminary Design and Class Environmental Assessment from Todd Lane/Cabana Road Easterly 37.4 kilometers to the East Junction of Essex County Road 34

Highway 7 Preliminary Design and Class Environmental Assessment from Highway 7B Easterly to Highway 134

Highway 7 Preliminary Design and Class Environmental Assessment from Marmora Easterly to Highway 62

Highway 17 Detail Design and Class Environmental Assessment from Sudbury Regional Road 55 Easterly to Highway 69

A=COM lan Dobrindt

Highway 6 Detail Design and Class Environmental Assessment from 0.5 km South of Argyle Street Northerly to Seneca Greens Road

Highway 17 New Interchange at Sudbury Municipal Road 80 Detail Design and Class Environmental Assessment

Highway 17 Detail Design and Class Environmental Assessment from Stonecliffe Easterly 12.7 kilometers

Silver Sands Lake Road Preliminary/Detail Design and Class Environmental Assessment

Highway 69 Passing Lane Extensions and New Passing Lanes Detail Design and Class Environmental Assessment

Highway 6 New Interchange at Highway 5/Dundas Street East Preliminary Design and Class Environmental Assessment

Highway 400 and Muskoka Road 5 Interchange Improvements Detail Design and Class Environmental Assessment

Highway 26 Preliminary Design and Class Environmental Assessment from Owen Sound to Meaford

Highway 101 Detailed Design and Class Environmental Assessment from Wawa easterly 10.6 kilometers to Fire Sand Creek

Highway 77 from Staples to Comber Detail Design and Class Environmental Assessment

Trout Creek Bridge Preliminary/Detail Design and Class Environmental Assessment

Highway 69 from French River Northerly for 26 kilometers Detail Design and Class Environmental Assessment

Highway 144 Chelmsford Detail Design and Class Environmental Assessment Highway 3 St. Thomas Detail Design and Class Environmental Assessment Highway 63 from Highway 533 to the Quebec Border Preliminary Design and Class

Environmental Assessment Highway 63 from Highway 533 Northerly to McConnell Lake Road Detail Design and Class Environmental Assessment

Highway 141 from Muskoka Road 24 to Muskoka Road 35 Detail Design and Class Environmental Assessment

Highway 124 from Highway 520 to Highway 510 Detail Design and Class Environmental Assessment

Highway 17 from Highway 94 to Highway 11/17 Detailed Design and Class Environmental Assessment

Highway 531 from Highway 17 to Bonfield Detail Design and Class Environmental Assessment

Highway 94 from Highway 11 to Highway 17 Detail Design and Class Environmental Assessment

Canadian Environmental Assessment Act

Highway 407 East Completion Environmental Assessment Coordinated with Screening Level EA (MTO)

Ferry Terminal and International Marine Screening Level Environmental Assessment (Toronto Port Authority)

Manitoba Seniors Complex Screening Level Environmental Assessment (Health Canada)

Ferry Terminal Screening Level Environmental Assessment (Toronto Port Authority)

Toronto City Centre Airport Screening Level Environmental Assessment (Toronto Port Authority)



Blair Shoniker, MCIP, RPP

Senior Environmental Planner

Education

MA, Environmental Impact Assessment and Management, University of Manchester, UK, 2005 BURPI, Urban and Regional Planning, Ryerson University, 2003

Licenses/Registrations

Registered Professional Planner, Ontario

Years of Experience

With AECOM: 7
With Other Firms: 3

Professional Associations

Ontario Professional Planners Institute Canadian Institute of Planners Mr. Shoniker has ten years of environmental and land use planning experience. He is involved in a variety of individual and class environmental assessment projects for provincial highways, renewable energy facilities, municipal roads, waste management, and water and wastewater infrastructure throughout Ontario. Mr. Shoniker is experienced in all phases of project planning and execution including strategic planning, implementation, management, and evaluation of projects at the provincial and federal government levels. His responsibilities include leading and managing the implementation of various individual and class environmental assessments; coordinating various disciplines involved in the environmental assessment process; coordinating stakeholder/public consultation processes; data management and issue tracking; preparing environmental assessment documentation and reporting; and liaising with various regulatory agencies and municipal/provincial/federal government.

Project Experience

Individual Environmental Assessments

Ministry of Transportation Ontario and Canadian Environmental Assessment Agency, Highway 407 East Environmental Assessment, Ontario. Assisted the project manager for extension of Highway 407 from its current terminus (Brock Road) to Highway 35/115 and two north-south links (West and East Durham) for a total of approximately 72 kilometres of new highway. Provincial EA was approved by the minister in June, 2010. This is a joint provincial/ CEAA project.

Waste Management of Canada Corporation, Ottawa Waste Management Facility Environmental Assessment, Ottawa, Ontario. Project Manager responsible for preparing, coordinating and submitting the Terms of Reference (ToR) and EA for a landfill expansion at the West Carleton Environmental Centre.

Waste Management of Canada Corporation, Beechwood Road Environmental Centre EA, Napanee Ontario. Project Manager responsible for preparing, coordinating and the EA for a new landfill footprint.

Ministry of Natural Resources (MNR) Class Environmental Assessment Toronto Hydro, Lake Ontario Anemometer, Scarborough, Ontario. Project manager that completed the Ministry of Natural Resources class environmental assessment process for leasing crown land in Lake Ontario to erect an offshore wind monitoring station (anemometer). Coordinated and managed internal disciplines and implemented a rigorous consultation plan.

Canadian Environmental Assessment Act

Hiawatha First Nations, Serpent Mounds Park Rejuvenation and Expansion Plan. Project Manager for the completion of a federal CEAA Screening on behalf of the Hiawatha First Nation in relation to the rejuvenation and expansion plan for the Serpent Mounds Park. The CEAA Screening was accepted and the project is currently in its implementation phase.

Peer Review

Taykwa Tagamou Nation, Technical Review of the Abitibi Canyon Dam Tailrace Rehabilitation, Ontario. Lead Environmental Planner responsible for undertaking a review of the environmental permits and approvals granted to OPG as part of their Rehabilitation project, representing the Taykwa Tagamou Nation (TTN).

Municipal Class Environmental Assessment

City of Vaughan, Dufferin Street & Teston Road Class Environmental Assessment, Vaughan, Ontario. Project manager for assessment and evaluation of the most appropriate route for a new trunk sanitary sewer connection.



Marvin Stemeroff Energy & Power Industry Leader - Canada

Professional History

2008 – Present, Energy & Power Industry Leader, AECOM Canada 2003 - 2008, Principal, Gartner Lee Limited – National Power & Energy Industry Loader 2000 – 2003, eBiz Professionals Inc., Partner 1988 – 2000, Deloitte Consulting, Principal and Director, Energy and Utilities Practice

Education

M.Sc., Economics and Business, University of Guelph
BA, Economics, University of Western Ontario

Years of Experience

With AECOM: 10 With Other Firms: 15

Professional Affiliations

Association of Power Producers of Ontario (APPrO) and "sister" associations in each Province

Ontario Energy Association (OEA)
Ontario Waterpower Association (OWA)

Areas of Specialization

Strategic and business planning Socio-economic impact assessment Market analysis Sustainability assessment Communications and consultation Facilitation Project management Mr. Stemeroff is a senior economist and consultant in the Environmental Group and he leads the power industry group within AECOM.

He has worked with many diverse clients in agriculture, health care, forestry, mining, and energy to envision options and possibilities, which led to informed choices, and he has helped them to implement sustainable solutions with shared value to proponents and affected communities of interest.

Mr. Stemeroff has worked on numerous development studies for infrastructure projects throughout Canada. He brings extensive project planning and subject matter expertise to the EWT project in relation to:

- Planning and execution
- Gaining social acceptance with communities of interest and Aboriginal Peoples

Selected Project Experience:

Nuclear Waste Management Organization (NWMO) - Ongoing

- Risk/Cost/Benefit assessment of alternative methods to management of used nuclear fuel
- Advice and input to design of siting process for used fuel repository
- Project management, co-ordination and integration from multiple firms and disciplines
- Community engagement throughout Northern Ontario including communities from Thunder Bay to Wawa

NextEra - Ongoing

 Project direction and management of multiple wind energy projects in Ontario relating to approvals. Project management and strategy.

Northland Power - Ongoing

 Preliminary planning for power generation and transmission in Northern Ontario linked to the Ring-of-Fire

Matawa Tribal Council - 2012

Advice, business planning, and guidance regarding supporting services and businesses in relation to the Ring-of-Fire mining development in Northern Ontario

Ontario Power Generation (OPG) - Ongoing

Approvals and permitting for nuclear power generation facilities

Economic modelling

- Stakeholder engagement and communications
- EA approvals and consultation regarding the DGR for low and intermediate nuclear waste.

Ontario Ministry of Natural Resources - Ongoing

- Design and implementation of a socio-economic impact assessment framework for assessing how alternative forest management strategies
- Design and development of an economic model for assessing waterpower projects in Ontario, some of which are located in the Thunder Bay to Wawa region

Nipissing First Nation - 2006

- Electricity business planning
- Advice and guidance for investments into alternative power generation and transmission business plans

Great Lakes Power Transmission - 2010/11

Facilitation of meetings with Aboriginal community leaders



Deborah L. Sinclair Senior Aquatic Scientist

Education

MASc, Ryerson University, 2002 BSc, University of Waterloo, 1999

Years of Experience

With AECOM: 10 With Other Firms:

Professional Associations

Canadian Association on Water Quality

Training and Certifications

Calculating and Determining Internal Load - Pre-conference Workshop - North American Lake Management Society

Ontario Benthos Biomonitoring Network Certification Course - Ministry of the Environment

Fundamentals of Urban Runoff management - Pre-conference Workshop - North American Lake Management Society

Enhancing the States' Lake Management Programs - North American Lake Management Society

Level 1 First Aid - St. John's Ambulance

Ms. Sinclair is a Senior Aquatic Scientist with AECOM. Her academic background is aquatic chemistry, in which she studied the fate and transport of trace metals in freshwater lakes. Deborah applies her knowledge of lakes and watersheds to numerous projects. These have included substantial projects for the private sector, government, governmental agencies and First Nations. She has designed and implemented programs to monitor and analyse the response of the aquatic environment to construction activities, urban runoff, mining operations, industrial activity, contaminated sites, and development. She has managed projects, provided technical direction and served as a technical lead on many AECOM projects.

Project Experience

South East Collector EA, York Region. Identified and evaluated potential effects of sanitary trunk sewer construction and operation on surface water quality and quantity. Assessed surface water-groundwater interactions, provided mitigation measures to reduce potential impacts, and recommended monitoring programs.

Western Vaughn Transportation Improvements EA, York Region. Conducted field investigations, identified and evaluated potential effects of transportation improvements(e.g. large road widenings) in Vaughn ON on surface water quality and quantity. Recommended mitigation measures and monitoring to alleviate potential impacts on surface water quality and quantity. Met with local regulatory agencies to discuss potential impacts and mitigation measures.

Rewnewable Energy Approval, NextEra Energy Canada. Designed the surface water quality and aquatic habitat component for a large wind farm project. Evaluated potential impacts of project related activities including road construction and tower placement on surface water quality and quantity.

Beechwood Road Environmental Centre EA, Waste Management of Canada Corporation, Napanee Ontario. Responsible for the aquatic habitat component of an EA for landfill expansion. Collected and analysed surface water quality, benthic community and fisheries data.

Lambton Landfill Expansion EA – Clean Harbors Canada, Lambton Ontario. Preparing the Surface Water and Sediment/Soil Quality Existing Conditions Report in support of the EA submission.

16th Avenue Trunk Sewer, York Region. Assisted in the co-ordination of the environmental monitoring program during trunk sewer construction.

Technical Review of the Diavik AEMP Study Design, Wek'eezhii Land and Water Board. Conducted an evaluation of the Diavik Aquatic Effects Monitoring Program Study Design. Provided opinions and recommendations on if the study design changes were supported by the results.

McWatters Mine Initial EEM Program, Liberty Mines. Project manager for an environmental effects monitoring program for a nickel and cobalt ore extraction mine in Northern Ontario. Responsible for co-ordinating field work, meeting project deliverables, and reporting.

Podolsky Mine Cycle 1 Environmental Effects Monitoring Interpretive Report, FNX Mining Company Inc. Responsible for the initial EEM reporting for a copper-nickel mine in the City of Greater Sudbury.

Technical Review of the Final Alexander Centre Industries Ltd. Environmental Study Report, Olthuis, Kleer, Townsend. Provided technical review of the water

AECOM Deborah Sinclair

quality aspects of an EEM study completed in support of the harbour lease renewal on Manitoulin Island.

Technical Review of the Detour Lake Mining Project Class Environmental Assessment, Coral Rapids Power L.L.P (representing TaykwaTagamou Nation). Provided a technical review of the aquatic environment and surface water aspects of the Class EA for the Detour Lake Mining Project.

Technical Review of the Solid Gold Exploration Program, Olthuls, Kleer, Townsend (representing Wahgoshig First Nation). Provided technical review of the potential water quality impacts of an exploration drilling program in northern Ontario.



Dennis J. Gregor, PhD, PGeo., P. Geol. (NWT) Water and Natural Resources Practice Coordinator

Professional History

November, 2008 to 2010

Director Water Resources Management, AES International, Kingdom of Bahrain

Regional Manager Bahrain, AES International, Kingdom of Bahrain

2004 - October, 2008

Senior Aquatic Scientist, Office Manager. Gartner Lee Limited, Guelph, ON

1997 - 2004

Director, Environmental Services, MDA Consulting Limited, Campbellville, ON

1998 - 1999

Director Environmental Services, Geomatic International Inc., Burlington, ON

1995 - 1997

Sole Proprietor, Northern Environmental Services, unincorporated consulting service

1993 - 1995

Manager, Waterloo Centre for Groundwater Research (WCGR), University of Waterloo – An Ontario Centre of Excellence

1989 - 1993

Research Scientist, Atmosphere/ Hydrosphere, National Water Research Institute, Environment Canada, Burlington, ON

1986 - 1989

Educational Leave from Water Quality Branch, Inland Waters Directorale to complete Doctorale

1984 - 1989

Head, Surveys and Interpretation Division.
Water Quality Branch, Environment Canada.
Regina, SK

1977 - 1982

Various Positions - Environment Canada, Burlington and Toronto

Education

1986 - 1989

Ph.D., University of Geneva, Institute F.A. Forel, Faculty of Earth Sciences, Geneva, Switzerland

1974 - 1977

M.Sc., Queen's University. Faculty of Science. Geography

1969 - 1973

Hons, B.A., McMaster University. Departments of Geography and Geology

Dr. Dennis Gregor has over 30 years experience in water resources management in Canada and overseas. He is currently using his broad based project and people management experience as the Water and Natural Resources Practice Co-ordinator for AECOM, Canada, Central Region.

Dr. Gregor continues to develop his personal practice in the area of private, municipal, and government related projects. He has managed a multi-million dollar environmental monitoring and recovery project of surface and groundwater following dewatering of an aquifer during the construction of a sanitary sewer tunnel. He has worked with Conservation Authorities in Ontario reviewing their environmental monitoring programs and recently has lead a team in the assessment and recommendations for creating a sustainable wetland on contaminated sediments within the Windermere Basin of Hamilton Harbour. Dr. Gregor has worked closely in the past with federal government departments in Canada on a wide range of environmental assessment, permitting and monitoring projects.

His approach has always been systems based, extending from watersheds to large ecosystems. He has worked actively on the effect of land use activities in the Great Lakes Basin including the effects of intensive agriculture on water quality, the impacts of agriculture and resource extraction in lakes and rivers of western Canada and anthropogenic impacts, including the effects of mining and fishing activities on surface water systems of northern Canada. The nature of large scale projects has resulted in the need for development of databases and the processing of information using GIS and/or the development of simple models. Dr. Gregor has also managed the development of site-specific dynamic water quality models, especially in the area of transport and fate of semi-volatile contaminants in surface waters. He directed the development of detailed spatial models to quantify and optimize the removal of contaminated sediments from Hamilton Harbour. In addition, Dr. Gregor completed a technical feasibility study of the preferred remedial option and identified key information gaps related to the effective remediation of these contaminated sediments. Dr. Gregor is comfortable at presenting complex technological information at stakeholders meetings as well as leading technical workshops and preparing information for either audience. He serves regularly as a peer reviewer for highly respected internationals professional journals and remains active in his community.

PROFESSIONAL COMPETENCIES

- Design of large scale monitoring programs including assessment and reporting of information to meet regulatory requirements concerning eutrophication, industrial chemicals, carcinogenic and mutagenic compounds
- Field investigations including: reconnaissance water, soil and tissue sampling under various climatic extremes (arctic to semi-desert).
- Contaminated site assessment including drilling supervision,

Professional Training

Human Health Risk Assessment and Detailed Quanitative Risk Assessment, Federal Contaminated Sites National Workshop, April, 2008

Soil Vapor Assessment at Contaminated Sites, Federal Contaminated Sites National Workshop, April, 2008

Sediment Toxicity Testing, Methods to Achieve Strong Data Sets and Interpret Results, SETAC, Nov., 2006

Medic First Aid

Professional Memberships

Association of Professional Geoscientists of Ontario, Canada

Association of Professional Engineers, Geologists and Geophysicists, NWT, Canada

American Chemical Society

Awards

Canada's Environmental Technology Verification (ETV) Program

TECHNOLOGY: ToxSense

Award Recipient: Dr. Dennis Gregor.

ToxSense is a remote field testing service providing quantitative and semi-quantitative analysis of PCBs from soil. ToxSense provides a fast analysis of PCBs in either a laboratory analysis or on site assessment. The technology is especially applicable at large and complex sites, including remote locations, where extensive sampling is required and the time delays of conventional laboratory analysis may introduce significant logistical costs.

sampling and reporting

- Investigation, assessment and remediation planning of contaminated sediments
- Environmental impact assessments of green field projects and built environments
- Project management including multidisciplinary projects with dollar value exceeding US \$4 million.
- Plain language public and client presentations and professional peer presentations

RELATED EXPERIENCE

 Review and Evaluation of the Revised Aquatic Effects Monitoring Program for the Dlavik Diamond Mine, NWT

Client: Wek' èezhìi Land and Water Board

 Recovery Monitoring and Permit Compliance Reporting – 16th Avenue York-Durham Sanitary Sewer Client: Regional Municipality of York

Detour Gold Environmental Assessment Review

Client: Taykwa Tagamou Nation

 Phase 2 Environmental Site Assessment for a Privately Owned Site Contaminated by an Adjacent Retail Gasoline Outlet – 2003 through 2009

Client: Wishart Law Firm, Sault Ste. Marie, On

- Water License Renewal for Ekati Diamond Mine, NWT Client: Mackenzie Valley Land and Water Board
- Project Manager and Lead Consultant, Detailed Multi-Disciplinary Investigation of the Effect of the Use of Herbicide Sprays on an Oil Pipeline Right of Way, Yukon Client: Champagne-Aishihik First Nation
- Lead Consultant and Project Manager, Ekati Diamond Mine™ Air Quality Monitoring Report Client: BHP Billiton, Diamonds Inc.
- Lead Consultant and Project Manager, Preliminary
 Environmental Investigations of Existing Waste Sites Cracker
 Creek and Canyon Creek (Alaska Highway) and Hayes Creek
 Noranda Camp, Yukon

Client: Indian and Northern Affairs Canada

 First Nations Manual for Source Water Quality Monitoring, Environment Canada.

Client: Environment Canada

 Project Manager and Lead Consultant, Development of a Manual for the Design and Implementation of Water Quality Monitoring Projects – Environmental Monitoring and Assessment Network (EMAN)

Client: Environment Canada

 Lead Consultant and Project Manager, Great Slave State of the Aquatic Environment Report Client: Environment Canada



Cameron (Cam) Baker, M.Sc., P.Geo.

Senior Geologist

Education

M.Sc., Earth Sciences – Geology University of Waterloo B.Sc., Geology Brock University

Years of Experience

With AECOM: 2 With Other Firms 32

Professional Affiliations

Association of Professional Geoscientists of Ontage

Cameron Baker is a Senior Geologist with a wide ranging background in the environmental and mineral exploration sectors. He has directed numerous projects in the fields of geologic mapping, terrain evaluations, groundwater assessments, geochemical sampling and aggregate inventories. Cam has an extensive professional expertise in the mapping and modelling of glacial materials, having directed for many years the Ontario Geological Survey's surficial materials and aquifer mapping programs. He oversaw geological mapping and geochemical investigations throughout northern Ontario.

Cam Baker has a demonstrated history of developing and implementing innovative geosciences project plans addressing the needs of industry, government and public agency clients. He is experienced at leading multi-disciplinary teams investigating the natural and human impacted environment. He is familiar with the issues that affect successful project development and delivery and is skilled at managing multiparty endeavours and effectively communicating results.

He has played key roles in national geoscience working groups, the development of government policy and industry liaison activity. He is the recipient of the Natural Resources Canada Merit Award recognizing his contribution to the development of a national groundwater mapping program. As an invited speaker he has given lectures at numerous academic institutions and professional conferences.

Experience

Surficial Geology Mapping. Project director for a multi-year, surficial deposits mapping program conducted across northern Ontario. Detailed mapping was completed in the Schreiber, Hemlo and Wawa areas and regional-scale digital mapping products for northeastern and northwestern Ontario. Program elements included project design, supervision of field investigations and delivery of map. report and database products.

Surficial Geochemistry. Project director for multi-media geochemical sampling programs conducted in the Nipigon, Lac des Iles, Terrace Bay and Hemlo areas. Helicopter and vehicle supported programs involved implementation design, sample analysis and report generation. Work included the establishment of protocols for sample collection, data analysis/ handling and strict QA/QC program.

Terrain Evaluation. Project director for a series of terrain evaluations covering large areas of northern Ontario including investigation of the north shore of Lake Superior for the Nuclear Waste Management Organization. These studies have been widely used as a basis for infrastructure planning, environment assessments and resource identification.

Aggregate / Industrial Minerals. Project director for the aggregate resources mapping program conducted by the Ontario Geological Survey to identify potential high-quality construction aggregate deposits. Surveys were completed along transportation routes in northeastern and north-central Ontario.

Involvement with First Nations. Participation in planning and discovery meetings with a number of First Nations regarding the conduct of field studies on traditional lands. Dialogue included discussion on the type of surveys, negotiations on the involvement of communities in the delivery of the surveys and opportunities for capacity building.

Publications

Mr. Baker has an extensive publication record with over 60 reports, maps and data releases to his credit.



Nicola Lower, B.Sc., M.Sc., PhD. Senior Aquatic Biologist

Professional History

09/2010 - present. AECOM, Senior Fisheries Biologist 10/2007 - 09/2010, University of Guelph, Post-Doctoral Research Fellow 01/1998 - 09/2007, The Centre for Environment, Fisheries and Aquaculture Science (cefas), Fisheries Biologist and Project Manager

Education

PhD, Biological Sciences. University of Portsmouth, 2008 MSc (with Distinction), Natural Resource Management, University of Leicester 1997 BSc. Environmental Science, University of Nottingham, UK, 1996

Years of Experience

With AECOM: 2 With Other Firms: 12

Professional Associations

American Fisheries Society River Systems Advisory Committee City of Guelph, Committee Member 2010 – present. Winston Churchill Fellow

Training and Certifications

MTO/DFO/OMNR Fisheries Protocol Training for Consultant Fisheries Specialists, January 2011.

Standard First Aid with CPR A+AED. March 2012 Dr. Lower is a senior aquatic biologist with more than 13 years of professional experience in fisheries and natural resource management. Nicola contributes to technical advice to environmental assessments, natural heritage studies, , environmental impact studies, environmental baseline studies, aquatic habitat assessments, species at risk screening, environmental effects monitoring. Iisheries compensation plans, permitting and approvals and technical peer-reviews. Nicola has delivered project reports for a variety of clients and has work experience in the private, public and academic sectors. Dr Lower has published research on a range of factors affecting fish populations, including barriers to migration, water quality, and invasive species in the Great Lakes. Dr Lower has conducted research for the Great Lakes Fishery Commission, and is a member of the City of Guelph River Systems Advisory Committee. Nicola has much practical experience in fisheries management and in the techniques used to assess and monitor habitat and fish populations, including radio-acoustic and PIT telemetry, backpack and boat electrofishing, and netting and trapping. Dr Lower was awarded a prestigious Canadian Commonwealth Post-Doctoral Fellowship to conduct research on the migratory biology of the sea lamprey and native fish species in the Great Lakes. In AECOM, Nicola has conducted environmental baseline studies in remote areas of Northern Ontario and Labrador, mainly in support of mining development and associated infrastructure. Dr Lower is skilled at coordinating and bringing environmental teams together for the purpose of providing a comprehensive study integrated with all relevant disciplines.

Project Experience

Probe Mines Limited., Project Manager for environmental baseline studies (hydrology, hydrogeology, ecology, water quality) in support of a proposed open pit gold mine in northern Ontario (Chapleau). Responsible for delivery of work to time and to budget, as well as the integration of all relevant disciplines to provide a comprehensive work program.

Labrador Iron Mines, Environmental Baseline Studies, Schefferville, Quebec. Aquatic baseline studies of six sites in Labrador and Quebec, to facilitate the permitting process for proposed mining operations. Senior review for previous habitat assessment conducted on three sites.

Billiken Management Inc., Project Manager for potential dewatering of a mine site in northern Ontario (Pickle Lake). Responsible for delivery of work to time and budget, as well as the integration of all relevant disciplines to provide a comprehensive work program including environmental regulatory planning and water quality assessments.

Elgin Area Primary Water Supply System (EAPWSS), Authority Regulatory Approvals for the Elgin Area Primary Water Supply System, Elgin County, Ontario. Provided technical advice to the overall project team, Conservation Agency liaison as well as construction monitoring during a design and build operation for a pipeline twinning to ensure compliance with permits and regulatory requirements.

NextEra Energy Canada, wind energy centres. Aquatic technical lead for Renewable Energy Approval (REA) applications for three large potential wind energy centres. Multi-agency liaison for permitting and approvals for REA, Fisheries Act, Endangered Species Act, and Conservation Agency Regulations.

Regional Municipality of York, Upper York Sewage Solutions Environmental Assessment, Aquatic Ecology lead (planning, field assessment, reporting, agency meetings) to the Natural Environment Baseline Conditions Report to aide in selection of preferred alternative, as well as technical advice on the potential impacts of the water reclamation centre outfall on fish and fish habitat.

Windsor-Essex Mobility Group and Ministry of Transportation. Fisheries Technical Reviewer for HADD or No-HADD submissions to DFO, fish habitat compensation plans, design drawings, and stormwater management reports related to the Design-Build of the Windsor-Essex Parkway.

City of Hamilton, culvert replacement. Completed technical assessment and permitting applications with MNR and Conservation Agency for culvert replacement and emergency road repair. Successfully applied for overall benefit permit (17(2)c) under the Endangered Species Act.

Region of Peel, Road Widening, Ontario. Provided technical advice and liaison with the project team and Ministry of Natural Resources on the evaluation of culvert and bridge alternatives in order to protect fish habitat, including the endangered Redside Dace (Endangered Species Act 2007).

City of London, Stanton Drain Remediation and Stormwater Management Facility. Aquatic Ecology input for the Detailed Design of stormwater management as outlined in Class EA, including relocation and rehabilitation of existing portions of the Drain. Agency liaison and completion of HADD-Authorization under the Fisheries Act and development of compensation plan.

City of Peterborough, Class Environmental Assessment for the Jackson Creek Diversion Project. Natural Environment lead for Class EA diversion project for flood reduction

Métis Nation of Ontarlo, Technical Review, Ontario. Led a technical review report on migratory characteristics of species of interests (mammals, fish, birds) and potential development impacts and mitigation techniques.

Wek'èezhil Land and Water Board, Diavik Diamond Mine AEMP Study Design Technical Review, Northwest Territories. Conducted an evaluation of the Diavik Aquatic Effects Monitoring Program (v3) regarding fish health. Provided recommendations on whether the proposed revisions to AEMP Version 2.0 were adequately supported by the data.

Taykwa Tagamou Nation, Technical Review, Northeastern Ontario.

Participated in technical review of the Detour Lake Gold Mine fish habitat compensation plan before submission to the Department of Fisheries and Oceans.

Liberty Mines, Environmental Effects Monitoring (EEM) Cycle One Report, Northern Ontario. Provided a study report in accordance with Schedule 5, Section 10 – 14 of the 2002 Metal Mining Effluent Regulations of the *Fisheries Act*. Report accepted and met the requirements of Environment Canada with no revisions required



D. Stephen (Steve) Davies, P.Geo. Senior Hydrogeologist

Proposed Role: Senior Hydrogeologist

Professional History

03/2008 - present. AECOM, Senior Hydrogeologist 2000 - 2008, Conservation Authorities Moraine Coalition-YPDT / Credit Valley Conservation, Senior Hydrogeologist 1997 - 2000, Stantec Consulting Ltd., Project Manager 1994 - 1997, Golder Associates Ltd., Geologist and Hydrogeologist 1990 - 1994, Dames & Moore, Geologist and Hydrogeologist

Education

MSc, Geology McMaster University BSc, Geology, McMaster University

Registrations

Professional Geoscientist, Ontario

Years of Experience

With AECOM: 5 With Other Firms: 18

Professional Affiliations

Association of Professional Geoscientists of Ontario, International Association of Hydrogeologists

Training and Certifications

PSMJ Project Management, 2010
Mike She / Mike 11 Integrated
Catchment / River and Channel
Modelling, DGI training series, 2007
YPDT Training Series, 2005;2006 –
Access Database (CTC), Viewlog
'SiteFx, Geostatistics and Modelling
3D Groundwater Flow Modelling
Using Visual Modflow, Waterloo
Training Series, 2001
OSHA 40-hour Health & Safety at
Hazardous Waste Sites course

Steve Davies is the Manager of the Guelph office Water and Natural Resources Group. He is a senior hydrogeologist with over 20 years of experience managing hydrogeological and geological investigations. His experience includes municipal groundwater studies, Source Protection studies, groundwater – surface water interaction investigations, mining investigations and contaminated sites investigations.

Experience

Class EA, Water Resource Exploration and Detailed Design of the Yonge Street Aquifer Well Replacement Program. York Region.

Deputy Project Manager / Technical Lead for the ongoing study to select and replace two municipal groundwater supply wells in York Region due to lost capacity. The program includes a groundwater exploration program, including a feasibility and effects reports, as well as performance testing of all existing wells. Data collected is being coordinated with the ongoing Class EA Study. [2012 – present]

Environmental Baseline Study for Proposed Gold Mine near Chapleau, Confidential Client. Managed the hydrogeological component of an Environmental Baseline Study as part of an overall feasibility study for a proposed gold mine near Chapleau. This involved an assessment of potential impacts associated with mine development and a preliminary mine inflow assessment. Ongoing work will include a detailed hydrogeological assessment to determine mine dewatering requirements and the resultant effect on the site's water balance (2012 - present).

Tier Three Water Budget and Water Quantity Risk Assessment, Halton Hills, Ontario, Region of Halton. Managed the Tier Three Water Budget and Water Quantity Risk Assessment being completed for the Regional Municipality of Halton, and technical review of individual study components. This involved completing a large field program to update the understanding of the geology and hydrogeology of the study area, updating the numerical groundwater flow model and running a number of present and future land use / water taking scenarios to assess the risk to the areas' groundwater municipal supply. [2008 – present].

Aquifer Vulnerability Assessment, Trent Conservation Coalition, Trent Source Protection Region, Eastern Ontario. Managed a groundwater vulnerability assessment for both the Paleozoic and Precambrian areas of the TCC's Source Protection Region. Used a combination of AVI and ISI techniques [2009 – 2010]

Peer Review Committee for the Trent Conservation Coalition's Water Budget Studies, Trent Source Protection Region, Eastern Ontario. Participated as a peer reviewer of a number of technical reports prepared as part of the Source Water Protection program's water budget studies [2008 – 2010]

AECOM

Peer Review – Numerical Modelling of Wellhead Protection Areas for City of Whitehorse, Yukon Senior Hydrogeologist responsible for peer review of three-dimensional numerical modelling efforts for wellhead protection area delineation at the City of Whitehorse municipal wellfields. [2011-2012t]

Middle Sixteen Mile Creek Buried Bedrock Valley Investigation, Halton Hills, Ontario, Region of Halton. Managed the investigation of the Middle Sixteen Mile Creek buried bedrock valley aquifer system east of Georgetown (Halton Hills), Ontario. The objectives of the study were to improve the understanding of the bedrock valley feature and its infill sediments and assess its suitability as a municipal supply aquifer. The work involved seismic surveys, borehole drilling and hydraulic testing of the aquifer system [2008-2010]

Lindsay Court Well Re-Rating and Hydrogeological Assessment and Class EA, Halton Hills, Ontario, Region of Halton.

Led a PTTW re-rating project for the Lindsay Court well field in Halton Hills being completed in coordination with a Schedule B Class EA. Included a detailed hydrogeological analysis of potential impacts associated with increased pumping including impacts to the surface water features, possible domestic well interference effects and assessing the long term sustainability of the taking [2009 – 2011]

Sustainable Halton Water and Wastewater Master Plan, Region of Halton. Senior hydrogeologist responsible for coordinating assessment of various groundwater servicing concepts for the Sustainable Halton Master Planning Process and Class EA [2010 – 2012t]

Beeney Creek Assessment, Halton Hills, ON, Region of Halton – managed a detailed assessment of a creek (Beeney Creek) as a significant recharge feature for a buried bedrock valley municipal supply aquifer. Work involved detailed geomorphological assessments, spot flow analysis, geological assessments and the establishment of several permanent continuous gauge stations [2010 – present]

Black Creek Subwatershed Planning – Hydrogeological Analysis and Report, Credit Valley Conservation.

Managed the hydrogeological analysis and reporting component of the Black Creek Subwatershed Characterization
Report as part of the overall subwatershed planning process. [2010 - 2011]

Ontario Municipal Board (OMB) Expert Witness, Confidential Client, Ontario – Appeared before the OMB as an Expert Witness in hydrogeology in matters pertaining to an application for an above water table sand and gravel extraction [2011].

Nuclear Waste Management Organization, Saskatchewan, Ontario, Quebec and New Brunswick. Project coordinator and contributing researcher of geoscientific projects related to compilation of geoscientific information in Canada's four nuclear provinces [2009]

Nuclear Waste Management Organization, Geosynthesis Program, Toronto, Ontario. Participated in the geosynthesis program evaluating the geoscientific attributes of the Paleozoic rocks at the Bruce Nuclear site to host a deep geological repository for low and intermediate level radioactive waste, [2008 – 2011]

Conservation Authorities Moraine Coalition, Oak Ridges Moraine Groundwater Study, South-Central Ontario. Co-ordinated the technical program for large multi-jurisdictional groundwater study of the Oak Ridges Moraine. Directed field studies (seismic surveys, borehole drilling, downhole geophysics) and collaborated with the Ontario Geological Survey (OGS) and Geological Survey of Canada (GSC) to prepare a number of technical papers and reports on the groundwater resources of watersheds draining off the moraine. [2003 - 2008]

Adam's Mine Proposed Landfill Site Investigation, Kirkland Lake, Ontario, Notre Development. Field supervisor of a deep drilling and testing investigation under the existing open pit mine to assess hydrogeological conditions associated with the proposed landfill application (1995-1996).

Aquarius Mine Slope Stability and Mine Inflow Assessment, Timmins, Ontario, Confidential Client. Field supervisor of a drilling and testing program to assess slope stability and mine inflow for a proposed open pit gold mine near Timmins. Lead to a recommendation to use freeze wall technology to control groundwater inflow (1997).

CP Rail Yard Phase 2 ESA and Remedial Options Evaluation, North Bay, Ontario, CP Rail. Project manager for a Phase 2 ESA and Remedial Options Evaluation of the North Bay rail yard for the redevelopment as parkland (1998-1999).

Shared Value Solutions

Donald R. Richardson, PhD Managing Partner, Shared Value Solutions Ltd.

Professional History 06/2012 – present, Shared Value

Solutions, Managing Partner 09/2009 - 06/2012, AECOM, Global Practice Leader - Socio-economics & Communications 09/2004 - 09/2009, AECOM, Senior Consultant, Communications & Consultation 2001 - 2004, Stantec Consulting Ltd. Senior Consultation Specialist 1998 - 2001, TeleCommons Development Group, Director 1994 - present, University of Guelph, Associate Graduate Professor (parttime). Faculty of Environmental Design and Rural Development 1987 - 1994, University of Guelph, McMaster University and Wilfred Laurier University, Sessional Lecturer

Education

PhD, Communications and Sociology, McMaster University MA, Communications and Sociology, University of Guelph BA, Sociology, University of Guelph Diploma, Business and Marketing, Lambton College

Awards

Award of Merit – Consulting Engineers of Ontario: Aboriginal Traditional Ecological Knowledge Study Brownie Award – Canadian Urban Institute: Stelco Swansea Works Remediation & Residential Rebuild

Years of Experience

23

Overview

Don Richardson has over 25 years of experience as a skilled facilitator capable of building agreements between project proponents, community/non-governmental organizations, government agencies and Aboriginal communities. He fosters constructive engagement to create "shared value" between communities and infrastructure / resource extraction projects and operations. He has extensive global experience with environmental assessments, communications, socio-economics and enhancing community well-being.

Don currently manages stakeholder and government relations on several environmental and infrastructure development projects in Canada and globally. He is a recipient of the Canadian Urban Institute's Brownie Award recognizing outstanding achievement in building and maintaining effective working partnerships with professionals, the local community and others involved in Brownfields redevelopment, and a Consulting Engineers of Ontario Award for Aboriginal Traditional Knowledge achievements.

Don has worked on several international projects focused on civil society capacity building and natural resource management in regions prone to conflict and insurgency. This includes extensive basic infrastructure, water management, agriculture, irrigation & drainage systems, education, governance and communications support work in Pakistan, Egypt, the southern Philippines, Bolivia, Nicaragua, Peru, Chile, Cameroon, Ghana, Haiti, India, Sri Lanka, South Africa, Zimbabwe and Senegal for firms and organizations such as the World Bank, the UK Department for International Development, United Nations organizations, and the US Agency for International Development (USAID) which appointed him as a program advisor for a five year global communication capacity building effort.

Specialties

Risk communication, stakeholder engagement, public consultation, facilitation, mediation, negotiation, environmental enhancement programs, natural resource management, rural community development, agricultural communications, participatory communications, Indigenomics



Selected Experience

Technical Review of Environmental Assessments Detour Lake Gold Mine Project Coral Rapids Power L.L.P. (representing Taykwa Tagamou First Nation). Strategic advisor for reviews of technical aspects and Aboriginal consultation for two provincial EAs and a federal Comprehensive Study EA for the proposed Detour Lake gold mine project. Submitted comments on two provincial EAs for the location of the mine site and for a transmission line, and submitted comments on the federal EA for the entire Detour Lake gold mine project. Also provided a review of how Traditional Knowledge and TTN input was incorporated into and dispositioned within the proponent's EA reports to the Crown and how it relates to Provincial standards and industry best practices. [2010 – present]

Walker Industries: Consultation & Communications Strategic Advisor — Southwestern Ontario Landfill Environmental Assessment. Overseeing public and Aboriginal consultation for a multi-year environmental assessment for a proposal for one of the largest landfills to be established in Ontario. Includes overseeing Aboriginal consultation for over ten Aboriginal communities across Southwestern Ontario.

Constance Lake First Nation: Province of Ontario Showcasing Water Innovation Project, Project Director for Water Management Action Plan. Advising Chief and Council on the development of a \$7 million water and wastewater capital infrastructure project involving source water protection, community water management planning and innovative approaches to sourcing groundwater. [2012 – present]

Quest Minerals: Labrador-Quebec Rare Earth Minerals Environmental Assessment – Strategic Advisor for Aboriginal Relations. Provided guidance on relationship building approaches for Aboriginal community consultation and accommodation for federal and provincial environmental assessments. [2012]

Hiawatha First Nation: Community Infrastructure Planning Advisor. Coordinating the review of alternative approaches to financing, engineering and partnering to enhance key community infrastructure, with a primary focus on water and wastewater infrastructure. [2012 – present]

Red Sky Independent Métis Nation: Review Coordinator - Marathon Copper Mine Environmental Assessment. Work includes preparation of technical comments on the Marathon Copper Mine Joint Provincial/Federal Environmental Assessment together with coordination of a traditional land use study and video documentary illustrating community environmental, land use and harvesting interests. [2012 – present]

Magnetawan First Nation, Ontario Ministry of Transportation and AECOM: Traditional Land Use Study in Relation to Highway 69 – 400 Series Highway Expansion. Project Director for a traditional land use study to determine potential impacts to Magnetawan First Nation land use, harvesting and environmental interests for input to federal and provincial environmental assessments. Includes overseeing production of a video documentary illustrating community environmental, land use and harvesting interests. [2012 – present]

Matawa First Nations – Ring of Fire Mining Initiatives. Strategic regional and community infrastructure advisor for focused on rail, road, telecommunication and water management infrastructure. [2011 – present]

Mississaugas of the New Credit First Nation: Environmental Assessment Advisor. Coordinating review of multiple environmental assessment and environmental approval projects across the Greater Toronto Area and coordinating approaches to private sector business development with key infrastructure proponents. [2012 – present]



Aroland First Nation – Ring of Fire Mining Initiatives. Strategic regional and community infrastructure advisor and environmental assessment review coordinator. [2012 – present]

AECOM: Community & Government Relations – Legacy Environmental Site Issues. Strategic communications and government relations advisor for AECOM staff managing legacy environmental sites adjacent to populated urban areas of Omtario. [2012 – present]

Aboriginal Community Energy Planning Program Development; Ontario Power Authority. Strategic Advisor. Assistance to develop a new funding program to provide First Nation and Métis communities across Ontario with resources to undertake Community Energy Planning. [2010 – 2011]

Windsor Essex Parkway – Province of Ontario. Strategic advisor for community communications and consultation for the Windsor Essex Parkway engineering, design and construction, reporting to Province of Ontario. [2011 – 2012]

Nuclear Waste Management Organization, Community Well-being Support. Stakeholder engagement specialist providing expert guidance to the Nuclear Waste Management Organization on community well-being and stakeholder and Aboriginal engagement aspects of site selection for a deep geological repository for used nuclear fuel in Canada. [2008 to 2012]

Flin Flon & Creighton Education Outreach Campaign for HudBay Minerals - Strategic Advisor overseeing the design and implementation of a community outreach campaign to educate residents of the Flin Flon area about ways to reduce exposure to lead. [2010-2012]

York Region Southeast Collector Trunk Sewer. Project Director for construction roll-out communications and environmental assessment consultation for this \$500,000,000 critical infrastructure project. Includes role as chair of a multi-stakeholder community advisory committee and strategic guidance on stakeholder and Aboriginal communication and consultation. [2009 – 2012]

Confidential Client, Waste Management Facility Site Selection, Ontario. Strategic advisor for a comprehensive analysis of stakeholder and political contexts for the siting of two major waste management "campus" facilities in Ontario. [2009 to 2011]

Ontario Power Generation, Deep Geological Repository for Low/Intermediate Level Nuclear Waste, Public Consultation Program, Canada. Project manager for public consultation and Aboriginal impact assessment components for the environmental assessment for Canada's first deep geological repository for nuclear waste. [2007 – 2012]

Cameco, Vision 2010, Port Hope, Ontario. Project manager for engagement of local residents in shaping plans for remediation and renewal of Cameco's Port Hope conversion facility (nuclear fuel). [2005 - Present]

GE Canada, Environmental Programs - Stakeholder Relations Programs for Legacy Industrial Sites, Ontario. Planned and implemented four stakeholder relations and communication management programs to manage issues associated with remedial activities for contaminated industrial sites in populated areas of Ontario cities. [2005 - Present]

Environmental Assessment Guide - Métis Nation of Ontario Co-author and Reviewer. Developed a guide on the environmental assessment processes for use by Métis Nation of Ontario (MNO) staff and Community Council leaders. [2009 – 2010]

Walker Industries Duntroon Aggregate Quarry Expansion, Collingwood, Ontario. Project manager responsible for engagement of area residents, First Nations and government agency technical staff in



shaping plans for the expansion of a quarry site on the Niagara Escarpment, [2007 - 2010]

Walker Industries Atlas Landfill Remediation Project, Welland, Ontario. Strategic advisor responsible for overseeing engagement of area residents, Aboriginal communities and government agency technical staff in shaping plans for the remediation and reopening of an abandoned industrial landfill on the banks of the Welland River. [2009 - 2010]

Walker Industries Dunkeroon Compost Facility, Simcoe County, Ontario. Project manager responsible for engagement of area residents and other stakeholders in shaping the plans for a major private sector compost facility. [2007 - 2008]

Walker Industries Niagara Falls Landfill Expansion Environmental Assessment, Niagara Region, Ontario. Public consultation and communication co-ordinator responsible for planning and implementation of an extensive public consultation program to enable stakeholders to actively participate in the planning and execution of a comprehensive environmental assessment for one of the largest private sector landfill expansions in Ontario. The project received provincial, regional and municipal approval with no objections from area stakeholders. [2002 – 2009]

Walpole Island First Nation Community, Peer Review - Proposed Shell Canada Refinery Expansion, Sarnia, Ontario. Project manager working closely with First Nation technical staff, community elders, clam mothers and band councillors, facilitated the technical review and socio-economic impact assessment review of a proposed \$10 billion, 200,000 barrel per day heavy oil refinery on the St. Clair River. [2007 - 2008]

District of Greater Sudbury, Soils Study, Sudbury, Ontario. Planned and implemented a public consultation program for the largest human health and ecological risk assessment in Canada related to historic smelting operations. Work included multi-stakeholder planning to design the public consultation strategy and program including consultation and communication with First Nations communities. [2003 - 2009]

Carpathian Gold, Gold Mine Development, Romania. Project director for peer review and recommendations for the stakeholder engagement aspects for the environmental assessment of a planned gold mine. Work included review of the application of Equator Principles, EU environmental frameworks, and Romanian legislation with respect to best practices for stakeholder engagement. [2008]

Government of Hong Kong, Kowloon Bay Waste Transfer Facility Environmental Assessment, Hong Kong. Project director for strategic planning and stakeholder relations advice for the environmental assessment of a major waste transfer and waste diversion facility. [2008]

Constance Lake First Nation, Proposed Phoscan Phosphate Mine Environmental and Socio-Economic Impacts Review, near Kapuskasing, Ontario. Project director for an environmental and socio-economic review to assist Constance Lake First Nation to develop appropriate positions for an impact benefit agreement for a proposed \$500 million phosphate mine in its traditional territory. [2008]

Recycling Council of Ontario and Stewardship Ontario, Blue Box Initiative, Ontario. Planned and implemented a cross-Ontario public consultation program, which helped lead to provincial government approval of a new funding mechanism for the municipal Blue Box recycling, [2002 - 2003]

Canada Colors Environmental Remedial Activities - Communication Program, Toronto, Ontario. Planned and implemented a communication management program to manage issues associated with remedial activities for a contaminated industrial site in a populated area of Toronto undergoing residential redevelopment. [2005 – 2009]

Mills Canada, Environmental Remedial Activities - Communication Program, Mississauga, Ontario. Planned and implemented a communication management program to manage communication issues



associated with remedial activities for a contaminated industrial site in a populated residential area of Mississauga, [2005 – 2009]

Shell Canada, Sarnia Refinery, Effluent Management Plan Review, Multiple Locations. Project manager for an internal multi-stakeholder review of the oil refinery's effluent management system and proposals for system upgrades. Work included significant attention to the stated requirements of external stakeholders: First Nations, communities in Michigan, and regulatory authorities. [2007]

City of Orillia, Multi-use Recreational Facility Risk Assessment, Orillia, Ontario. Engaged Orillia residents in public consultation and communication regarding a site risk assessment under Ontario Regulation 153/04 of the Environmental Protection Act. Work involved planning and implementation of a consultation and communication plan with respect to the mandatory requirements of Ontario Regulation 153/04, together with establishing and managing a stakeholder liaison committee and developing public communication tools and strategies. [2005 - 2009]

Nuclear Waste Management Organization, Assessment of Benefits, Risks and Costs for Long Term Management Approaches for Used Nuclear Fuel: Community Well-being and Stakeholder Engagement Issues, Canada. Compared several Canadian economic regions with respect to community capacity to engage in complex social, economic and environmental planning processes. Report included recommendations for capacity building for equitable, transparent and meaningful stakeholder engagement, particularly with respect to poorer economic regions and economic regions with significant First Nations populations. [2004 - 2005]

District of Greater Sudbury, Soils Study, Sudbury, Ontario. Planned and implemented a public consultation program for a large-scale human health and ecological risk assessment. Work included multi-stakeholder planning to design the public consultation strategy and program including consultation and communication with First Nations communities. Work involved preparation of all media materials, media briefings, meetings with citizens, conducting public open houses and public workshops, obtaining public input on valued ecosystem components, and providing communication strategy advice for advising members of the public about high levels of arsenic and lead in soils. [2003 - 2009]

US Agency for International Development and the Academy for Educational Development - DOT-COM Alliance, Multiple Locations. Member of an international advisory team for a multiplear USAID program to apply information and communication technologies to achieve strategic development objectives in the areas of environment, governance, and rural socio-economic development. [2003 - 2007]

Gabriel Resources and Rosia Montana Gold Corporation, Environmental Assessment, Romania. Provided planning and strategic support for an extensive public consultation program for the environmental assessment for what may become one of the world's largest gold and silver mining operations. [2002 - 2004]

Global Environment Facility, Meso-American Barrier Reef System - Environmental Monitoring and Information System. Facilitated a multi-stakeholder program for the design and implementation of a distributed electronic information system for partners from Belize, Guatemala, Honduras, and Mexico who are collaborating in the protection of the ecologically unique and vulnerable marine ecosystems of the western Caribbean. [2003 - 2004]

REON Development Corporation, Former Stelco Swansea Works Site Redevelopment, Toronto, Ontario. Planned and implemented a comprehensive community engagement program which helped lead the site owner to formal site approvals from various agencies for a controversial 12 acre high-rise condominium project - with no community objections. The project was recognized by the Canadian Urban Institute with a Brownie Award recognizing outstanding achievement in building and maintaining effective working partnerships with professionals, the local community and others involved in Brownfields redevelopment. [2000 - 2003]



Food and Agriculture Organization of the United Nations, Rockefeller Foundation, and United Nations Educational, Scientific and Cultural Organization, Building Electronic Communities and Networks - Distance Education Module, Multiple Locations. Facilitated multi-stakeholder input, module design, pretesting and finalization for a benchmark, internationally disseminated distance education tool to assist people in planning and evaluating electronic communities and networks. [2003 - 2005]

Environmental Monitoring Information Network (EMIN), Governance Component, Bangladesh. Provided advice and assistance on mechanisms and processes for achieving multi-stakeholder governance of the Network, including representation from indigenous peoples' organizations. The purpose of EMIN is to implement an information network to facilitate the planning and management of water and land resources as it relates to flood and erosion monitoring among national stakeholders and relevant agencies in the Brahmaputra-Jumuna Rivers region of Bangladesh. [2001 - 2003]

Keewaytinook Okimakanak First Nations, Aboriginal Smart Community Project Planning and Evaluation Component, Northwestern Ontario. Worked with stakeholders in six Keewaytinook Okimakanak First Nations communities for this \$10 million Smart Community Project. Activities incorporated participatory exercises that enable local residents to envision the integration of telecommunication systems and applications within their communities, together with assistance in developing and implementing the monitoring and evaluation program for the community initiatives. [1999 - 2004]

Kirkland Lake and District, Economic Development and Telecommunication Study, Kirkland Lake, Ontario. Directed a study involving the Town of Kirkland Lake and five surrounding communities and First Nations. The study focused on identifying how business communities could harness the potential for economic development through a greater integration of telecommunication services. The study provided the client with recommendations and a comprehensive action plan to guide the district in its future economic development efforts. [2000 - 2001]

Industry Canada, Smart Communities Engagement Best Practices, Nationwide. Project team leader for a cross-Canada fact-finding and analysis of community experiences, particularly among rural and First Nations communities, to yield five community engagement best practices with concrete examples. [2002 - 2003]

Industry Canada, Smart Communities Performance Measurement and Sustainability, Nationwide. Researcher and co-author for a cross-Canada fact-finding and analysis of community networking experiences, particularly among rural and First Nations communities, to yield a series of sustainability and performance measurement best practices with concrete examples. [2002 - 2003]

Caribbean Telecommunication Union, International Telecommunication Union, United Nations Educational, Scientific and Cultural Organization, Caribbean Development Bank, Canadian International Development Agency, Multi-stakeholder Collaboration to Enhance Rural and Remote Telecommunications, Caribbean. Planned and facilitated multi-stakeholder workshops for cross-Caribbean stakeholders: government, regulators, telecommunication operators, indigenous communities, and rural community leaders. [2003]

Social Action Program Communication, Pakistan. Planned and facilitated multi-stakeholder planning for public-private district and provincial social service delivery in the areas of environment, education, health, sanitation and social welfare initiatives. Focused on enabling partner organizations and indigenous peoples' organizations to develop a comprehensive results-based management plan and evaluation framework for this project. [1998 - 2002]

Government of Egypt and Food and Agriculture Organization of the United Nations, Rural



Development and Agricultural Communication System, Egypt. Worked with Egyptian counterparts to develop and implement a program framework for the establishment and evaluation of a stakeholder driven Internet-based communication network that improves linkages between agricultural extension and research systems and rural community members. The project evolved from a four site pilot project to a fifty site program funded entirely by the government of Egypt and continues to generate significant improvements to the lives or rural community members across the country. [1996 - 2002]

Canadian International Development Agency, Institutional Support to the Development Support Communication Centre, Dikirnis, Nile Delta, Egypt. Responsible for enabling a government facility to transform itself for public-private service provision. Work included developing business planning, marketing and sales processes, facilitating and coordinating joint work plans to strengthen rural community development and agricultural communication, designing monitoring and evaluation frameworks, training program development, gender mainstreaming for agricultural services, introduction of improved telecommunication and Internet services for the agricultural extension system, and the establishment of new decentralized, fee-for-service Rural Extension Units to provide more responsive extension services to small farmers across Egypt. The project enabled the Ministry of Agriculture to establish a physical hub in the Nile Delta to support the transition of Egypt's agricultural system from a state-controlled system to a market-based system. [1995 - 2001]

SR Telecom, Multiple Projects, Chile, Haiti, Ghana, and the Philippines. Co-ordinated a corporate strategic program to assist in the implementation and management of telecommunication infrastructure development projects in rural areas. Work included producing detailed socio-economic business plans, coordinating village-based market research programs, producing environmental impact assessments, and developing strategic approaches to dovetailing telecommunication infrastructure with in-country programs for environment, health, agriculture and socio-economic development. [1997 - 2000]

International Development Research Centre and International Fund for Agricultural Development, Rural Electronic Networking, Asia-Pacific. Managed multi-stakeholder communication and rural community development needs assessment, planning and development of evaluation frameworks for an eight country Asia-Pacific electronic networking project to enable rural and agricultural development projects to combine Internet connectivity with traditional communication media and outreach activities. Specific support for enabling rural development stakeholders to develop and evaluate practical Internet applications in the Philippines, Sri Lanka and Nepal, India. [1998 - 2001]

Community Development, Various Locations. Provided multi-stakeholder communication and rural community development needs assessments, program planning and project implementation for a variety of clients. Work included projects for clients such as the World Bank, Industry Canada, Rotary International, UK Department for International Development and UN agencies in Bangladesh, Belize, Bolivia, Cameroon, Canada, Colombia, Guatemala, Honduras, India, Italy, Nepal, Pakistan, South Africa, Sri Lanka, Tanzania, Thailand, Uganda, and the United States. [1993 - 2002]



Jeremy Shute, M.A., R.P.P. Managing Partner, Shared Value Solutions Ltd.

Professional History

06/2012 – present, Shared Value Solutions, Managing Partner

AECOM (formerly Gartner Lee Limited) Consultant, Communications Consultation Guelph, ON 2005 – 2012

Cardinal Maps Owner 2000 – Present

The Salsateria Owner 2002 – 2004

Machute Reforestation Owner 1986 – 1990

Education

M.A. Geography Carleton University Ottawa, ON 1994

B.A. (Honours year), Geography University of Guelph, ON 1989

B.A. Geography University of Western Ontario 1988

Overview

Jeremy Shute is a public and Aboriginal Peoples engagement specialist. His professional focus is on using collaborative planning, negotiation, communication and consensus building to:

- prevent, reduce and solve land use and environmental conflicts;
- improve project design by obtaining meaningful community input;
- integrate local and traditional knowledge into project planning;
- incorporate multiple stakeholder interests in the governance of natural resources.

Jeremy is a trained mediator and facilitator and is a registered professional planner. He has a diverse background in resource, land use and community planning. He has developed strategic communication and stakeholder consultation frameworks for energy, water management, waste management, mining, brownfield, and planning projects.

Specialties

Community engagement, collaborative planning, problem solving, negotiation, the Duty to Consult, First Nation consultation, Aboriginal community consultation, community development, conflict prevention, conflict resolution, mediation, facilitation, cartography, participatory mapping, traditional knowledge, natural resource management, ecological restoration, water resources management, risk communication.

Selected Experience

Lambton Area Water Supply Project, Ontario 2009-2011

Manager – aboriginal community engagement and consultation for an expansion of a municipal water supply system. Selected route has potential to impact reserve lands and land currently under land claim negotiations. Activities included determining how project could potentially impact aboriginal rights and community interests, and how those impacts could be prevented or mitigated through changes to project design and inclusion of community interests in project planning.

Saskatchewan Research Council, Athabasca Region, Saskatchewan, 2010.

Facilitator, end use and community goals for Gunnar Mine Rehabilitation Project. Worked with area communities (First Nations, Métis and non-native), and provincial and federal agency stakeholders.



Walker Industries: Consultation & Communications Strategic Advisor, 2012-Present — Southwestern Ontario Landfill Environmental Assessment. Coordinating Aboriginal consultation for a multi-year environmental assessment for a proposal for one of the largest landfills to be established in Ontario. Includes consultation with over ten Aboriginal communities across Southwestern Ontario.

Constance Lake First Nation, 2012-Present: Province of Ontario Showcasing Water Innovation Project, Project Director for Water Management Action Plan. Coordinating the community planning component for the development of a \$7 million water and wastewater capital infrastructure project involving source water protection, community water management planning and innovative approaches to sourcing groundwater.

Hiawatha First Nation, 2012-Present: Community Infrastructure Planning Advisor. Coordinating the review of alternative approaches to financing, engineering and partnering to enhance key community infrastructure, with a primary focus on water and wastewater infrastructure.

Magnetawan First Nation, Ontario Ministry of Transportation and AECOM, 2012-Present: Traditional Land Use Study in Relation to Highway 69 – 400 Series Highway Expansion. Traditional Land Use Study coordinator determining potential impacts to Magnetawan First Nation land use, harvesting and environmental interests for input to federal and provincial environmental assessments. Includes contributing to the production of a video documentary illustrating community environmental, land use and harvesting interests. [2012 – present]

Red Sky Independent Métis Nation, 2011-2012: Traditional Land Use Study Coordinator - Marathon Copper Mine Environmental Assessment. Work includes support for preparation of technical comments on the Marathon Copper Mine Joint Provincial/Federal Environmental Assessment together with coordination of a traditional land use study and video documentary illustrating community environmental, land use and harvesting interests.

Mississaugas of the New Credit First Nation, 2012-Present: Traditional Land Use Study Advisor. Contributing traditional land use study input for coordinating review of multiple environmental assessment and environmental approval projects across the Greater Toronto Area. Includes support for strategic approaches to private sector business development with key infrastructure proponents.

Walpole Island First Nation, Ontario 2010-2011

Manager – feasibility study for large-scale landscape remediation project. Activities include managing biophysical baseline studies, incorporating community and traditional knowledge into project planning and developing a framework to assist the community in decision making.

NextEra Energy Canada, 2010-2011. Manager – community consultation process for Renewable Energy Approvals process for three wind energy centres.

NextEra Energy Canada, 2011 Facilitator – stakeholder and community meetings for other existing projects.

Clean Harbors Hazardous Waste Facility, Ontario 2009-2011. Manager - Environmental Assessment Terms of Reference phase and Environmental Assessment Phase - community consultation process.

Conestogo Highlands Windfarm Project, Ontario 2005-2008. Developed community and Aboriginal consultation programs for a ~65 MW wind farm. Included community mapping process, managing the public liaison committee, and building diverse stakeholder interests into project design.



Township of Centre Wellington, Ontario 2008-2010 Project manager/advisor - Aboriginal communities consultation for the re-development of a bridge over the Grand River and a waste water treatment plant adjacent to the Grand River.

Whitefish River First Nation, Ontario 2009-2011. Project manager, peer review of harbour expansion Environmental Assessment and Certificate of Approval. Activities included assessing potential impacts from expanded harbour activities and recommending approaches to prevent or mitigate impacts to local environment and community.

Elgin Area Water Supply System, Ontario 2010- 2011. Transmission line twinning - Advisor Community consultation process – design/build phase.

Constance Lake First Nation, Ontario 2008-2011. Assisted the First Nation in an assessment and evaluation of their land use planning process. Assisted First Nation in community communication regarding boil water advisory and water crisis.

Ministry of Northern Mines, Development and Forestry, Ontario and Manitoba 2011. Project manager, researcher for assessment of potential impacts to aboriginal rights of proposed mine rehabilitation project.

Zinifex, Nunavut 2008. Facilitated strategic planning process for a mine expansion and the development of an all-weather road from the Yellowknife region to Bathurst Inlet.

Métis Nation of Ontario 2011. Advisor, researcher – Oral history and traditional knowledge study using video and audio with key community informants. Land use and occupancy mapping project using tablet-based GIS.

Grassy Narrows First Nation, Ontario 2008-2010. Community advisor for a collaborative forest management planning process. Project incorporates community values, traditional knowledge, mapping sites of community significance, traditional use and occupancy and west scientific approaches to forestry management into the development of new forest management practices.

Thierry Mine, Ontario 2011. Advisor, aboriginal community engagement.

Métis Nation of Ontario, 2010. Trainer and coach for Negotiation and Conflict Resolution skills development.

Ontario Ministry of Transportation, 2011. Facilitator - community meetings for the Windsor Essex Parkway redevelopment. Advisor – 2010 - community engagement, Highway 400 redevelopment through Magnetawan First Nation

City of Toronto, Ontario 2009-2010. Advisor, community relations for Waste Water Treatment Master Plan

City of Hamilton, ON 2009-2010. Advisor, community relations for Waste Water Treatment Master Plan

Town of Innisfil, ON 2010. Water Treatment Plant Upgrade Class EA, Aboriginal community consultation manager.

Métis Nation of Ontario, 2010. Advisor, researcher in the development of a framework to effectively engage and comment on diverse development projects in the Boreal Forest. Activities included translating community values and goals into practical tools that can be used to shape and influence project design to minimize potential impacts from development projects on the environment and on the Métis Way of Life.



Remediation project – Ontario – 2009. Manager – large-scale ground water, surface water remediation project. Tasks included managing project budgets, scheduling, reporting and coordinating field staff and discipline leads.

Contaminated Sites Communications, Ontario – 2005-2011. Community relations manager. Development of risk communication and consultation strategies for several brownfield sites in Ontario. 2005-2009

Nestlé Waters Canada, Puslinch, Ontario 2007-2008. Managed community engagement process. Developed a multi-stakeholder collaborative planning framework for a water taking project in order to incorporate community and stakeholder interests in project planning. Created a wide range of opportunities for constructive dialogue in a highly charged environment.

Walker Industries, Ontario 2009-2011. Manager of Aboriginal community consultation process for a proposed landfill project in the Niagara region. Developed non-aboriginal community engagement process for potential new sites.

Government of Saskatchewan 2009. Development of Aboriginal community consultation process for a regional highway project.

Walpole Island First Nation, Ontario, 2008-2009. Assessment of proposed wind power projects within the Aboriginal community's Traditional Territories.

Tidal power feasibility project, Nova Scotia 2008. Preliminary evaluation of First Nation interests in the proposed project.

Northern Alberta 2007. Preliminary evaluation of Aboriginal community interests related to a proposed energy project.

Ontario Association of Impact Assessment, 2007. Facilitator for wind energy component of the 2007 "Duty to Consult" conference.

Community Justice Initiatives, Kitchener, Ontario 2005-2010. Lead mediator for public disputes.

Nipissing First Nation, Ontario 2006-2007. Assessment of renewable energy resources and power generation business opportunities.

Guelph Roundtable on Environment and Economy, Ontario 2006-2008. Development of a community leadership forum to build capacity among municipal staff, the development industry and community groups to effectively resolve infill development disputes.

Professional Development

Conflict Resolution and Dispute Negotiation. Ryerson University. Toronto, Ontario. School of Urban and Regional Planning. With Larry Sherman (2003)

Public Facilitation and Conflict Resolution. University of Guelph. Guelph, Ontario. School of Rural Planning and Development. With Jim Mahone (2003)

Training in Nutrient Management Planning under the Nutrient Management Act (2003)

Advanced Course on Mediating Land Disputes. Consensus Building Institute/Lincoln Institute of Land Policy. Cambridge, Massachusetts. With Larry Susskind (2004)

Structure and design of digital geographic databases. Ryerson University (2004)

Mediation Skills. Conflict Resolution Services of Downsview (2005)

Communications/Planning for Effective Public Participation. International Association of Public Participation (2006).

Professional Certification Course. Ontario Professional Planners Institute (2007)



Techniques for Effective Public Participation. International Association of Public Participation (2008). Certification received.

Principled Negotiation. University of Windsor Faculty of Law/Stitt, Feld, Handy Group (2010). Certified Standard First Aid, with CPR (C).

Professional Affiliations

International Association of Public Participation: Certified Member

Canadian Institute of Planners: Full Member

Ontario Professional Planners Institute: Full Member

Community Involvement

Chair, River Systems Advisory Committee (City of Guelph, Ontario) 2008-2011.

Member of the Technical Advisory Committee for the City of Guelph Storm Water Management Master Plan. 2010.

Member of the Public Advisory Committee for the City of Guelph 2008 Water Conservation and Efficiency Strategy Update.

Member of the Ignatius Old Growth Forest Restoration Committee 2008-2011.

Founding member of House of Velvet (musical ensemble).

Member of the Guelph Round Table on Economy and Environment 2004-2008.

Facilitator at the Guelph Urban Design Workshop (2003); Mediating Land-disputes Workshop (2004); Green Impact Guelph (2008).

Member of Guelph's Recreation, Parks and Culture strategic planning community team (2000).

Participant in GRCA's "A Watershed Forest Plan for the Grand River" (2003).

Participant in workshops for: City of Guelph's Growth Management Strategy; City of Guelph's Development Application Review Process; SmartGuelph; City of Guelph's Greenway Vision and Plan and Open Space Development Criteria; the City of Guelph's Official Plan; the Ontario Forest Policy Panel's Forest Policy Framework for Ontario.

PART A CAPABILITY OF THE APPLICANT

EXHIBIT 4 TECHNICAL CAPABILITY

Appendix 4C Consultants Experience

Appendix 4C - AECOM Experience

Company Overview

AECOM Inc. is a global provider of professional technical and management support services to a broad range of markets, including transportation, facilities, environmental, energy, water and government. AECOM Inc. has approximately 45,000 employees in 130 countries, including 58 offices in Canada. AECOM Inc. has worked with more than 300 power utilities in over 50 countries on more than 27,000 km of transmission lines. Its transmission and distribution team includes engineers, planners and environmental specialists who together provide the full set of competencies required within the electricity supply industry to develop and construct major electricity transmission lines.

AECOM Canada Ltd. ("AECOM") is a wholly owned subsidiary of AECOM Inc. AECOM has permitted a number of transmission line projects in compliance with numerous state/provincial utility siting protocols, and provided expert witness testimony on behalf of electrical utility companies before several regulatory authorities.

AECOM staff have implemented many large field data management programs, involving complex data analysis and interpretation. Its biologists and its natural and cultural resources specialists have an in-depth understanding of the environmental regulations and substantial experience working with government agencies, the regulated community, and public groups. Its natural resources solutions focus on regulatory compliance and our program designs are practical and results-oriented.

Experience & Expertise

AECOM has completed work on a number of transmission line projects in Canada including the 735,000 volt transmission lines for the James Bay Hydroelectric Power Complex. Five transmission lines (a total of approximately 6,000 km) were constructed for the delivery of some 10,000 MW from James Bay hydroelectric stations to the Montréal region, a linear distance of about 900 km. AECOM were responsible for the studies and design of these lines, including:

- Ecological and environmental studies;
- Corridor selection, determination of right-of-way widths;
- Determination of loading:
- Design of towers, foundations and anchors for guyed towers;
- Selection of conductor and shield wire hardware, selection of conductors and shield wires;
- Tower spotting;
- Preparation of drawings and specifications for procurement and construction contracts.

Another example of AECOM's experience relevant to the East-West Tie is the work performed for the British Columbia Hydro and Power Authority ("BC Hydro") in connection with the Columbia Valley Transmission Line project in eastern British Columbia. AECOM was retained to initiate baseline studies on this 130 km long transmission line in support of final route selection and an overview environmental assessment. AECOM conducted all the biophysical

studies along the proposed corridor and developed constraints mapping in support of selecting a final alignment. The environmental and socio-economic assessment of the project performed by AECOM considered not only the outside of British Columbia's environmental assessment process but also the needs of the British Columbia Utilities Commission and the local community. AECOM has continued to provide services to BC Hydro through the preconstruction and construction phase. AECOM developed the environmental management plan for project construction, vetted the environmental protection plans prepared by the contractors and provided a quality control function for the environmental monitoring of the clearing and construction of the right of way. AECOM provided advice on the Federal environmental assessment ("EA") process, the provincial process, and the federal and provincial permitting process to BC Hydro on this project. A further summary of key areas addressed is as follows:

- Developing and initiating environmental baseline studies;
- Supporting the application to the Utilities Commission;
- Understanding the ongoing and long term approaches BC Hydro uses in working with First Nation, project communities and non-government agencies;
- Close working relations between AECOM's environment team and the engineering team; and,
- Supporting the permitting process.

In Ontario, AECOM has completed numerous large scale individual environmental assessments and consultation processes for major linear projects, including sewers and highways. Example projects are reviewed below.

<u>Highway 407 East Extension</u> - AECOM led the individual environmental assessment for the extension of the existing Highway 407 from Brock Road to Highway 35/115 with north-south links to Highway 401 in Whitby and Clarington, protection for a dedicated transit way corridor and various lay-bys, transit way stations, maintenance facilities and commercial vehicle inspection facilities. AECOM led five rounds of consultation involving a Regulatory Agency Group, Municipal Technical Advisory Group and Community Advisory Group; public information centres; public/stakeholder workshops; direct correspondence with landowners; project web-site & phone toll-free line; newsletters; agency field trips; and First Nations consultation. AECOM also prepared the final environmental assessment report.

Consultation was completed through numerous forums throughout the study process, including five open houses (public information centers), meetings, three community workshops, information sessions, various methods of correspondence and website updates. A summary report for each round of open houses was prepared which included the material presented and a table of the individual comments received and the associated project team responses was prepared. Notification for the open houses was done through a number of methods including direct mailings, event posters in municipal offices and public libraries, website updates, external signage at the venues hosting the events and newspaper notices. The open houses were held to:

• Facilitate an exchange of knowledge between the project team and stakeholders

- Review the study progress and the findings/recommendations of each stage of the study
- Provide a formal opportunity for comment and input to further and better develop a solution
- Address individual needs / requests for information Learn specific conditions, issues and concerns on an individual property basis

A proactive involvement plan was designed to enhance the consultation requirements under the Environmental Assessment Act and was implemented as part of the environmental assessment to provide a framework for open dialogue and input at all phases of the study. The plan was integrated and implemented throughout the planning and preliminary design stages to ensure all decisions were made through a consultative, open and traceable process. The plan provided stakeholders opportunities for involvement with the project and the project team to be made aware of issues. This type of information exchange allowed for informed decisions to be made early and optimized design flexibility in the various stages of the environmental assessment. By employing this innovative plan, the project team was able to:

- Better understand / respond to concerns;
- Provide information on how decisions were made in a transparent manner;
- Promote and facilitate early, open, effective and continuous public/stakeholder involvement to ensure timely input to decision processes;
- Consider strategies to add value to the process; and
- Obtain input from government agencies on applicable legislation, regulation, policies and programs.

As well as being an integral part of transmission line routing, public involvement is also a key component of the environmental assessment in Ontario. Community consultation includes planning, notification, meeting facilitation and logistics, presentation materials, and media relations. Success factors to AECOM's public involvement strategy are:

- Identification of stakeholders, special interest groups, and agencies that have an interest in the project
- Development of potential route alternatives that meet the project objectives
- Fully informing landowners about the routing and environmental permitting process
- Extensive experience and expertise in working collaboratively with Aboriginal Peoples (First Nations and Métis) in developing projects that benefit owners and stakeholders
- <u>Highway 407 Durham Region AECOM</u> led the individual environmental assessment for the extension of Highway 407 in the Region of Durham, Ontario, which was approved in 2009. The purpose of the assessment was to address existing and future anticipated transportation capacity deficiencies within the Region of Durham and to determine the transportation needs from a principal perspective. The project included two north-south links to Highway 401, maintenance facilities, commercial vehicle inspection facilities, and 17 transit way stations.

AECOM also wrote the terms of reference for the environmental assessment that was approved in January 2005.

- <u>Southeast Collector Trunk Sewer Project</u>: AECOM led an environmental assessment and a public consultation program for the Southeast Collector Trunk Sewer project.
 - The purpose of the environmental assessment was to accommodate the additional sanitary sewer flows projected from future growth, as allowed for in York Region Official Plan, in accordance with the provincial initiative for growth outlined in the Places to Grow Act. In accordance with the EA Act, a terms of reference was prepared, submitted to the Minister for approval in July 2005 and approved in February 2006. With the terms of reference approved, the actual EA was initiated to determine a route for a new 3.0 m diameter SEC trunk sewer. With this in mind, various routes were generated, assessed, and comparatively evaluated leading to a preferred route.
 - A proactive constructive engagement program was led by AECOM as part of the environmental assessment to inform participants, identify issues, and resolve concerns prior to the submission of the environmental assessment to the Minister. The constructive engagement program was implemented through five rounds of consultation reflecting key decision making points in the environmental assessment.

Appendix 4C - Altus Experience

Company Overview

Altus Group Inc. ("Altus") is a Canadian company that provides professional services in the real estate sector. Altus has a staff of over 1,700, located in over 60 offices in 14 countries worldwide including the United Kingdom, Australia, Asia, the United States and 29 offices in Canada.

Altus provides professional services in five interrelated disciplines: research, valuation and advisory; cost consulting and project management; realty tax consulting, ARGUS Software (for property asset management); and Geomatics. Geomatics includes the following services:

- <u>Legal/Municipal Land Surveys</u> Spatial identification, property boundaries and other geo-referencing specifications to conform with local jurisdictions and systems.
- <u>Construction Surveys</u> –Procedures and processes to manage the entire construction cycle effectively.
- <u>Field Surveys</u> Highly skilled project management, mapping, field and CAD teams to deliver seamless, concurrent, service.
- <u>Geographic Information Systems (GIS) and Internet GIS</u> An extensive, online system with over 80 layers of resource data to generate informative location reports.
- <u>Mapping</u> Aerial photography, orthophoto maps, satellite imagery and other applications generated to provide a comprehensive range of services.
- <u>3D Scanning</u> Highly detailed and defined application in a fraction of the time it takes using conventional survey methods to capture new and existing facilities.
- <u>LiDAR</u> (Light Detection and Ranging) Accurate, cost-effective, and timely data to ensure optimal route and site selection.
- <u>Environmental & Forestry</u> Comprehensive, multi-disciplinary solutions to facilitate the resource-management needs of the forestry and energy sectors.

Altus has recent experience acquiring transmission, pipeline and road rights of way in British Columbia, Alberta, Ontario and Québec. The Altus Group Infrastructure team consists of numerous professionals offering up-front consulting solutions in the areas of Development Planning, Land Management, Site & Right of way acquisition, Cost Management, Economic Consulting and Project Management.

Altus Group is by far the largest commercial appraisal firm in Canada with the highest number of Accredited Appraisers, the broadest market coverage and one of the largest databases of sale and lease transactions. Altus has completed approximately 4,000 appraisals for commercial and investment properties and land across Canada for each of the last three years. Several billion dollars' worth of commercial properties are appraised every year, many of them under multi-year contracts with major institutional owners of real estate.

Of specific relevance to the East-West Tie project, Altus services include analysis, research, valuation, realty tax consulting, due diligence, right-of-way and corridor property acquisitions

for major infrastructure installations, land appraisal and valuation, site acquisition and procurement through expertise in expropriation, easements, licenses and utility agreements, as well as planning and regulatory approvals for municipal, provincial, federal and regulatory bodies.

Experience & Expertise

Altus has extensive experience completing analysis, research, valuation, realty tax consulting and due diligence services for large property portfolios across Canada. In addition, Altus has developed a wide range of experience in rights of way and linear/corridor property acquisitions for major infrastructure installations including major hydro projects, highways and telecommunications facilities. Furthermore, Altus has experts in expropriation and injurious affection with expert testimony experience before the Ontario Municipal Board, Appeal Boards in BC New Brunswick Newfoundland and Nova Scotia as well as before the provincial Supreme Courts and the Federal Court of Appeal and Alberta Court of Queen's Bench and Land Compensation Board.

Some highlights of Altus Group's experience are provided below:

- Bruce to Milton: Hydro One Networks Inc. hired Altus to provide value benchmarking along the proposed route; prepare pre-expropriation property specific valuations and property specific expropriation valuations; act as an expert witness during Ontario Energy Board proceedings; and complete +200 market value appraisals with consideration of injurious affection from 2007 to 2011. The work affected approximately 350 properties along the approximately 180 km right of way comprised of future residential development land, farms, rural residential improved land, vacant land, and estate residential land. The project required in excess of 13,000 employee hours from Altus staff.
- North and South Foothills Transmission Project: An incumbent transmission franchise holder in Alberta hired Altus to complete right of way valuation analysis to establish land acquisition costs for the proposed 160 km South Foothills Transmission Project and the 60 km North Foothills Transmission Project. The analysis was undertaken in order to facilitate ROW acquisition for the proposed 240,000 volt lines. The main challenge involved the very diverse Highest and Best Uses of the lands in the corridors. The corridors ran through several legal jurisdictions, from within the City of Calgary through industrial designated lands, to the country residential acreages of the Municipal District of Foothills, to the City of Okotoks, to rangeland, cultivated or irrigated lands in the south. The line alternatives were balanced into Zones of common Highest and Best Use, and valued accordingly. In addition, there were several zones with sour gas facilities, the effects of which were analyzed and integrated with the report. Although sour gas facilities are not expected to be an issue for the East-West Tie, the project area does include a number of existing mines, mine projects and mining claims, and these will need to be incorporated in to the final route.
- Ram River Pipeline: Altus was tasked with completing the right-of-way planning and survey (LiDAR, construction and legal) for the construction of 30 kilometres of

midstream pipeline and associated plant site in order for Talisman Energy to tie-in its existing collector systems a midstream tie-in to a proposed plant site in the area of central West Alberta. Through the use of remote sensing data (LiDAR), aerial photography, geospatial forestry data, existing facilities data (pipelines, wellsites, residences, etc.) and ground reconnaissance, Altus group planned the right-of-way for the proposed midstream pipeline. Altus provided the client with constructible route through planning and engineering opportunities and constraint mapping for the proposed corridor and subsequent route. Once route was approved through the regulator, Altus completed all the survey requirements for the project which included planning and remote sensing data management, construction survey and legal right-of-way survey.

Appendix 4C - Power Engineers' Experience

Company Overview

Founded in 1976, Power Engineers is a full-service, multidiscipline global consulting engineering firm providing services to all types of electric utilities, transmission companies, independent power producers, mining clients, commercial and industrial clients, generation plants, and governmental agencies. Power Engineers employees more than 1,700 employees in 30 offices throughout the United States, the United Kingdom and South Africa. Power Engineer's transmission and distribution department employs over 675 staff, making it one of the largest of its kind in the US. Power Engineers is based in Hailey, Idaho.

Power Engineers has experience developing major projects in a variety of different locations each of which has required a unique approach guided by local preferences, limitations on experience and laws, material and labour availabilities, contract method dictations, project goals and the terrain/environment. Power Engineers' has a deep understanding of engineering transmission lines in northern Ontario. Power Engineers has a 20-year history of Ontario projects from the south to the north and under a host of contractual arrangements. Moreover, Power Engineers has experience of projects in northern conditions where the effects of rough terrain, remote access, deep snow, low temperatures, winter work methods, and the nuanced effects of rough terrain ice, snow and wind on line structure design loads are very important.

Outside of Canada and the United States, Power Engineers have also produced technical design criteria and specifications for large transmission line projects in New Zealand, east-central Africa (Kenya) and Central America (Cost Rica).

Power Engineers provides services for the transmission and distribution of electricity at all levels of the planning, permitting, design, construction, testing and commissioning processes, and maintenance testing over time including:

- High voltage and extra high voltage transmission line design overhead & underground
- High voltage and extra high voltage substation and switch station design
- System studies
- System planning
- Routing
- Utility automation
- Testing, commissioning and energization
- Geographic information systems
- Construction management and inspection
- Program Management

Experience and Expertise

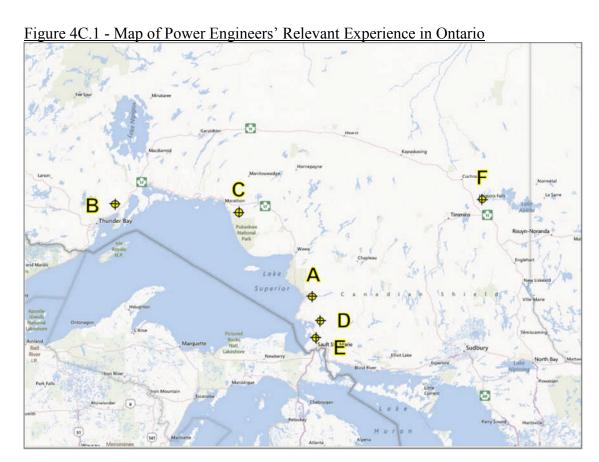
In the last ten years, Power Engineers has been or is currently engaged in the engineering management and execution of a number of very large projects, some of which are listed below:

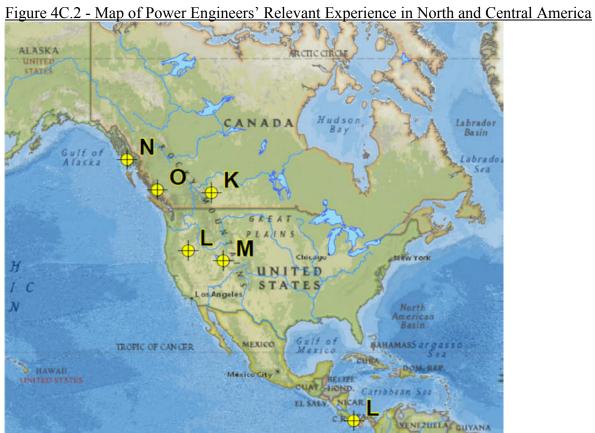
- AESO Functional Specifications for 500 kV Project: Power Engineers assisted the Alberta Electric System Operator ("AESO") in the development of a functional specification for the Genesee-Langdon 500 kV project between Edmonton and Calgary. The assistance was solicited because no one in Alberta had recent 500 kV experience, the last large EHV projects having taken place 25 years earlier. The work began with establishing the distinction in the minds of the AESO and facility owner (AltaLink/SNC Lavalin) between prescriptive specifications and functional specifications. (This project is identified as site "K" on Figure 4C.2 Map of Power Engineers' Relevant Experience in North and Central America.)
- <u>Allegheny Trail</u>: 160 miles of 500 kV line spanning the Allegheny Energy Service Territory from south-western Pennsylvania through West Virginia to northern Virginia for Kenny Construction Company. Power Engineers provided environmental resource studies and jurisdictional permitting and licensing services, and detailed transmission line engineering and design, including material specification and establishing new line and structure design criteria; 2007-2011.
- <u>Arrowhead-Weston</u>: 240 miles of 345 kV line in Minnesota and Wisconsin for American Transmission Company. Power Engineers acted as Owner's Engineer for siting, right-of-way procurement, engineering and construction management; 2000-2009.
- <u>BC Projects</u>: Projects for Rio Tinto Alcan and Plutonic Power (now Alterra) in the Coastal Mountains of BC executed by Power Engineers developed great understanding and appreciation of very rugged and remote access issues, deep snow, snow creep, avalanches, mud and rock slides, helicopter work and managing poor weather scheduling. (These projects are identified as site "O" on Figure 4C.2 Map of Power Engineers' Relevant Experience in North and Central America.)
- <u>CapX 2020</u>: 600 miles of 345 kV, 70 miles of 230 kV, and 9 new substations for Xcel Energy, one of the 11 regional utilities in this initiative to boost capacity of the electric transmission grid in Minnesota and surrounding states. Power Engineers is Owner's Engineer for four of the projects; 2009-2014 (est. in service).
- <u>Clean Line Energy</u>: Clean Line Energy hired Power Engineers to work on four projects; 2010-2013:
 - Centennial West Environmental Services 800 miles of high-voltage direct current ("HVDC") from eastern New Mexico to load centers in the Southwest. Power Engineers is providing siting studies to develop alternate routes.
 - Plains and Eastern 800 miles of 600 kV from Oklahoma Panhandle to Memphis, Tennessee. Power Engineers provided preliminary electrical studies and preliminary transmission line design.
 - Rock Island 500 miles of HVDC from Iowa, Nebraska, South Dakota, and Minnesota to Illinois and other eastern states. Power Engineers provided visualization services to give landowners a better understanding of the routing,

- regulatory, and construction processes for the proposed overhead transmission line construction process.
- Grain Belt 500 miles of 500/600 HVDC from Kansas to SE Missouri. Power Engineers provided preliminary design support and electrical studies.
- <u>Gateway South</u>: 420 miles of 500 kV with endpoint substations and third point series compensation stations from south-eastern Wyoming to central Utah for PacifiCorp. As Owner's Engineer, Power Engineers is responsible for engineering services to support the environmental permitting and final route selection processes and preparation of Engineering, Procurement and Construction ("EPC") packages for construction; 2011-2015 (est. in service).
- <u>Gateway South</u>: Power Engineers is PacifiCorp's Owner's Engineer ("OE") for the 420 mile, 500 kV mile between south-central Wyoming and East-central Utah. The 4 to 5 year process includes support to the project's environmental consultant, development of the line design to about 90% and writing of the technical specifications components of the EPC contract documents. (This project is identified as site "M" on Figure 4C.2 Map of Power Engineers' Relevant Experience in North and Central America.)
- <u>Gateway West:</u> 850 miles of 500 kV and 300 miles of 230 kV across southern Idaho and southern Wyoming for Pacificorp. Power Engineers is Owner's Engineer assisting in obtaining required environmental permits, performing the initial engineering for the project and developing the EPC specifications; 2008-2018 (est. in service).
- <u>Greenwich Wind Farm Connection to M23/24L</u>: Power Engineers designed the double circuit, 230 kV connection between the Greenwich Wind Farm and M23/24L about 45 km east of Thunder Bay. Power Engineers operated as the contractor's engineer in an EPC environment. Power Engineers simultaneously designed the Farm's 34.5 kV collector system. (This project is identified as site "B" on Figure 4C.1 Map of Power Engineers' Relevant Experience in Ontario.)
- <u>Iroquois Falls Line Failure Analysis</u>: Power Engineers staff performed a failure analysis of the 27 kV line installed to the Iroquois Falls GS. The lines were designed for an insufficient low temperature and employed inappropriate hardware for the conductor used on the line. (This project is identified as site "F" on Figure 4C.1 Map of Power Engineers' Relevant Experience in Ontario.)
- MPRP: 35 segments totalling over 350 miles of 345 kV and 115 kV transmission line and substations across Maine for Central Maine Power. Power Engineers provided Owners' engineering, detailed design, civil design support, permitting support, and EPC services; 2007-2013.
- <u>MSTI</u>: 430 miles of 500 kV from Central Montana to South-Central Idaho for NorthWestern Energy. Power Engineers is providing Owner's Engineering with continuing transmission line siting and environmental services, GIS mapping and data management support, right of way support, electrical system studies, and detailed engineering of all facilities; 2008-2017 (est. in service).

- <u>ON-Line/SWIP</u>: 235 miles of 500 kV line running from Ely to Las Vegas, Nevada for Great Basin Transmission South/NV Energy. Power Engineers served as both Owner's and Design Engineer; 2005-2011.
- Prince Wind Farm Connection to K24G: Power Engineers provided the engineering for this single circuit, 8-mile 230 kV connection north of Sault Ste. Marie on behalf of the contractor working in an EPC environment. (This project is identified as site "E" on Figure 4C.1 Map of Power Engineers' Relevant Experience in Ontario.)
- <u>SunZia</u>: 500 miles of 500 kV from central Arizona to central New Mexico for Southwestern Power Group. Power Engineers is Owner's Engineer covering permitting support activities, schedule preparation and access plan development; 2009-2013.
- <u>Technical Specifications developments</u>: Power Engineers staff have played a lead role in developing several technical specifications (design criteria) documents for the following: The first 400 kV line in New Zealand for TransPower; project specific specifications for several long 230 kV lines across Kenya; a complete 138 kV and 230 kV transmission line technical specification set including a rationale documentation for the national utility in Costa Rica, ICE; two project-specific design criteria sets for long transmission projects at 345 kV and 500 kV for Nevada Power. (The Nevada and Costa Rica projects are identified as sites "L" on Figure 4C.2 Map of Power Engineers' Relevant Experience in North and Central America.)
- <u>TransWest Express</u>: 765 miles of 60 kV HVDC from central Wyoming to south of Las Vegas, Nevada for TransWest Express. Power Engineers is acting as Owner's Engineer and providing preliminary engineering to support project development and engineering support to the routing, siting and environmental permitting; 2008-2016 (est. in service).
- Tyee Transmission Line Rebuild: Power Engineers designed the rehabilitation of the poorly performing 138 kV line is SE Alaska for the Alaska Energy Authority. The line suffered unplanned outages due to poor original design criteria and heavy snow loads on the long spans. The reconstruction required great care with special construction techniques to limit damage to the very soft soils in rugged and remote locations. (This project is identified as site "N" on Figure 4C.2 Map of Power Engineers' Relevant Experience in North and Central America.)
- <u>Umbata Falls 115 kV Connection to W21/22M</u>: Power Engineers designed the 14 mile, 115 kV connection of the Umbata falls generating plant to the East-West Tie on behalf of the contractor working in an EPC environment. (This project is identified as site "C" on Figure 4C.1 Map of Power Engineers' Relevant Experience in Ontario.)
- <u>Utilities Standards Forum ("USF") Standards</u>: Shortly after the USF was formed to develop standards for Ontario's small electric utility members in the absence of the onceavailable Ontario Hydro Standards, Power Engineers was asked to develop the USF standards for selected parts of their pending Standards. The sections of standard provided by Power Engineers were Sags and Tensions, Clearances, Pole Selection, Guying and Anchoring. As a follow-up, Power Engineers provided a number of training sessions to USF members on the meaning and use of the Standard.

- <u>Various Line Projects for Great Lakes Power Transmission ("GLPT")</u>: Power Engineers has performed more than three dozen projects on behalf of GLPT on their 115 kV and 230 kV lines since 1992. The work has touched every circuit on their system consisting of analysis or the engineering of complete rebuilds or upgrades. The importance of the work is to recognize the Power Engineers-GLPT relationship as strong and trusted. (These projects are identified as site "D" on Figure 4C.1 Map of Power Engineers' Relevant Experience in Ontario.)
- <u>Various Wind Farm High Voltage Connections and Collector Systems</u>: As Ontario embarked on the widespread installation of wind farm power sources, Power Engineers has provided the engineering to the line contractor for the 115 kV or 230 kV connections to the local grid at Prince (noted above), Erie Shores (13-mile), Kruger, Talbot and Greenwich (noted above). Power Engineers designed the Greenwich Wind Farm collector system (noted above) and also provided consulting/analysis services to Brookfield Renewable Power at Comber and Gosfield Wind Farms.
- W23K & K24G Design Criteria: Prior to the development of the replacement of GLPT existing circuits on the Wawa to Sault Ste Marie transmission corridor by the letting of OE and EPC contracts, Power Engineers wrote the design criteria for the project. The design criteria were adopted by the OE at the project's beginning. This was the first need for 230 kV design criteria in several decades at GLPT. It addressed two new issues: a transmission line that required extraordinary integrity because it would be a single circuit backbone to the GLPT system replacing two circuits; and the EPC construction environment. The latter required language tailored to the untested contractual relationships. (This project is identified as site "A" on Figure 4C.1 Map of Power Engineers' Relevant Experience in Ontario.)





PART A CAPABILITY OF THE APPLICANT

EXHIBIT 4 TECHNICAL CAPABILITY

Appendix 4D GLPTLP Procurement Procedure Policy

EB-20120-0300 Exhibit 4 Tab 2 Schedule 5 Appendix A Page 4 of 17

Great Lakes Power Transmission LP
Procurement Procedure
March 25, 2011

Great Lakes Power

Great Lakes Power Transmission LPSchedule 5
Procurement Procedures Appendix A
March 25, 2011

1	Overview	3
	1.1 Revision History	3
	1.2 Review Period	3
	1.3 Responsibilities	3
	1.3.1 Owner	3
	1.3.2 Manager	3
	1.3.3 Compliance	3
	1.4 Target Audience	3
	1.5 Conflict Escalation	4
2	Principles	4
3	Procedure Framework	5
	3.1 Objective	5
	3.2 Minor Purchase ProCard (<\$200)	7.
	3.2.1 Travel/Conferences/Seminars	7
	3.2.2 Low Dollar Item	7
	3.2.3 Emergency	8
	3.3 Major Purchase	8
	3.3.1 Purchase Orders	8
	3.3.2 Standing Purchase Orders	9
	3.3.3 Direct Invoicing	9
4	Contracts and Competitive Procurement	9
	4.1 Contracts	9
	4.2 Competitive Procurement	10
	4.2.1 Purchases up to \$5,000	10
	4.2.2 Purchases \$5,000 to \$25,000	10
	4.2.3 Purchases \$25,000 to \$250,000	10
	4.2.4 Purchases over \$250,000 [formal RFP process required]	10
	4.2.5 Award to Non-Lowest Bid	11
	4.2.6 Exemption from Requirement for Competitive Procurement	11
5	Definitions	12
6	References	13

EB-20120-0300

1 Overview

This procedure provides internal Management and control over the process of procuring goods and services. The procedure stipulates that the procurement of goods and services will be in accordance with the procedure framework (Section 3), the requirement is for competitive bids whenever commercially practicable (Section 4.2), all participants will conduct themselves in an ethical and fiscally principled manner (Section 2), and, that each control point must be approved in accordance with the Spending Approval Procedure.

1.1 Revision History

Version	Reason for version	Author	Date Approved	Approver	Signature
1.0	Initial Publication	M. McCracken	June 18, 2010	D. Fecteau	DF
1.0	Initial Publication	D. Fecteau	June 18, 2010	A. McPhee	AM
1.1	Minor Updates	D. Fecteau	March 5, 2011	A. McPhee	L. Elwingh

1.2 Review Period

This procedure is to be reviewed annually to ensure continued relevancy and accuracy.

1.3 Responsibilities

1.3.1 Owner

The Owner of this procedure is the Vice President and General Manager

1.3.2 Manager

The Manager of this procedure is the Director of Administration

1.3.3 Compliance

Employees are required to comply with the procurement procedure; Managers are responsible for ensuring that employees within his or her department are aware of the procurement procedure.

Managers are also responsible for ensuring that expenditures within their department are for an approved budgeted line item, the expenditure does not exceed the approved budget, and it is charged to the proper Work Order (WO) prior to the issuance of a PO.

1.4 Target Audience

The procurement procedures are for all operational and administration staff\consultants at Great Lakes Power Transmission (GLPT).

March 25, 2011

EB-20120-0300

1.5 Conflict Escalation

The Purchasing Department will work with Requestor but also departmental Managers to resolve any disagreement(s)/dispute(s) with regards to this procedure. In the event of an outstanding disagreement between or with the above parties, the procedure Owner represents the final escalation point.

2 Principles

The following principles shall be taken into account during any procurement of goods or services by GLPT:

Health and Safety: GLPT continuously strives to achieve excellence in safety performance and be recognized as industry leaders in accident prevention. Our overall objective is to achieve zero high risk safety incidents and zero lost time injuries for all employees. Contractors, and the public that are within close proximity of our facilities. Procurement of goods and services shall comply with GLPT Contractor safety Management which is detailed in the Safety Procedures.

Environmental Issues: GLPT accepts the responsibility entrusted to us to manage natural resources in ways to ensure sustainable development and public safety. Procurement of goods and services shall comply with GLPT Contractor environmental Management which is detailed in the Environment Procedures.

Accountability: Expenditures must be made in accordance with sound business practices and applicable requisitioning and approval practices of GLPT at the time of initiation of procurement process.

Honesty/Integrity: Maintaining an unimpeachable standard of integrity in all their business relationships both inside and outside the organization;

Ethical and Transparent: Acquiring goods and services through the consistent application of transparent processes, and professional standards of business ethics in accordance with the GLPT - Code of Business Conduct and Ethics. In addition, employees and consultants shall not use their authority for personal gain and shall reject any business practices that are improper.

Discrimination and Harassment: No employee shall knowingly participate in acts of discrimination or harassment towards any person that he or she has business relations with.

Business Gifts and Hospitality: Employees and consultants shall preserve the image and integrity of themselves and of GLPT; business gifts other than items of small intrinsic value should not be accepted.

Procurement Procedures Appendix A March 25, 2011

Great Lakes Power

Competition: Remaining conscious of the advantages of maintaining a continuing relationship with a Supplier. Any arrangement which might prevent the effective operation of fair competition must be avoided.

Conflict of Interest: Employees and consultants shall avoid situations where personal interest which may infringe, or might reasonably be deemed by others to infringe, on a member's impartiality in any matter relevant to his or her procurement related duties.

Such instances should be immediately declared to the Vice President and General Manager before entering into any agreement. Recommendations will be made by the Vice President and General Manager on how to avoid, neutralize, or mitigate the risks based on the specifics of the situation.

Confidentiality: Take all reasonable steps to ensure that we comply with all confidentiality obligations. The confidentiality of information received in the course of duty must be respected and should not be used for personal gain or to the advantage of the Supplier; information given in the course of duty should be true and fair and not designed to mislead.

Conformity to the Laws: Employees and consultants must comply with all of the laws in which we practice; the rules and regulations of GLPT and the Ontario Energy Board; any professional institutions that we might be a member of; and our contractual obligations.

3 Procedure Framework

The purpose of this procedure is to describe the processes to be followed for the acquisition/lease of goods and services. The acquisition/lease of goods and services are classified into two categories. Category one consists of Operations, Regular Maintenance, and Administration (OM&A). Category two consists of Capital or Major Maintenance (MM) projects.

This procedure document does not outline the authorization levels for approval of category two projects or spending approval limits for both categories one and two expenditures. (Please refer to the Spending Approval Procedure). This procedure outlines the steps to be followed **after** satisfying all requirements of the Spending Approval Procedure.

3.1 Objectives

The objective of this procedure is to ensure that all stakeholders (GLPT Operations, Partners, and Ratepayers) needs are adequately assessed and acquisition/lease of goods and services are properly justified prior to purchase. The intent of this procedure is to: ensure operations have the tools required to operate a safe, reliable, environmentally responsible and efficient transmission system, ensure (where appropriate) acquisitions/lease of services are acquired through a competitive procurement process (Section 4.2), and ensure appropriate internal controls and audit

trails are maintained. To ensure GLPT meets this objective the following specific objectives will be adhered to:

- The Purchasing Department is to be utilized as much as possible, in order to allow others to focus efforts on specific departmental tasks. This will ensure enhanced operational efficiency and support the internal controls and audit trails. The Purchasing Department will liaise with the requester and existing/potential Suppliers.
- Obtaining quotes or proposals from multiple Suppliers is preferable to single sourcing when possible. Single sourcing (Section 4.2.6) may be necessary and suitable in certain circumstances, and when the risks associated with single sourcing can be mitigated.
- Qualification and selection of Suppliers will be conducted based on certain criteria. Selection criteria include but are not limited to any of the following.
 - Health and safety considerations
 - Environmental considerations
 - Prequalification of Suppliers (All Suppliers should be prequalified¹)
 - Price variations
 - Community support and strategic business relationships
 - Past procurement experience
 - Available information about Suppliers
 - Timeframe for selection
 - Nature of goods/services being procured
 - Availability of Suppliers
- Decisions made in the selection of Suppliers and service providers must be adequately documented.
- Documentation is required for each purchase to ensure purchasing files are
 consistently maintained with all required information. This will also facilitate the
 maintenance of an inventory database, and proper tracking and accounting for
 disposals of assets.

When there is uncertainty as to the requirement of a prequalification, consultation with the Health, Safety and Environmental Specialist will be required to reach a conclusion.

¹ It will be the responsibility of the requesting/approving individual to determine if the prequalification program is required; as this requirement will not be enforced upon Vendors, service providers, or Contractors who do not pose safety or environmental concerns.

EB-20120-0300
Exhibit 4
Tab 2
Great Lakes Power Transmission LPSchedule 5
Procurement Procedures Appendix A
March 25, 201

 Expenditures on goods and services are not to be broken down arbitrarily into smaller amounts to circumvent the documented authorization limits.

This Procedure document covers major purchases completed via Purchase Orders (PO), Standing Purchase Orders (SPO), and direct invoicing, as well as minor purchases completed via Procurement Cards (ProCard) and Fleet Cards.

3.2 Major Purchase

For all external purchases of goods and services, which are not ProCard purchases, a PO or SPO must be issued for the item or service through the Purchasing Department. The only exceptions are in the case of emergencies and where a Purchase Requisition and sourcing are not feasible or applicable; such expenditures include but are not limited to payroll, utility bills, insurance, property taxes, regulatory fees, fuel, etc.

3.2.1 Purchase Orders

A Purchase Requisition form is to be completed. This will include an estimated value for the purchase, a Work Order (WO) number and approval from a manager (subject to the "Spending Approval Procedure" limits). The estimated value of the expenditure will be calculated as follows:

The estimated value of the purchase of goods and services excludes taxes. For a lease it will be the sum of rental/lease payments over the contracted or expected term and, if applicable, would include the purchase option at the end of the rental/lease period, and the residual value payment, including any expected renewal periods. If a contingent obligation is associated with the lease, the estimated value of the contingency must be included as part of the total expenditure for approval purposes.

The Purchase Requisition will be sent to the Purchasing Department to be sourced. Multiple quotes will be obtained when possible/reasonable (Section 4.2). When not possible or reasonable, formal documentation of sourcing methodology is necessary on the Purchase Requisition. Examples include instances where the Requestor has already sourced a highly specialized product/service, or the nature of the product/service is such there are no other Vendors available. The documentation will serve to verify to stakeholders that value for money is being ensured and to assist with audit purposes.

The documentation related to the quotes will be retained with the Purchase Requisition for audit purposes.

The quoted price should be within 10% of the estimated value, where it is not, the Purchaser will communicate with the approving manager prior to creating a PO.

When the Purchaser is satisfied that the above requirements have been met he/she will create a PO.

3.2.2 Standing Purchase Orders

When certain goods are repeatedly purchased, or services are retained throughout the year, a SPO will be more efficient and preferred over repeatedly following the PO procedures noted above in section 3.2.1.

Requirements are equivalent to those requirements set out above in 3.2.1 for a regular PO, excluding the need for sourcing once a SPO has been established.

Annual review of SPO's is required. This will be in the form of an analysis outlining the sourcing decisions.

3.2.3 Direct Invoicing

As noted above in section 3.2 invoices that are not on PO's include but are not limited to payroll, utility bills, insurance, property taxes, regulatory fees and expenses, etc. Direct invoicing is acceptable in cases where a Purchase Requisition and sourcing are not feasible. In addition direct invoicing is acceptable in cases of Emergency.

Approval of all direct invoicing will be evident by a manager's signature on invoice.

3.3 Minor Purchases

Because of the nature of ProCard and Fleet Card purchases, a Purchase Requisition and PO is not required. However, a WO must be created or assigned prior to the reconciliation process which is completed by accounting. All receipts MUST be included with the monthly reconciliation as set out in the detailed ProCard Guidelines. In the event that a receipt is not available, authorization will be required and approval is left to the discretion of the manager.

Receipts assist in the fulfillment of inventory requirements; all tools, equipment and furniture greater than \$200 are to be capitalized and recorded in inventory databases, as required in the separate inventory Database Procedures.

Purchases under a ProCard are categorized as Travel/Conferences/Seminars, Low Dollar Items (under \$200) or Emergencies. Purchases under a Fleet Card are categorized as fuel or minor vehicle maintenance costs (under \$200).

3.3.1 Travel/Conferences/Seminars

The P-Card is to be used for approved GLPT travel expenses, approved GLPT conferences, or approved seminars.

Exhibit 4
Tab 2
Great Lakes Power Transmission LPSchedule 5
Procurement Procedures Appendix A
March 25, 2017 ge 12 of 17

EB-20120-0300

3.3.2 Low Dollar Items

For purchases of goods and services (those not exceeding \$200, all taxes included), it is efficient to use the procurement card with no requirement to utilize the Purchasing Department; however managerial approval must be obtained after the purchase. This is evident through the Manager's review and approval of the reconciliation. The P-Card may also be used to purchase Emergency items (see below). For in-depth instructions on the utilization of the P-Card, please refer to the procedures outlined in the Purchasing Card Program Guideline.

Expenditures are not to be broken down arbitrarily into smaller amounts to circumvent the limit. Purchases of goods and services which fall outside of these requirements will require formal detailed documentation of the special situation, with evidence of a manager's review. All purchases of goods and services will be monitored and subject to periodic reviews.

3.3.3 Emergency

Advance approvals are not required for Emergency expenditures. However, the Emergency details must be noted through the monthly P-Card or Fleet Card reconciliation process.

3.3.4 Fuel and Minor Vehicle Maintenance

Fleet Cards are to be used for fuel and minor vehicle maintenance costs (costs < \$200). A Fleet Card is found in each company vehicle for this purpose.

4 Contracts and Competitive Procurement

4.1 Contracts

Contracts can be utilized for any of the above purchasing options. Contracts may be preferred for services that have increased health safety and environmental concerns or for large purchases. A contract is not required when the costs associated with the process of obtaining a contract do not provide sufficient business justification. The ultimate determination for whether a contract is required will be the responsibility of the requester.

When certain goods are repeatedly purchased, or services are retained throughout the year a contract may be preferred by the Requestor/Purchaser or the Vendor. All contracts and agreements must be submitted to the Director of Administration and the Vice President and General Manager for approval.

The Contract Specialist is to be utilized when questions arise as to the need or requirement of a contract. The Contract Specialist should be consulted in the initial stages of implementing a contract and he/she will assist with the formal documentation.

Contracts are to be reviewed annually.

4.2 Competitive Procurement

It will be the responsibility of the Purchasing Department to ensure the following procedures for competitive procurement are followed.

4.2.1 Purchases up to \$5,000

Can be executed on a non-competitive basis and the decision as to whether to source and seek multiple verbal quotations rests with the Purchasing Department.

4.2.2 Purchases \$5,000 up to \$25,000

To be considered as competitive the procurement of goods or services should be based on at least three bids, which may be oral or written, but the details must be attached to the Purchase Requisition. Typical information may include:

- Vendor's name.
- Vendor phone number,
- contact person's name and number;
- prices quoted, and,
- date.

If less than three quotes are received, an explanation is to be provided and attached to the Purchase Requisition.

4.2.3 Purchases \$25,000 up to \$250,000

To be considered as competitive the procurement of goods or services should be based on at least three written quotes which must be attached to the Purchase Requisition. The Requestor may choose to RFP if deemed appropriate. If less than three quotes are received, the Purchaser or Requestor is to provide an explanation and attach it to the Purchase Requisition.

4.2.4 Purchases Over \$250,000 [formal RFP process required]

To be considered competitive the procurement of goods or services should be solicited through a formal written Request for Proposal (RFP) with the scope developed by the Requestor as appropriate for the type of goods and services, that can be either:

- solicited among three or more potential Vendors that might reasonably be expected to be appropriately qualified; or,
- solicited to at least two Vendors selected on the basis of formal written qualifications, documented GLPT Vendor evaluation reviews, or,

Exhibit 4
Tab 2
Great Lakes Power Transmission LP Schedule 5
Procurement Procedures Appendix A
March 25, 2017 age 14 of 17

EB-20120-0300

successful and positive experiences related to previous GLPT requirements or projects.

If less than three quotes are received, an explanation is to be provided and attached to the Purchase Requisition.

4.2.5 Award to Non-Lowest Bid

Award of the bid to a materially non-lowest price Supplier or service provider is justified from time to time but it must continue to adhere to the approved spending limits on the Purchase Requisition.

Non-Lowest Bid justifications shall objectively and quantifiably address some or all of the following factors:

- Quality/safety or schedule reasons.
- Total value or life-cycle costs,
- Experience (general or site specific),
- Continuity of service or expertise previously engaged, and/or
- Compatibility with existing equipment, systems, and/or protocols.

Justifications must be re-approved annually and/or on a project by project basis as applicable to the nature and value of the goods or service and in accordance with the Spending Approval Procedure.

Similarly, if the lowest price bid is >25% lower than the next highest bid, the requestor must provide an explanation which includes:

- Confirmation that the scope was the same for all Vendors;
- Confirmation that the winning bidder is capable of delivering the goods and services according to the scope, quality, schedule and without safety, environmental or operational risk.

4.2.6 Exemption from Requirement for Competitive Procurement

On occasion a purchase of larger dollar value goods or services may be exempt from the requirement for competitive procurement (as defined in sections 4.2.1 – 4.2.4). To be exempt from the competitive requirement, Requestor will be required to provide a Sole Source justification, approved in accordance with the Spending Approval Procedure and with a minimum of a Vice President and General Manager or their designates approval. Sole Source justifications shall objectively address either of the following factors:

- Urgency of the need (and why there was insufficient time to perform a competitive sourcing).
- The need for equipment goods or services.
- Steps taken to mitigate financial exposure inherent in sole sourcing.

Sole Source Justifications are to be documented on or attached to the Purchase Requisition, and must be re-approved annually and/or on a project by project basis as applicable to the nature and value of the goods or service.

5 Definitions

Asset - Defined in accordance with CICA Handbook.

Assets have three essential characteristics:

- (a) They embody a future benefit that involves a capacity, singly or in combination with other assets, in the case of profit-oriented enterprises, to contribute directly or indirectly to future net cash flows;
- (b) The entity can control access to the benefit; and
- (c) The transaction or event giving rise to the entity's right to, or control of, the benefit has already occurred.

Capital Spending – Defined in accordance with the CICA Handbook.

Cost is the amount of consideration given up to acquire, construct, develop, or better an item of property, plant and equipment and includes all costs directly attributable to the acquisition, construction, development or betterment of the asset including installing it at the location and in the condition necessary for its intended use.

Purchases which extend the life or improve the reliability of existing assets. The total cost of Capital purchases includes all direct and/or indirect costs.

Contractors – Any person, consultant, or business performing a services or offering goods to GLPT who is not a GLPT employee.

ELKE - Work Management software.

Emergency - Purchases required to avoid or shorten an unexpected or actual outage, or to complete a project that the delay of which is expected to result in increased costs.

Financial Work Order (FWO) – Spending approval form for Capital or Major Maintenance with a total cost of less than \$250,000.

Investment Request Form (IRF) – Spending approval form for Capital or Major Maintenance projects with a total cost that is greater than \$250,000.

Major Maintenance – Purchases which include significant maintenance projects undertaken to maintain the reliability and efficiency of operations but do not extend the

Exhibit 4
Tab 2
Great Lakes Power Transmission LpSchedule 5
Procurement Procedures Appendix A
March 25, 2011

EB-20120-0300

useful life of the asset. All Major Maintenance expenses are recorded as a Major Maintenance expense on the income statement.

Management/Managers – Refers to all GLPT Management including supervisors, superintendents, business controller, Managers and the Vice President and General Manager.

Property, Plant and Equipment - Defined in accordance with the CICA Handbook.

Identifiable tangible assets that meet all of the following criteria:

- are held for use in the production or supply of goods and services, for rental to others, for administrative purposes or for the development, construction, maintenance or repair of other property, plant and equipment;
- (ii) have been acquired, constructed or developed with the intention of being used on a continuing basis; and
- (iii) are not intended for sale in the ordinary course of business.

Purchase Order (PO) – A commercial document issued by a buyer to a seller, indicating types, quantities, and agreed prices for products or services the seller will provide to the buyer. Sending a PO to a Supplier constitutes a legal offer to buy products or services.

Purchase Requisition (See Appendix #1) – A request submitted to the Purchasing Department to obtain quotes from various Suppliers. Must be completed and approved prior to committing to a purchase, must also reference a WO. This appendix can be found on the GLPT intranet at http://w6/its/itpolicies.nsf

Purchaser – The person responsible for fulfilling a Purchase Requisition which includes sourcing and creating PO.

Purchasing Department – The group of employees responsible for overseeing the acquisition of goods/service.

Requestor – The person who has formally requested a good or service on behalf of GLPT.

Standing Purchase Order (SPO) – A long term (1 year) commitment to a Supplier for material against which short-term releases will be generated to satisfy requirements.

Supplier - Party providing a good or service to GLPT

Vendor – Supplier of goods or services

EB-20120-0300
Exhibit 4
Tab 2
Great Lakes Power Transmission LPSchedule 5
Procurement Procedures Appendix A
March 25, 2011

Great Lakes Power

Work Order (WO) – A number assigned from the ELKE system to every item or service acquired. This number may already be in place if a purchase is for a project in progress, or it may be new if the item is the first purchase of a project or stand alone item.

6 References

- -Purchasing Card Program Guideline
- -Fleet Card Program Guideline
- -Spending Approval Procedure
- -Capital Asset Management Procedures including Inventory Database Procedures (Currently in development)

PART A CAPABILITY OF THE APPLICANT

EXHIBIT 4 TECHNICAL CAPABILITY

Appendix 4E
Hydro One Land Acquisition
Compensation Principles

Bruce to Milton

April 2008

Transmission Reinforcement Project

Land Acquisition
Compensation Principles





Bruce to **Milton**

Transmission Reinforcement Project

- 1	Intro		:	-	-
- 1	IDTFO		CTI		

Land Acquisition Compensation Principles 1 II. Acquisition Process A. Project Corridor Identification and Selection 2 B. Introduction and Overview by Property Agents 2 C. Preperation of Independent Property Appraisal Reports 2 D. Preparation of Hydro One Property Rights Acquisition Offers 2 E. Next Steps 3 III. Compensation **Principles** 4 A. General Principles 5 B. Principles Applicable to the Acquisition of Easement Interests C. Principles Applicable to the Acquisition of a Fee Simple Interest 7 D. Principles Applicable to Mandatory Buyouts 9 E. Principles Applicable to Voluntary Buyouts 12 F. Ability to Challenge Appraised Injurious Affection Amounts 15 G. Agreement Structure and Timing 16

Bruce to **Milton**Transmission Reinforcement Project

Land Acquisition Compensation Principles

The planning process for the Hydro One Networks Inc. ("Hydro One") Bruce to Milton Transmission
Reinforcement Project ("Bruce to Milton Project" or
"Project") is now well underway. Hydro One requires
additional land interests immediately adjacent to the
existing Bruce to Milton transmission corridor to widen
that corridor so that the proposed 500 kV double circuit
transmission line can be safely constructed and operated.
The land interests comprising this area are referred to in
this document as the "Project Corridor".

Discussions with Project Corridor property owners ("Property Owners") are now being initiated to review property acquisition requirements. To facilitate this process, Hydro One believes it is important that its land acquisition compensation principles are known in advance and commitments are made to have these compensation principles applied in a fair, transparent and consistent manner.

These Project-specific land acquisition compensation principles were developed in consultation with Property Owners, Property Owner representatives (Powerline Connections) and municipalities. Through this

consultation process, Hydro One has considered many issues associated with fair acquisition practices and compensation concerns. A central consideration has been the need for Property Owners to have flexibility and choice embedded in these principles, while balancing Hydro One's need and preference to achieve timely resolution of its land acquisition requirements and ensuring that overall compensation remains fair to ratepayers.

Hydro One's preference is to reach mutually acceptable arrangements with Property Owners. Adoption and application of these compensation principles provide real value for timely settlements and to otherwise avoid potentially lengthier, less flexible and less certain outcomes associated with legislated expropriation procedures.

Hydro One also recognizes that the disposition of land interests by Property Owners concerns personal choices and that mutually acceptable resolutions may not always be possible. In such circumstances, these compensation principles will not apply and Hydro One will rely upon the legislated expropriation process.

A. Project Corridor Identification and Selection

The Project Corridor was developed after evaluating a number of alternatives to deliver forecast increases in generation produced in the Bruce Area into the Ontario power grid. The Project will improve the performance and reliability of Ontario's electricity transmission network from the strongest environmental and economic position.

Since March, 2007, Hydro One has been carrying out additional planning activities relating to route selection and the need for area-specific refinements. Part of these activities has included public consultation sessions, property visits, environmental investigations and land surveying activities. In March, 2008, refinements to the general route were considered and Hydro One finalized the general location of the Project Corridor.

B. Introduction and Overview by Property Agents

The Project land acquisition process will formally commence when initial meetings take place between Hydro One's contracted property agent and each Property Owner to review and discuss these land acquisition compensation principles. Property Owners will be provided time to review the materials and to consider the need for follow-up meetings and discussions with Hydro One's property agent in advance of Hydro One presenting a formal offer to acquire the specific Project Corridor property interests.

C. Preparation of Independent Property Appraisal Reports

Once Hydro One has collected all pertinent property information, contracted accredited independent appraisers will prepare formal appraisal reports that quantify the fair market value of each Project Corridor property interest, including injurious affection, if applicable.

All appraisers retained by Hydro One will have received an Accredited Appraiser Canadian Institute (AACI) designation from the Appraisal Institute of Canada. This ensures that appraisals are conducted pursuant to professional standards established by the Institute.

Hydro One expects that preparation of all independent appraisal reports will be completed in the second half of 2008.

D. Preparation of Hydro One Property Rights Acquisition Offers

Hydro One will use the independent appraisal valuation information as the basis for the preparation of individual formal offers to be provided to each Project Corridor Property Owner. As part of Hydro One's formal land acquisition offer ("Offer"), Property Owners will be provided with a copy of Hydro One's commissioned independent appraisal report, together with a sketch plan and/or draft survey plan of the land interest to be acquired.

E. Next Steps

Following a review period of Hydro One's Offer, the next steps in the process will depend upon whether individual Property Owners find Hydro One's proposal acceptable or not.

If the Offer is accepted, the acquisition process will proceed and the parties will finalize the transaction.

Alternatively, if the Property Owner considers that additional steps are necessary to independently assess/review the Offer, Hydro One will provide for the reimbursement of reasonably incurred independent review costs of up to \$7,500 (the expected cost of an additional appraisal report and/or legal review). In order to be entitled to this reimbursement, the Property Owner, after receiving Hydro One's Offer, the Property Owner must notify Hydro One of its decision to incur independent review costs. An independent review appraisal carried out for the Property Owner must be conducted by an AACI-accredited appraiser and must be in a form that meets the requirements of section 25 of the Ontario Expropriations Act. A copy of the Property Owner's independent review appraisal report must also be provided to Hydro One before reimbursement amounts are advanced.

Reimbursement of the above-noted independent review costs is in no way intended to bind the Property Owner to voluntarily sell the interests in land required by Hydro One.

Hydro One's Offer will remain available for a limited period of time. If parties are unable to reach mutually acceptable terms by the time Hydro One files an application to seek expropriation authority status pursuant to section 99 of the *Ontario Energy Board Act*, 1998 ("OEB Act"), then Hydro One's Offer will lapse.

If the Offer lapses, Hydro One will then proceed with the legislated expropriation process. In such circumstances, a revised compensation offer will be provided to the Property Owner. While the revised offer will comply with compensation requirements of the *Expropriations Act*, it will no longer include the compensation incentives (as described further in this document) originally presented in the Offer, as the early resolution objectives will no longer apply.

A. General Principles

This section describes the general principles Hydro One is committed to follow in respect of the voluntary acquisition of land rights for the Project:

• Property Owner Choice:

Property Owners will be offered the choice of Hydro One acquiring either an easement or the purchase of a fee simple interest in the lands required for the Project Corridor.

• Independent Valuation:

Hydro One's Offers will be based upon appraisal reports prepared by external, independent AACI-accredited appraisers retained by Hydro One.

• Use of Improved Land Rates:

Where vacant land rates would otherwise apply on agricultural properties, Hydro One will instruct its independent appraisers to base their valuation determinations using higher improved land rates.

Full Property Buyout Principles (Mandatory):

In circumstances where a buyout of the entire property interest is mandatory compensation levels are intended to exceed the amounts otherwise provided for under the *Expropriations Act*.

• Full Property Buyout Principles (Voluntary):

Where a buyout of the entire property interest is voluntarily offered, the principles adopted, in certain

circumstances, include incentives and compensation that would exceed the appraised fair market value of the property. All valuation dates will be "as of" the date Hydro One receives, from the Property Owner, formal notice of the intention to elect the buyout option.

• Incentives:

Compensation premiums, over and above fair market value, will be made available as an incentive to achieve the timely acquisition of necessary property interests. Subject to all necessary regulatory approvals first being obtained, acceptance of the Offer will permit Hydro One to commence construction of the Project on the acquired property as Hydro One deems necessary. All applicable incentives will be applied on a fair, transparent and consistent basis. Hydro One has offered and will continue to offer to Property Owners an up-front payment of \$2,500 as part of each full settlement package, in recognition of time taken to meet with and discuss necessary land settlement requirements with Hydro One.

• Opportunity for Independent Review:

Hydro One will offer to those Property Owners whose lands are required for the Project Corridor, the opportunity to seek independent AACI appraisal advice and/or legal review with reimbursement of reasonable expenses of up to \$7,500 for this independent review.

B. Principles Applicable to the Acquisition of Easement Interests

This section describes more specific compensation principles applicable to the voluntary acquisition of easement interests. Hydro One commits to implementing the following easement compensation principles:

Valuation of Easement Interest:

Hydro One's Offer will value all easement interests based upon 75% of the appraised fair market value of the total acreage over which the intended easement applies.

• Injurious Affection:

Compensation for injurious affection is provided when reductions to the market value of the remaining property interests are estimated to result from Hydro One's use of the interest in the portion of the land required for the Project. This amount is determined as part of the independent appraisal process. The analysis takes into consideration various attributes of the remaining property and whether a loss in market value is likely to result from the construction and operation of the Project.

Hydro One will ensure that all appraisals prepared by Hydro One's independent appraisers consider and, where applicable, make provision for any injurious affection arising to the remaining acreage of property affected by the Project Corridor that is owned by the Property Owner, net of the acreage comprising Hydro One's existing transmission easement corridor(s) and the acreage of lands over which the new easement applies. Property Owners who accept Hydro One's Offer will be provided the option of having Hydro One's injurious affection amount made subject to a binding review process as described further in Section III, Part F of this document.

Annual Payment Option:

Property Owners will be offered the option to receive a portion of the easement compensation in the form of an annualized payment.

The annual payment will be calculated by multiplying the total value of the appraised Project Corridor easement by the chartered bank prime-lending rate, as of January 1st of each year, plus one percent, to arrive at the annual payment fee. All other applicable compensation amounts, such as injurious affection and incentive payments, will be paid up front as a lump sum amount.

The value of the easement will be subject to reassessment every five years, and adjustments (up or down) will be made to the annual payment amount based on this update.

The annual payment obligation will be converted to a one-time lump sum payment, subject to adjustments, upon the happening of any one of a number of specific events. These events are:

- The land subject to the rights is rezoned.
- The land subject to the rights is subdivided.
- The land subject to the rights is sold, transferred, assigned or conveyed.
- The Property Owner(s) dies.
- Hydro One determines that it no longer requires the easement interest for its operations.
- The Property Owner in any event requests payment of the lump sum in writing.

On a case-by-case basis, Hydro One will exempt having the lump sum conversion practice apply when the only contemplated change in circumstance is the transfer of ownership of the underlying lands from the original owners to their immediate first-generation offspring.

• Incentive Compensation:

Property Owners who accept Hydro One's offer to acquire easement interests will be provided with the following incentive compensation amounts:

- \$5,000 option payment paid at the time agreements are signed providing Hydro One with the option to purchase the interest (referred to in this document as Option Agreements and described in Section III, Part G) are executed; plus
- a further \$4,000 paid at the time Option Agreements are executed if and where (i) the Property Owner has not required reimbursement of any costs for the independent review of Hydro One's Offer (as described in Section II, Part E); and (ii) the Property Owner does not seek to challenge the injurious affection amount included in Hydro One's Offer (see Section III, Part F); plus
- an amount equal to 40% of the appraised fair market value of the acreage over which the easement interest will be taken. This amount will be paid if and when Hydro One elects to proceed with the Project. This timing is described further under Section III, Part G of this document.

Other Compensation Provisions:

Hydro One commits to reimbursing Property Owners for reasonably incurred transaction costs (i.e. such as lawyer fees) associated with the review of applicable conveyancing agreements.

Hydro One commits to compensating Property Owners for all damages that arise out of the operations of Hydro One, including Project construction and maintenance activities. The types of construction damages could include but are not limited to: damage to tile drains; crop loss; rutting of laneways, fence or gate damage, and soil compaction. Property Owners who grant Hydro One easement interests will be contractually indemnified from all liabilities, damages, claims, suits and actions arising out of the operations of Hydro One except to the extent any such liabilities, damages, claims, suits and actions arise out of or are contributed to by the negligence or wilful misconduct of the Property Owner.

Each Property Owner affected by the loss of wooded areas on the Project Corridor will be offered a reforestation program choice to be determined as a condition of the environmental assessment process.

Choice will be negotiated on a case-by-case basis by each Property Owner.

Hydro One will provide appropriate compensation for the loss of tax benefits, if any, to the Property Owner if the qualifications for a Managed Forest Tax Incentive Program or the Conservation Land Tax Incentive Program are withdrawn in their entirety due to Hydro One acquiring interests in the Project Corridor and thereby reducing the area of the (a) individual managed forest area to less than the qualifying 10 acres; or (b) the conservation land to less than 1.5 acres. These will be negotiated on a case-by-case basis.

C. Principles Applicable to the Acquisition of a Fee Simple Interest

This section describes the compensation principles that will be applied when Property Owners prefer to sell to Hydro One the fee simple in the required Project Corridor titles instead of an easement interest. This choice in land interests is subject to all applicable municipal authority guidelines that may be required for the creation and configuration of any required title severances. In such circumstances, Hydro One will implement the following compensation principles:

Valuation:

All fee simple land requirements will be valued at 100% of the appraised fair market value of the total acreage of the fee simple to be acquired.

• Injurious Affection:

Compensation for injurious affection is provided when reductions to the market value of the remaining property interests are estimated to result from Hydro One's use of the interest in land required for the Project. This amount is determined as part of the independent appraisal process. The analysis takes into consideration various attributes of the remaining property and whether a loss in market value is likely to result from the construction and operation of the Project.

Hydro One will ensure that all appraisals prepared by Hydro One's independent appraisers consider and, where applicable, make provision for any injurious affection arising to the remaining acreage of property affected by the Project Corridor that is owned by the Property Owner, net of the acreage comprising Hydro One's existing transmission corridor(s) and the Project Corridor lands. Property Owners who accept Hydro One's Offer will be provided the option of having Hydro One's injurious affection amount made subject to a binding review process as described further in Section III, Part F of this document.

• Incentive Compensation:

Property Owners who accept Hydro One's Offer to acquire a fee simple will be provided with the following incentive compensation amounts:

- \$5,000 signing allowance paid at the time agreements providing Hydro One with the option to purchase the fee simple (referred to in this document as Option Agreements and described at Section III, Part G) are executed; plus
- a further \$4,000 paid at the time Option Agreements are executed if and where (i) the Property Owner has not required reimbursement of any costs for the independent review of Hydro One's Offer (as described in Section II, Part E); and (ii) the Property Owner does not seek to challenge the injurious affection amount included in Hydro One's Offer (see Section III, Part F); plus
- an amount equal to 15% of the total appraised fair market value of the fee simple. This amount will be paid if and when Hydro One elects to proceed with the Project. This timing is described further under Section III, Part G of this document.

• Other Compensation Provisions:

Hydro One commits to reimbursing Property Owners for reasonably incurred transaction costs (i.e. lawyer fees) associated with the review of applicable conveyancing agreements.

On a case-by-case basis, Hydro One will consider whether unique circumstances exist which require the payment of additional compensation such as the purchase of remnant parcels.

In circumstances where the Property Owner seeks to continue to use the newly-acquired Project Corridor lands, Hydro One will make all reasonable efforts to negotiate a licence-back arrangement for the ongoing occupation and use of the Project Corridor in compliance with Hydro One licensing policy.

Hydro One commits to compensating Property Owners for damages caused by the construction of the Project to the remaining portions of their lands.

Each Property Owner affected by the loss of wooded areas on the Project Corridor will be offered a reforestation program choice to be determined as a condition of the environmental assessment process. Choice will be negotiated on a case-by-case basis by each Property Owner.

Hydro One will provide appropriate compensation for the loss of tax benefits, if any, to the Property Owner if the qualifications for a Managed Forest Tax Incentive Program or the Conservation Land Tax Incentive Program are withdrawn in their entirety due to Hydro One acquiring interests in the Project Corridor and thereby reducing the area of the (a) individual managed forest area to less than the qualifying 10 acres; or (b) conservation land to less than 1.5 acres. These will be negotiated on a case—by-case basis.

D. Principles Applicable to Mandatory Buyouts

If a Property Owner's primary residence or a major farm building, or a major commercial/industrial building, is located within the new Project Corridor, Hydro One will offer a one-time choice of either: (i) acquiring the Property Owner's entire property parcel on which the Project Corridor is situated; or (ii) acquiring only that portion of the Property Owner's property that is on the Project Corridor lands and providing compensation for the loss of the primary residence, major farm building, or major commercial/industrial buildings, including reasonable relocation costs. This election cannot be subsequently revisited.

Compensation principles applicable to each of these choices are more fully described below.

1. Principles Applicable to Mandatory Full Parcel Buyout Offers

Valuation:

The full parcel will be valued based on 100% of the appraised fair market value.

Damages attributable to Disturbance:

Hydro One will provide an allowance for disturbance equal to 5% of the fair market value of the primary residence located on the parcel plus the fair market value of one acre of land.

Relocation Costs:

Hydro One will reimburse all reasonable relocation costs incurred by Property Owners.

•Incentive Compensation:

Property Owners who accept Hydro One's offer to acquire full parcel buyouts will be provided with the following incentive compensation amounts:

- As per previously described easement and fee acquisition principles, a signing allowance amount of \$5,000; plus
- An additional amount equal to 5% of the appraised fair market value of the primary residence plus the fair market value of one acre of land.

Other Compensation Provisions:

Hydro One commits to reimbursing Property Owners for reasonably incurred transaction costs (i.e. lawyer fees) associated with the review of applicable conveyancing agreements.

Where applicable, Hydro One will compensate for any reasonable, non-agricultural business loss.

Hydro One will also provide compensation for equivalent reinstatement and such other similar compensation as would be provided for under the *Expropriations Act*.

Dispute Resolution Mechanism:

Non-agricultural business loss and equivalent reinstatement claims.

The settlement of claims for non-agricultural business loss or equivalent reinstatement costs by mandatory buyout Property Owners may occur following the in-service date of the Project.

In the event that a mandatory buyout Property Owner and Hydro One cannot mutually agree upon the fair value of such amounts, the dispute shall be referred to a binding independent review process. Under this process, the mandatory buyout Property Owner will be afforded the opportunity to obtain the services of an independent qualified appraiser to prepare a report that is limited to the fair value of (i) non-agricultural business loss and (ii) equivalent reinstatement claim amounts. Hydro One will also retain the services of a qualified appraiser to report on these items.

Both reports will then be submitted to an independent qualified third party expert who will have the opportunity to review each of the reports, question the appraisers, and accept final written submissions from each appraiser before making a final decision. The decision taken by the independent decision-maker will be limited to selecting one of the two appraisal reports.

Hydro One will reimburse the mandatory buyout Property Owner for reasonable costs incurred solely by the Property Owner's qualified appraiser to (i) prepare a report; and (ii) participate in the dispute resolution process. Hydro One will also pay for all costs incurred by the independent decision-maker.

2. Principles Applicable to Mandatory Buyout Offers For Project Corridor and Not Full Parcel Land Interests

Valuation:

Required Project Corridor lands will be valued based on 100% of their appraised per acre fair market value. Buildings located within the Project Corridor and that must accordingly be removed will be valued at appraised fair market value.

Injurious Affection:

Compensation for injurious affection is provided when reductions to the market value of the remaining property interests are estimated to result from Hydro One's use of the interest in land required for the Project. This amount is determined as part of the independent appraisal process. The analysis takes into consideration various attributes of the remaining property and whether a loss in market value is likely to result from the construction and operation of the Project.

Hydro One will ensure that all appraisals prepared by Hydro One's independent appraisers consider and, where applicable, make provision for any injurious affection arising to the remaining acreage of property affected by the Project Corridor that is owned by the Property Owner, net of the acreage comprising of Hydro One's existing transmission corridor and the Project Corridor lands. Property Owners who accept Hydro One's Offer will be provided the ability of having Hydro One's injurious affection amount made subject to a binding review process as described further in Section III, Part F of this document.

Damages attributable to Disturbance:

Hydro One will provide an allowance for disturbances equal to 5% of the fair market value of the primary residence located on the parcel plus the fair market value of one acre of land.

Relocation Costs:

Hydro One will reimburse all reasonable relocation costs incurred by Property Owners.

• Incentive Compensation:

Property Owners who accept Hydro One's Offer to acquire mandatory buyouts of Project Corridor lands will be provided with the following incentive compensation amounts:

- As per previously described easement and fee acquisition principles, a signing allowance amount of \$5,000; plus
- An additional amount equal to 5% of the appraised fair market value of the primary residence plus the fair market value of one acre of land.

• Other Compensation Provisions:

Hydro One commits to reimbursing Property Owners for reasonably incurred transaction costs (i.e. lawyer fees) associated with the review of applicable conveyancing agreements. Where applicable, Hydro One will compensate for any reasonable, non-agricultural business loss.

Hydro One will offer to Property Owners the option to buy back Project Corridor lands at a nominal sum and with a grant of easement in favour of Hydro One for the construction and ongoing operation of the Project.

Each Property Owner affected by the loss of wooded areas on the Project Corridor will be offered a reforestation program choice to be determined as a condition of the environmental assessment process. Choice will be negotiated on a case-by-case basis by each Property Owner.

Hydro One will provide appropriate compensation for the loss of tax benefits, if any, to the Property Owner if the qualifications for a Managed Forest Tax Incentive Program or the Conservation Land Tax Incentive Program are withdrawn in their entirety due to Hydro One acquiring interests in the Project Corridor and thereby reducing the area of the (a) individual managed forest area to less than the qualifying 10 acres; or (b) conservation land to less than 1.5 acres. These will be negotiated on a case-by-case basis.

E. Principles Applicable to Voluntary Buyouts

Hydro One is also prepared to acquire full parcel land interests in three circumstances. These are referred to as voluntary buyout circumstances. Voluntary buyout circumstances are intended to provide certain Property Owners with the choice and opportunity to have Hydro One purchase their entire land parcel. Two of the voluntary buyout circumstances arise when primary residences are within 75 metres of the outside edge of the Project Corridor boundary:

- The first situation occurs where the Project
 Corridor lands are situated on the Property
 Owner's lands and the Property Owner's
 non-urban primary residence is located within
 75 metres of the outer edge of the Project Corridor
 boundary.
- The second situation occurs where no Project
 Corridor land rights are required from an owner,
 but an owner's non-urban primary residence is
 within 75 metres of the outer edge of the Project
 Corridor boundary.

Hydro One's willingness to acquire full parcel interests from Property Owners in the first situation will extend for a three-year period commencing from the date that the Project is placed in service. This voluntary buyout offer will be included as part of the Option Agreement and will apply only to Property Owners registered on title as of the date of the offer. This principle will not apply to any successors in title during the three-year period or beyond.

Owners in Situation 2 will be given a Letter of Intent from Hydro One expressing its willingness to a voluntary purchase of their property due to the proximity of their non-urban primary residence to the outer edge of Project Corridor boundary. This Letter of Intent will be valid for three years from the date that the Project is placed in service and will apply only to Situation 2 landowners registered on title as of the date of the Letter of Intent. This principle will not apply to any successors in title during the three-year period or beyond.

Compensation Principles Applicable to Voluntary Buyout Situation 1: Project Corridor Lands Required from Property Owner

Valuation:

In circumstances where the Property Owner exercises the option to have Hydro One buyout the entire land parcel, the full parcel will be valued based on 100% of the appraised fair market value as of the date the Property Owner elects this option.

The Property Owner will have first selected either the easement or fee simple option (Section III, Parts B & C) and therefore all prior payments for acquired Project Corridor land interests (e.g., easement value, fee simple value, injurious affection, incentive compensation, woodlot compensation) will be deducted from the appraised full parcel fair market value determination.

Incentive Compensation:

At the time a Property Owner elects to seek a voluntary buyout of his or her full parcel interests,

Hydro One commits to providing an additional amount equal to 5% of the appraised fair market value of the primary residence plus the fair market value of one acre of land; plus

• A signing allowance amount of \$5,000.

Relocation Costs:

Hydro One will reimburse all reasonable relocation costs incurred by Property Owners.

Other Compensation Provisions:

Hydro One commits to reimbursing Property Owners for reasonably incurred transaction costs (i.e. lawyer fees) associated with the review of the applicable conveyancing agreements.

2. Compensation Principles Applicable to Voluntary Buyout Situation 2: Project Corridor Lands Are Not Required from Landowner

In this situation Hydro One has not required any interests in land from the landowner for the Project, but the landowner's non-urban primary residence is situated within 75 metres of the outer edge of the Project Corridor boundary.

In such circumstances, Hydro One commits to offering to purchase the landowner's full parcel interest, open for acceptance during a three-year period commencing on the date upon which the Project is placed into service. This will be expressed in a Letter of Intent issued to landowners registered on title as of the date of the Letter of Intent. This voluntary buyout will not apply to any successors in title during the three-year period or beyond.

Valuation:

The full parcel will be valued based on 100% of the appraised fair market value as at the date the landowner elects the offer to sell the full parcel interest.

3. Voluntary Buyouts in Farm-Specific Special Circumstances

Hydro One has also identified potential circumstances where the operation of the Project, in conjunction with Hydro One's existing and immediately adjacent transmission operations, is demonstrated to significantly and adversely affect the economic viability of a farm operation. If all of the following conditions are satisfied, Hydro One will offer affected Property Owners a voluntary buyout option. The conditions are as follows:

- The farm operation must take place on the existing easement(s) and Project Corridor easement lands and the arable portion of these lands must comprise at least 25% of the current arable portion of the overall farm operation.
- The Property Owner must provide written request to Hydro One seeking a voluntary buyout option. In this request the Property Owner must reasonably demonstrate how the ongoing farm operation is no longer economic due directly to Hydro One's use of the Project Corridor for the Bruce to Milton Project.
- The Property Owner is eligible to make his or her written request only within three years from the in-service date of the Project.

• If a voluntary buyout request is made, Hydro One will retain the services of an independent farm agricultural economist who will assess the ongoing economic viability claim. If the independent farm agricultural economist endorses the views of the Property Owner, Hydro One will offer to acquire the full parcel interests from the Property Owner and the following compensation principles will apply:

Valuation:

The full parcel will be valued based on 100% of the then applicable appraised fair market value as at the date of endorsement of the independent farm agricultural economist.

All prior payments made in respect of Project Corridor interests (e.g. easement values, fee simple values, injurious affection, incentive compensation, woodlot compensation) will be deducted from the appraised full parcel fair market value determination.

•Incentive Compensation:

At the time a Property Owner elects to seek a

voluntary buyout of his or her full parcel interests, Hydro One commits to providing an additional amount equal to 5% of the appraised fair market value of the primary residence plus the fair market value of one acre of land.

Relocation Costs:

Hydro One will reimburse all reasonable relocation costs incurred by Property Owners.

Other Compensation Provisions:

Hydro One commits to reimbursing Property Owners for reasonably incurred transaction costs (i.e. lawyer fees) associated with the review of the associated conveyancing agreements.

If the decision of the independent farm agricultural economist is disputed by the Property Owner, Hydro One agrees to have the matter referred to and will participate in a binding third party dispute resolution process identical to that provided for in Section F of this document, except that in lieu of the independent AACI-Acredited Appraiser, the Property Owner shall obtain and submit a report from a second independent farm agricultural economist.

F. Ability to Challenge Appraised Injurious Affection Amounts

Hydro One acknowledges that one of the main compensation components contained in its offers to acquire easement interests and fees simple may involve the assessments for injurious affection upon remaining parcel lands. All of Hydro One's injurious affection assessments will be conducted by independent AACI-Accredited Appraisers.

As described in Section II, Part E of these land acquisition compensation principles, Property Owners are provided with the opportunity to obtain a second independent appraisal to consider the reasonableness of Hydro One's Offer. When a Property Owner elects to obtain an independent appraisal and differences arise with the injurious affection amounts found in each of the appraisals, these differences may be reviewed and a binding determination made by an independent party as to which amount is to be paid by Hydro One. The idea is that acceptance of Hydro One's Offer will allow Property Owners to take advantage of certain incentive compensation amounts, while allowing disputes concerning the injurious affection component amount to be impartially determined on an expedited basis. Acceptance of Hydro One's Offer also allows timely resolution of all necessary land acquisition requirements so that Hydro One may proceed with the construction and operation of the Project.

The injurious affection dispute resolution process will take the form of a binding independent "baseball-style" review process. Each of Hydro One and the Property

Owner's independent AACI appraisals will be submitted to an independent third party expert. The decisionmaker will be instructed to decide which of the two injurious affection calculations set forth in the submitted appraisals is more reasonable, taking into account all applicable facts and circumstances. In making this determination, the decision-maker will apply the per acre fair market value amount that the parties will have already agreed to and which is set out in the Option Agreement. In reaching a decision, the independent decision-maker will have the discretion to ask questions of clarification to the appraisers, and, if necessary, request final written submissions from each appraiser before making a final and binding decision. This approach is intended to ensure that all parties act reasonably and fair and efficient results are achieved. Hydro One will reimburse the Property Owner for reasonable costs incurred solely by his or her appraiser to participate in this dispute resolution process.

Property Owners seeking to use the injurious affection dispute resolution process must notify Hydro One within 60 days from the date that the Option Agreement is executed. If such notification is not provided, the injurious affection amount described in Hydro One's independent appraisal shall apply.

G. Agreement Structure and Timing

These land acquisition compensation principles (other than reimbursement of independent review costs as discussed at page 3) will be incorporated into the terms and conditions of the land acquisition agreements made between Hydro One and Property Owners. Hydro One intends to have Property Owners enter into what is known as an Option Agreement. This agreement will grant to Hydro One the right to acquire either an easement interest or fee simple in the Project Corridor or parcel lands, as applicable. The Grant of Easement Agreement or Fee Simple Purchase and Sale Agreement will be attached to the Option Agreement. Hydro One's right to exercise its option will be limited to a period of 3 years commencing on the date the Property Owner executes the Option Agreement.

At the time the Option Agreement is signed, Hydro One will pay Property Owners incentive compensation of either \$5,000 or \$9,000, as the case may be, reflected in the foregoing options, and depending upon whether

independent reviews are required or whether challenges are made to the injurious affection component amounts. Hydro One expects to exercise the option and therefore pay the balance of the incentive compensation amounts if and when the Ontario Energy Board and environmental assessment approvals for the Project are satisfactorily and conclusively obtained. Compensation for the land interests will also be paid if and when Hydro One exercises its option to acquire the applicable interest.

Hydro One commits to having its Offer remain available to Property Owners until such time as Hydro One decides to seek expropriation authorization from the Ontario Energy Board pursuant to section 99 of the *OEB Act*. This step will happen only if and when Project approvals have been satisfactorily and conclusively obtained from the Ontario Energy Board and the Ministry of the Environment.



For general information...
Visit our website at:
www.HydroOneNetworks.com/BrucetoMilton



PART A CAPABILITY OF THE APPLICANT

EXHIBIT 4 TECHNICAL CAPABILITY

Appendix 4F GLPTLP Health and Safety Policy; Brookfield Safe Work Management System; Brookfield Contractor Safety Management Policy

Great Lakes Power

Transmission



Health and Safety Policy

We continuously strive to achieve excellence in safety performance and to be recognized as industry leaders in accident prevention. Our overall objective is to incur zero high risk safety incidents and zero lost time injuries.

Great Lakes Power
Transmission recognizes
and is committed to the
following health and
safety principles

- Accountability and responsibility for safety performance extends from the directors through to the executives, managers, supervisors and workers.
- Active participation of company leadership in the management of health and safety.
- A primary focus on the elimination and control of high risk hazards for our employees, contractors, visitors and the population potentially affected by our operations.
- The right and the responsibility of every employee to contribute to safe work performance.
- Prevention through the proactive application of a comprehensive safe work management system.

Jell Routh

Jeff Rosenthal Chief Operating Officer Canadian Transmission Operations Brookfield Renewable Power Inc.

Andy McPhee

Vice President and General Manager Great Lakes Power Transmission LP

L. Cenhew McPhes

Brookfield

Document Type: Safety Procedure	Document #: BREG - SP2 Page: 1 of 9
Document Title: Safe Work Management System	Issue Date: (R3) April 1 st , 2011
Approved By: President and COO	Review Date: April 1 st , 2014

1. Application

Brookfield Renewable Energy Group ("BREG") is committed to protecting their Employees and Contractors and Sub-Contractors' employees by understanding, minimizing and managing the potential Health and Safety Hazards associated with their Facilities. We exercise diligence at all stages of our Facilities' life cycle (design, construction, operation, and decommissioning), going beyond regulatory requirements where justified.

This procedure applies to all Organizational Units managed or operated by BREG worldwide. For Organizational Units where BREG does not have management control but for which BREG has oversight or activities, BREG will review compliance and will strive to ensure implementation of at least comparable safety standards to the ones described in this procedure. BREG will assess on a case by case basis the best method to accomplish its review of compliance.

BREG safety management philosophy emphasizes the importance of leadership, management accountability, managed system approach, and of the identification and elimination High-Risk Hazards as the cornerstones to safety performance excellence.

The objective is to establish a world class management system for safety that is consistent across every Organizational Unit. This procedure defines the Safe Work Management System (SWMS) elements that must be implemented in an effort to proactively protect the Employees, and Contractors and Sub-Contractors' employees and to comply with all applicable laws, regulatory requirements and applicable standards.

The elements of the SWMS also serve as the reference for:

- Conducting safety management audits,
- Developing annual safety strategies, and
- Developing safety program manuals.

To achieve the "world class" recognition, an Organizational Unit must maintain an overall safety audit rating greater than 80%. BREG must periodically audit all Organizational Units to ensure consistent implementation of this procedure. Senior management of BREG must review the safety audit results.



Document Title: Safe Work Management System	Document #: SP2	BREG-	Page: 2 of 9
---	-----------------	-------	--------------

2. Safe Work Management System Elements

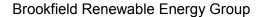
The SWMS is a comprehensive safety management system consisting of 21 elements (see Chart 1) that has been designed specifically for the power utility industry. Together, they form the BREG's SWMS.

The system incorporates the principles of loss prevention, system safety, risk management and performance management and recognizes the unique nature of power utility work: i.e., mobile, independent work forces primarily performing construction and maintenance activities.

The SWMS may require several years to fully implement. Consequently, it is important to initially focus on elements that have the greatest impact on the worker safety culture. Chart 2 represents the relative impact of each element on Safe Work.

The elements within the inner band have a direct impact on the "worker safety culture" and should be given first priority (P1). The elements within the middle band impact on the "management culture" but are one step removed from influencing the worker culture and so should be given second priority (P2). The elements within the outer band impact on the "expert culture" but are two steps removed from influencing the worker culture and should be given third priority (P3).

The elements and their main components are listed below according to the categories presented on Chart 1, namely: leadership, risk management, education, control and protection, and monitoring.





Document Title: Safe Work Management System	Document #:	BREG- SP2	Page 3 of 9
---	-------------	------------------	-------------

Leadership Elements

1. Management Commitment (P2 – 8%)

Senior managers must set the direction for safety within their organization. Together with the management team, they should:

- Develop the health & safety policy
- Communicate the safety vision and philosophy
- Participate in visible safety activities
- Ensure responsibility and accountability for safety program activities

2. Strategic Planning (P2 – 8%)

Managers must apply a strategic planning approach to safety management, similar to other key result areas. Together with the management team, they should:

- Set performance targets and objectives
- Develop an annual safety strategy and action plan
- Develop a safety program manual
- Ensure resources are available for safety program coordination

3. Joint Health & Safety Committees (P3 – 3%)

The organization should have a joint health & safety committee with worker and management representation. The organization needs to:

- Define the role and function of the committee
- Provide training to committee members
- Schedule and manage committee meetings effectively
- Involve the committee in monitoring safety program activities



Document Title: Safe Work Management System

Document #: BREG-SP2

Page 4 of 9

Risk Management Elements

4. Safety Design Analysis (P3 – 4%)

The organization should conduct upstream safety analyses to ensure that safety has been incorporated into the design of the facilities, equipment, procedures and training of workers. There should be a process to prioritize and conduct:

- Risk Assessments (Hazard Registry)
- Job Safety Analyses
- · Hazard Analyses
- Ergonomic Analyses

5. Rules and Regulations (P1 – 4%)

The organization should provide employees with specific safety rules and regulations relating to their job function. The organization should:

- Identify and develop company specific safety rules
- Introduce and review safety rules with employees
- Provide an employee safety information centre
- Ensure proper enforcement of safety rules

6. Written Work Procedures (P2 – 4%)

The organization should provide employees with written safe work procedures for critical tasks (i.e., tasks where workers are exposed to high levels of risk and where there should only be one standard method to complete the task safely). The organization should:

- Establish a standard format for development of work procedures
- Develop safe work procedures for critical tasks
- Introduce and review work procedures with employees
- Develop technical maintenance procedures

7. Lockout / Tagging (P1 – 6%)

The organization must have a written lockout/tagging procedure to operate and control energized systems. The organization should:

- Ensure the procedure meets industry and government standards
- Provide training and assign responsibility for the procedure
- Provide up-to-date operating diagrams and nomenclature
- Monitor the application of the procedure

8. Job Safety Planning (P1 – 8%)

The organization must formalize the process to integrate risk assessment and safety into each phase of job planning. The organization should:

- Develop a policy and provide training on job safety planning
- Incorporate safety analysis into project planning
- Incorporate safety analysis into daily job planning
- Monitor the job safety planning process



Document Title: Safe Work Management System	Document #:	BREG- SP2	Page 5 of 9
---	-------------	------------------	-------------

Education Elements

9. Management Training (P2 – 5%)

The organization should ensure that managers and supervisors receive the appropriate training to enable them to exercise their safety responsibilities. The organization should:

- Assign responsibility for training coordination
- Provide safety orientation to new managers/supervisors
- · Provide supervisory skills training
- Provide safety management training

10. Employee Training (P1 – 7%)

The organization should ensure that all employees receive the appropriate training to enable them to work safely. The organization should:

- Establish minimum qualifications for all hiring and placement
- Assign responsibility for training coordination
- Provide safety orientation to new employees
- Provide skills proficiency training for trades and technical staff
- Provide safety related training

11. Safety Meetings (P2 – 3%)

The organization should conduct regular group safety meetings for their employees that include updates, reviews, presentations and problem solving. The organization should:

- Develop guidelines for conducting safety meetings
- Schedule and assign safety meetings for each group
- Administer safety meetings effectively
- Ensure meaningful safety meeting topics

12. Health & Safety Promotions (P3 – 1%)

The organization should operate health and safety promotional programs to encourage safe behaviour on and off the job. The organization should:

- Provide an employee assistance program
- Provide health, safety & wellness promotional material
- Provide off-the-job safety promotional material
- Provide recognition and celebrate safety successes



Document Title: Safe Work Management System

Document #: BREG-SP2

Page 6 of 9

Control and Protection Elements

13. Protective Equipment (P1 – 6%)

The organization should ensure that workers are provided and use quality protective equipment. The organization should:

- Define the profile for each type of protective equipment
- Provide or make available all appropriate protective equipment
- Provide training on the use of protective equipment
- Monitor the use of protective equipment

14. Inspections and Maintenance (P2 – 4%)

The organization should conduct pre-use checks and regular inspection & maintenance on the following equipment to prevent unexpected failure while in use:

- · Critical tools and equipment
- Mobile equipment
- System equipment
- Workplace facilities

15. Occupational Health (P3 – 3%)

The organization should identify potential occupational health hazards to the employees and establish programs to control exposure to hazardous materials and agents. The organization should:

- Monitor air and water quality
- Establish a noise control program
- Establish a hazardous materials control program
- Control exposure to biological and physical agents

16. Emergency Preparedness (P2 – 3%)

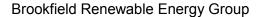
The organization should establish emergency preparedness and response plans for all types of emergencies. The organization should:

- Develop and communicate emergency preparedness plans
- Develop and communicate fire prevention and control plans
- Develop and communicate first aid response plans
- Develop and practice emergency rescue and evacuation procedures

17. Contractor Safety (P2 – 8%)

The organization should establish a program to ensure that contractors work to the same standard of safety as is expected of Brookfield employees. The organization should:

- Develop a policy and provide training to employees on contractor safety
- Pre-qualify contractors and specify safety criteria in the contracts
- Provide safety orientation and training to contractors on specific policies
- Monitor contractors for compliance to safety standards





Document Title: Safe Work Management System	Document #:	BREG- SP2	Page 7 of 9
---	-------------	------------------	-------------

Monitoring Elements

18. Work Observations (P1 – 8%)

The organization should establish a program for managers and supervisors to monitor, coach and correct unsafe performance at the work sites. The organization should:

- Develop a policy and provide training on conducting work observations
- · Schedule and monitor observations by managers
- Schedule and monitor observations by supervisors
- Establish a corrective action follow-up process

19. Incident Investigations (P3 – 3%)

The organization should establish a program for reporting, investigating and following up on all types of incidents and accidents. The organization should:

- Develop a policy on incident investigation
- Establish a process and forms for reporting and investigating incidents
- Establish a process to conduct detailed investigations
- Establish a corrective action follow-up process
- Manage workers compensation and modified work programs

20. Statistical Analysis (P3 – 1%)

The organization should prepare summary and statistical reports on leading and lagging indicators of safety performance. The organization should:

- Prepare regular incident summary reports
- Prepare periodic incident statistical reports
- Prepare periodic statistical reports on proactive safety measures

21. Audits & Assessments (P3 – 3%)

The organization should periodically assess the quality and effectiveness of their safety management system. The organization should:

- Conduct periodic employee safety perception surveys
- Conduct regular internal safety assessments
- Conduct periodic external safety audits

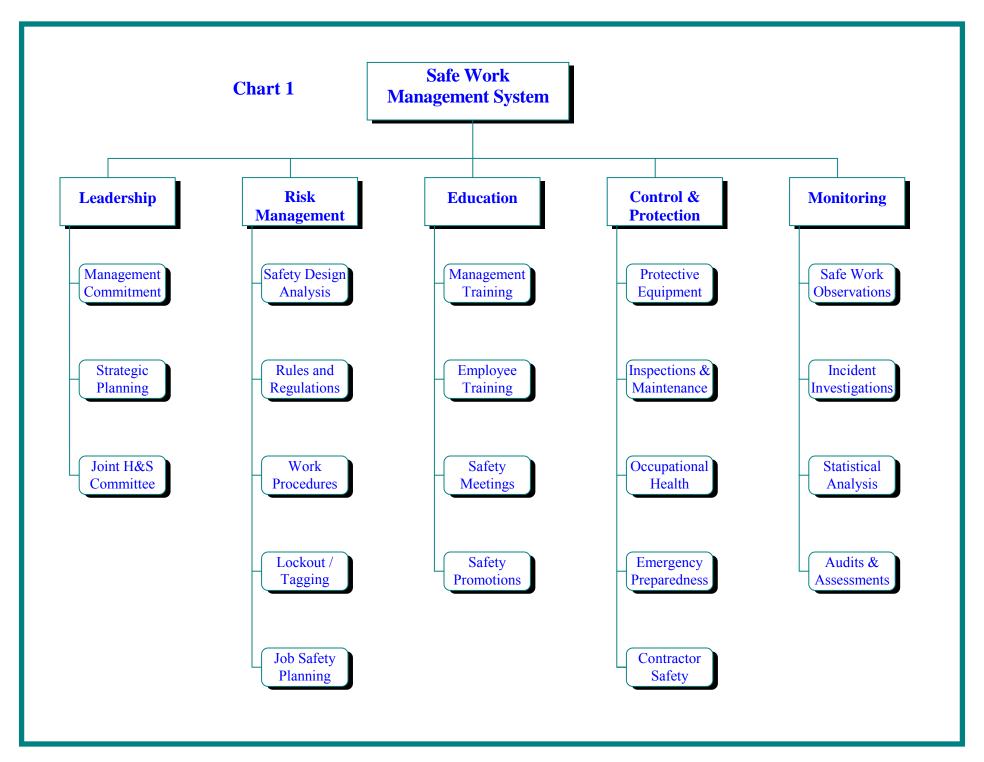
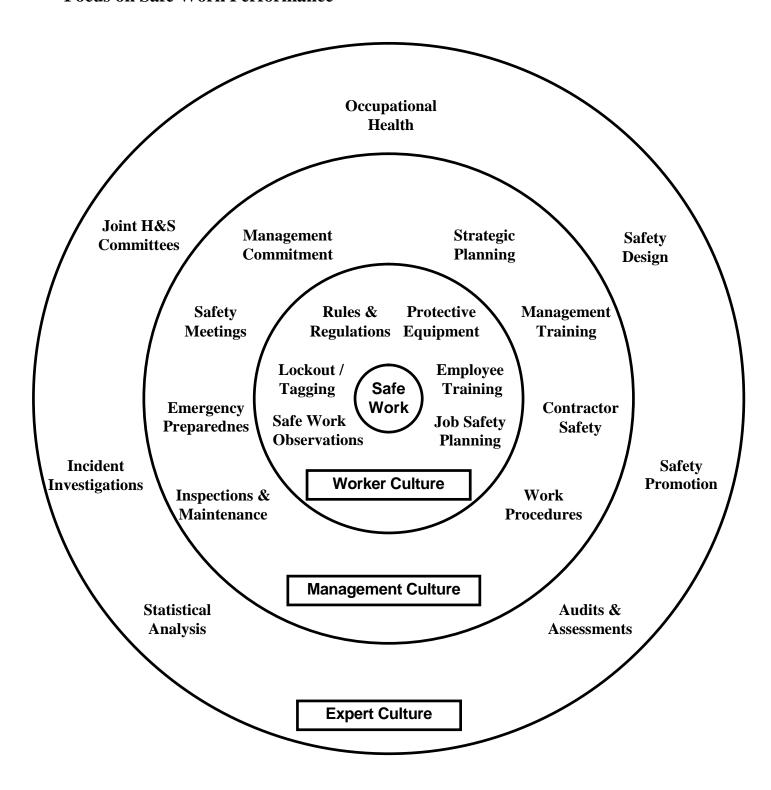


Chart 2
Focus on Safe Work Performance



Brookfield

Utilities

Document Type: Safety Procedure	Document #: SP6	Page: 1 of 7
Document Title: Contractor Safety Management	Issue Date: (R3) Septem	ber 1, 2009
Approved By: President & CEO	Review Date: September	I, 2012

1.0 Application

This procedure applies to every Brookfield Utilities Organizational Unit that hires Contractors and Sub-Contractors to perform High-Risk Work or Medium-Risk Work. This procedure is designed to ensure that High-Risk or Medium Risk Work done by Contractors and Sub-Contractors meets or exceeds the standards of safety established by regulations and by Brookfield Utilities' safety policy, procedures and programs.

The principal components of this Safety Procedure are:

- Contractor Qualification (as described in section 3.0)
- > Contract Administration (as described in section 4.0)
- > Contractor Orientation (as described in section 5.0)
- > Contractor Management (as described in section 6.0)
- > Contractor Monitoring (as described in section 7.0)

Specific requirements for Contractors are detailed in the accompanying document Contractor's Health and Safety Obligations.

Every Organizational Unit must develop a safety procedure and program on Contractor Safety Management that specifies responsibilities for adhering to this Brookfield Utilities procedure.

Every Organizational Unit must develop a training package on applicable Brookfield Utilities safety policies and procedures.

Every Organizational Unit must provide the training to all persons who may be involved in contractor qualification, contract administration, contractor orientation, contractor management or contractor monitoring. This includes employees and agents who may exercise any of these functions on behalf of Brookfield Utilities.

The Organizational Units may combine the application of this Contractor Safety Management Procedure with the equivalent Contractor Environmental Management Procedure. Sample forms that support the application of these procedures are referred to in the body of this procedure.

Note: Unless defined herein, the definitions for the terms capitalized in this procedure can be found in a separate safety and environmental document entitled *Definitions for Safety and Environmental Procedures* which can be found on the Brookfield Utilities intranet site.

Document Title: Contractor Safety Management	Document #:	SP6	Page: 2 of 7
--	-------------	-----	--------------

2.0 Contractor Qualification

Contractor Qualification is the process whereby the Brookfield Utilities Organizational Unit assesses a Contractor's ability to perform work safely and in keeping with all applicable health and safety laws and regulations and the terms of the **Contractor's Health and Safety Obligations**.

All Contractors performing Work for Brookfield Utilities must be qualified by the Organizational Unit for which the Work is to be done prior to awarding the contract for the Work. The extent of the qualification process must relate to the level of risk involved in the Work to be provided.

Contractor Qualification must include the following:

- 1. The Organizational Unit must designate a competent person or persons to conduct the Contractor Qualification assessment and determine if a Contractor is qualified.
- 2. The Organizational Unit must use **HSE Form C: Contractor Safety and Environmental Qualification,** or an equivalent form, to obtain appropriate information from the Contractor.
- 3. The Organizational Unit must conduct an assessment of liability coverage, applicable licenses and certificates, citations and litigations and a review of the Contractor's past accident record
- 4. The Organizational Unit must conduct an evaluation of the Contractor's ability to adhere to Brookfield Utilities' safety requirements for the Work and determine what specific training, if any, must be provided by the Organizational Unit to the Contractor. Such training is intended to provide the Contractor with the additional skills and knowledge required to comply with the terms of the Contractor's Health and Safety Obligations for the Work being performed by the Contractor (e.g. Job Safety Planning).
- 5. The Organizational Unit must maintain an up-to-date list of Contractors. The list will specify the following:
 - Their qualification status (qualified, disqualified, not current)
 - The type of Work they are qualified to perform
 - The date that the following items were confirmed: operating licenses, insurance, and training certificates for specialized Work.
 - The date that the following items were provided: orientation on the **Contractor's Health and Safety Obligations**, training on Job Safety Planning, etc.
 - Recommendation on whether to maintain the qualification status from the post-work evaluation

Brookfield

Utilities

Document Title: Contractor Safety Management	Document #:	SP6	Page: 3 of 7
--	-------------	-----	---------------------

- 6. Contractor information relating to operating licenses, insurance, and training certificates must be current within the past 12 months in order to maintain the Contractor's qualification status.
- 7. The Organizational Unit must assess the need for refresher orientation and training to be provided to Contractors' on-site management team and employees. Re-orientation is mandatory for Contractors who have not performed Work for the Organizational Unit within the past 12 months.
- 8. The Organizational Unit must verify that the Contractor qualifies its Sub-Contractors that will be involved in any Work, through a process similar to the one outlined above.

3.0 Contract Administration

Contract Administration is the process that leads to the awarding of a contract and includes preparing the contract tender documents, arranging pre-bid meetings, co-ordinating the bid evaluation process, and recommending the award of the contract, as applicable.

The Organizational Unit must designate a person or persons to perform the various duties of Contract Administration, which include, but are not limited to, the following:

- 1. Ensure that the Contractor is qualified and that the qualification information is current, prior to awarding the contract.
- 2. Ensure that tendering documents and contracts for Work include a copy of the **Contractor's Health and Safety Obligations** and any other Brookfield Utilities safety requirements specific for the Work.
- 3. Ensure that tendering documents and contracts specify any orientation or training that the Contractor must participate in prior to commencement of the Work in order for the Contractor to have the knowledge and skills required to comply with the **Contractor's Health and Safety Obligations**.
- 4. Ensure that contracts with agents who perform any of the duties set out in this Procedure on behalf of Brookfield Utilities, clearly specify the authority, responsibilities and obligations with regards to managing safety at the Work Site, monitoring safety performance, accident investigation, and response to safety violations.
- 5. Prepare a Site Hazard Assessment of the Work Site, using **HSE Form B: Site Hazard Assessment,** or an equivalent form, and ensure that it is provided to the bidders as part of the tendering documents.

Brookfield

Utilities

Document Title: Contractor Safety Management	Document #:	SP6	Page: 4 of 7
--	-------------	-----	---------------------

Ensure that the Contractor completes and submits the Site Hazard Assessment as part of their proposal and that it is included in the contract.

6. Ensure that Brookfield Utilities employees or agents who are assigned the duties of Contractor Management and Contract Monitoring have the qualifications set out in sections 5.0 and 6.0 respectively.

4.0 Contractor Orientation

Contractor safety orientation is the process whereby Contractor personnel are oriented on the Brookfield Utilities' safety standards and the site specific safety requirements for the contracted Work.

All Contractor and Sub-Contractor personnel who will be on the Work Site during the Work must participate in a safety orientation prior to them starting Work.

Contractor safety orientation must include the following:

- 1. The Organizational Unit must conduct a safety orientation meeting prior to the commencement of the Work with all the Contractor's supervisors and personnel who will be on the Work Site during the startup phase of the Work.
- 2. During execution of the Work on Site, the Organizational Unit must verify that the Contractor has conducted safety orientation meetings for all personnel new to the Work Site, prior to their starting Work.
- 3. The safety orientation must include a review of the Contractor's Health and Safety Obligations that are applicable to the Work being performed by the Contractor.
- 4. The safety orientation must include a review of Work and Work Site specific safety requirements such as the limits of the safe working area, all known High-Risk and Medium-Risk hazards, safety issues and restrictions, and of the Work Site emergency response plan.
- 5. The Organizational Unit must provide the training specified during the Qualification process to the Contractor in order for the Contractor to have the skills and knowledge required to comply with the terms of the Contractor's Health and Safety Obligations applicable to the Work being performed (e.g. Job Safety Planning).
- 6. The Organizational Unit may choose to provide the orientation and training listed above in separate sessions or as one session, as long as it is provided prior to commencement of Work.

Document Title: Contractor Safety Management	Document #:	SP6	Page: 5 of 7
--	-------------	-----	---------------------

5.0 Contractor Management

Contractor Management is the process that oversees the successful completion of a project and includes pre-project meetings, ensuring project readiness, periodic assessments, and problem resolution. The process must take into account safety considerations at all stages of the project.

For every contract for Work, the Organizational Unit must designate a person or persons to perform the duties of a Contractor Manager. The Contractor Manager must have the following qualifications:

- Training in project management
- Training in occupational health & safety regulations
- Training on Brookfield Utilities' safety policy and procedures

Knowledge of procedures and hazard control for high-risk tasks relating to the project

The duties of the Contractor Manager(s) include, but are not limited to, the following:

- 1. Conduct a pre-project Work Site safety meeting with the Contractor's representatives to discuss the site specific safety requirements of the Work.
- 2. Review the HSE Form B: Site Hazard Assessment completed by the Contractor
- 3. Review with the Contractor the appropriate level of safety planning required for the Work. **HSE Form A: Project Planning Decision Tree** must be used by the Organizational Unit to determine the appropriate level of planning for each project.
- 4. For Level 1 or 2 projects, review the Contractor's overall Project Safety Plan and the detailed Project Safety Plan for every 3 months of the project. **HSE Form D: Project Safety and Environmental Plan** or equivalent must be used for project safety planning by the Contractor.
- 5. Conduct a minimum of one work safety observation per week for each project. At least one work safety observation must be conducted on all projects regardless of the duration of the project. When a separate Contractor Monitor is assigned to a project, the Contractor Manager is still required to conduct one work safety observation per month for that project. The organization is required to determine the quantity and/or frequency of work observations prior to work commencement.
- 6. For Work lasting longer than one month, conduct monthly progress review meetings with the Contractor Monitor and the Contractor representative that include a review of safety observations and incidents of the Contractor and Sub-Contractors. Meeting minutes must be recorded and must identify responsibility for any corrective actions.

Brookfield

Utilities

Document Title: Contractor Safety Management	Document #:	SP6	Page: 6 of 7
--	-------------	-----	---------------------

7. Conduct a Contractor post-work evaluation with the Contractor Monitor and the Contractor to review their safety performance during the project. The meeting must include a review of safety observations and incidents of the Contractor and Sub-Contractors. The minutes of the meeting must include a recommendation as to whether or not to retain them as a qualified Contractor.

6.0 Contractor Monitoring

Contractor Monitoring is the process that ensures Contractors, Sub-Contractors, and their employees are complying with safety regulations and the safety requirements of the contract.

For every contract for Work, the Organizational Unit must designate a person or persons to perform the duties of a Contractor Monitor. The Contractor Monitor must have the following qualifications:

- Field experience related to the hazards associated with the Work
- Training in occupational health & safety regulation
- Training on Brookfield Utilities' safety policies and procedures
- Knowledge of procedures and hazard control for high-risk tasks relating to the project

The Organizational Unit must determine the frequency of monitoring (i.e., continuous, daily visits, or weekly visits) based on the level of risk, the complexity of the Work, and the Contractor's familiarity with Brookfield Utilities' operations.

The duties of the Contractor Monitor include, but are not limited to, the following:

- 1. Ensure the Contractor conducts safety orientations for new personnel arriving on the Work Site once the Work has begun and assess periodically the quality of safety orientations conducted by the Contractor, when applicable.
- 2. Confirm the certificates of qualification for Contractor's and Sub-Contractors' employees at the Work Site, and verify the inspection and maintenance records for specialized equipment at the Work Site.
- 3. Assess periodically the quality of safety discussions and written Daily Job Safety Plans at the daily job planning meeting. **HSE Form E: Daily Job Safety and Environmental Plan**, or an equivalent form, must be used for daily job safety planning by the Contractors and Sub-Contractors.
- 4. Conduct a minimum of one weekly work observation of the Contractor's and Sub-Contractors' employees performing High-Risk Work or Medium-Risk Work. **HSE Form F: Safety and Environment Work Observation,** or an equivalent form, must be used by the Contractor Monitor to record work observations.

Brookfield

Utilities

Document Title: Contractor Safety Management	Document #:	SP6	Page: 7 of 7
--	-------------	-----	---------------------

- 5. Provide immediate feedback to the Contractor's supervisor of any safety violations, stop the job if High-Risk or Medium-Risk hazards are not adequately controlled.
- 6. Assess periodically the quality of employee safety meetings conducted by the Contractor and Sub-Contractors, when applicable.
- 7. Maintain a log of activities, issues and observations, and provide a weekly written report to the Contractor Manager.

~

CONTRACTOR'S HEALTH AND SAFETY OBLIGATIONS

TABLE OF CONTENTS

1	STANDARDS OF PERFORMANCE	3
2	SITE HAZARD ASSESSMENT	4
3	PROJECT PLANNING DECISION TREE	4
4	CRITICAL TASK PLAN	5
5	PROJECT SAFETY PLANS	5
6	SITE SAFETY ORIENTATION	5
7	DAILY JOB SAFETY PLAN(S)	6
8	WORK OBSERVATIONS	6
9	SITE SAFETY MEETINGS	6
10	CLOSING MEETINGS	7
11	INCIDENT RESPONSE AND REPORTING	7
12	EMERGENCIES	7
13	REMOVAL OF WORKERS	8
14	FIRE PREVENTION AND PROTECTION	8
15	PRODUCT TRANSPORT	8
16	PRODUCT DELIVERY SYSTEMS	9
17	STUDENT EMPLOYMENT	9
18	USE OF OFF-ROAD VEHICLES (ATVS)	9
19	USE OF SNOWMOBILES	9
20	USE OF CHAINSAWS AND BRUSHSAWS	10
21	WORK IN PROXIMITY TO ENERGIZED ELECTRICAL EQUIPMENT	11
22	WORK ON ENERGIZED ELECTRICAL EQUIPMENT	11
23	USE OF HEAVY OPERATING EQUIPMENT	12
24	CLIMBING AND WORKING AT HEIGHT	13
25	LIST OF APPENDICES	15

1 STANDARDS OF PERFORMANCE

- 1.1 The Contractor shall maintain a high regard for safety while performing the Work.
- 1.2 The Contractor shall ensure that the Work shall be carried out in compliance with these Contractor's Health and Safety Obligations. Prior to commencement and during execution of the Work, the Contractor shall satisfy the Owner that the Contractor and its Subcontractor(s) and personnel have the skills and knowledge to perform the Work safely. The Owner may require the Contractor and its Subcontractor(s) and personnel to participate in safety training or orientation sessions in order to have the skills and knowledge necessary to comply with the requirements laid out in this document.
- 1.3 The Contractor shall comply with all applicable requirements of all federal, state/provincial health and safety acts and regulations. The Contractor shall ensure that the Work shall be carried out in compliance with such acts and regulations and that all workers shall work in the manner prescribed therein and use the protective equipment, and take all measures and follow all procedures required. The Contractor shall report promptly to the Owner any situations such as the reception of a notice or an order from an agency.
- 1.4 Each subcontract with Subcontractors shall expressly state in the agreement that the Subcontractor is bound by the provisions of these **Contractor's Health and Safety Obligations** insofar as such provisions are applicable to any or all of the Work being performed under any such subcontract. The Contractor shall ensure compliance by the Subcontractor with such provisions and the Contractor shall be fully responsible for the acts and omissions of Subcontractors and other Contractor personnel.
- 1.5 The Contractor shall ensure that all workers employed in the execution of the Contract are fully briefed on and advised of the location of all electrically energized apparatus in the vicinity of the Work and that they are fully briefed and instructed on the correct and safe working procedures, including but not limited to isolation, de-energizing, grounding, and maintaining safe distances for work in proximity to energized equipment.
- 1.6 The Contractor shall further ensure that every on-site supervisor and every worker is fully conversant with the correct work methods to be used in order to prevent electrical contact or encroaching on safe working distances and the procedures to be followed in case of an electrical contact.
- 1.7 In the event that the Contractor or any of its on-site supervisors is unsure of a proper working procedure, this person shall immediately request guidance from the Owner prior to proceeding with the Work.
- 1.8 The Contractor shall ensure that all equipment is checked regularly to establish that it is in safe working condition, that any defect is rectified before equipment use is resumed and that the equipment is approved for the purpose for which it is being used by the American National Standards Institute, the Canadian Standards Association and/or any other applicable governing body.

- 1.9 The Contractor shall ensure that safety ropes, tools, equipment and aerial lifts are handled in such a way as to prevent them from coming within approved safe working distances or into contact with energized equipment.
- 1.10 The Contractor shall promptly and suitably correct all safety related deficiencies and hazards, including those that may, from time to time, be identified by the Owner. All deficiencies and hazards shall be reported to the Owner.
- 1.11 The Contractor shall make available to the Owner, upon demand, all Work health and safety related documentation for audit.

2 SITE HAZARD ASSESSMENT

Prior to the commencement of the Work on Site, the Owner will perform an assessment of the known high-risk hazards associated with the Site that could arise during the Contractor's Site mobilization and preparation, using **HSE Form B: Site Hazard Assessment Form** attached as Appendix 1 (or an equivalent form approved by the Owner) and provide a copy to the Contractor. The Contractor shall review and amend the form to identify any additional hazards specific to the Work and describe the specific barriers and work methods to be employed to control all identified hazards and shall provide a copy of the reviewed/amended form to the Owner for review and comment.

- 2.1 The Contractor shall be responsible for controlling the hazards and implementing the specific barriers and work methods identified in the completed Site Hazards Assessment Form.
- 2.2 The Contractor shall ensure that all hazard controls and barriers are in place and functional prior to commencement of the Work, and are maintained and functional at all times until completion of the Work.

3 PROJECT PLANNING DECISION TREE

- 3.1 **HSE Form A: Project Planning Decision Tree** attached as Appendix 2 shall be used by the Owner to determine the appropriate level of safety planning required by the Contractor for the Work.
- 3.2 Level 1 Planning: If the project involves a prolonged outage, complex Work or Work lasting more than 20 days, the Contractor shall prepare a Critical Task Plan, a Project Safety Plan and Daily Job Safety Plans.
- 3.3 Level 2 Planning: If the project involves a brief outage, multiple crews or Work lasting more than 5 days, the Contractor shall prepare a Project Safety Plan and Daily Job Safety Plans.
- 3.4 Level 3 Planning: If the project does not involve any of the above, the Contractor shall prepare Daily Job Safety Plans for all tasks related to construction activities, projects, maintenance, operating, switching, service work, field studies and trouble calls.

4 CRITICAL TASK PLAN

4.1 When applicable as specified in 3.2, the Contractor shall provide to the Owner, prior to commencement of the Work on Site, a Critical Task Plan showing the sequence of tasks required to complete the Work. The Critical Task Plan will include the timing, resources and special equipment required for each task in the plan. The Owner will review and comment on the Critical Task Plan. The Contractor will use the Critical Task Plan to prepare the Project Safety Plan(s) required as per Section 5.

5 PROJECT SAFETY PLANS

- 5.1 When applicable as specified in 3.2 and 3.3, the Contractor shall provide to the Owner, prior to the commencement of the Work on Site and every three (3) months thereafter, a Project Safety Plan using **HSE Form D: Project Safety and Environmental Plan** attached as Appendix 3 (or an equivalent form approved by the Owner). The Project Safety and Environmental Plan(s) shall identify the sequence of activities to be completed on Site during the next three (3) months. For each activity, the plan will identify the high-risk hazards that may be present and include a barrier analysis that identifies the control barriers, safety barriers and support barriers required for each high-risk hazard.
- 5.2 The Owner will review the Project Safety Plan(s) and may, at its sole discretion, require the Contractor to make modifications the Owner deems necessary to ensure compliance with these **Contractor's Health and Safety Obligations**. The Contractor shall revise its Project Safety Plan(s) to include any such modifications required by the Owner. The Contractor shall provide to the Owner the revised Project Safety Plan(s) and the Contractor shall communicate to the workers performing the Work, the details of any such revised Project Safety Plan(s).
- 5.3 Notwithstanding the review of the Project Safety Plan(s) by the Owner, the responsibility for the accuracy, completeness, suitability, implementation and communication of such Project Safety Plan(s) shall remain the exclusive responsibility of the Contractor. The Contractor shall update the Project Safety Plan to address any new major tasks that may arise during the course of the Work.
- 5.4 The Contractor shall not make changes to the Project Safety Plan(s) without the prior written consent of the Owner.
- 5.5 The Contractor shall ensure that the Project Safety Plan(s) is (are) fully implemented and complied with at all times during execution of the Work on Site.

6 SITE SAFETY ORIENTATION

6.1 The Contractor shall participate in a Site safety orientation meeting conducted by the Owner prior to the commencement of the Work. This safety orientation meeting is mandatory for the Contractor's and Subcontractors' supervisors and all personnel who will

be on the Site during the startup phase of the Work. This orientation will be Site and Work specific and will identify the limits of the safe working area and all known High-Risk and Medium-Risk hazards, safety issues and restrictions, and the Site emergency response plan.

6.2 Afterwards, during execution of the Work on Site, the Contractor shall conduct Site safety orientation meetings for new Contractor and Subcontractor personnel prior to them starting to work and provide the Owner written confirmation that these meetings have taken place.

7 DAILY JOB SAFETY PLAN(S)

- 7.1 At the start of each work shift and prior to commencement of any Work on Site, each of the Contractor's work crews shall prepare a Daily Job Safety Plan using **HSE Form E:**Daily Job Safety and Environmental Plan attached as Appendix 5 (or an equivalent form approved by the Owner), where all individual employees and working crews assess the critical safety issues pertaining to the work shift. The Contractor shall provide the Owner with a copy of all Daily Job Safety Plans.
- 7.2 The Daily Job Safety Plan shall identify the sequence of tasks to be completed and the high-risk hazards and medium-risk hazards that may be present related to each task. The plan will include a barrier analysis that identifies the control barriers, safety barriers and support barriers required for each hazard. If the work conditions pertaining to the work shift change giving rise to new safety issues the Contractor shall revise the Daily Job Safety Plan before executing anymore work.
- 7.3 Every worker shall adhere to the requirements of each applicable Daily Job Safety Plan.

8 WORK OBSERVATIONS

- 8.1 If specified in the contract by the Owner, the Contractor shall conduct structured safe work observations of the Work at minimum weekly intervals and report the findings to the Owner using **HSE Form F: Safety and Environment Work Observation** attached as Appendix 6 (or an equivalent form approved by the Owner) within 3 working days of each observation.
- 8.2 The Owner may conduct regular structured safe work observations of the Work at the Owner's discretion. The Contractor shall ensure that the workers and supervisors cooperate with the Owner during such observations.

9 SITE SAFETY MEETINGS

9.1 The Contractor shall conduct Site safety meetings with its employees at least monthly or as requested by the Owner. These meetings should last approximately 45 minutes and may be attended by the Owner. The minutes of the meetings shall be forwarded to the Owner within 3 working days of the meeting.

10 CLOSING MEETINGS

10.1 The Contractor shall participate in a closing meeting with the Owner to complete an evaluation of the Contractor's performance. The meeting will in part assist the Owner to determine whether or not, or under what circumstances the Contractor may be considered for future work. The Contractor will be provided with a written copy of the evaluation and closing meeting notes.

11 INCIDENT RESPONSE AND REPORTING

- 11.1 In the event of an accident resulting in an injury to a Contractor's employee, an Owner's employee, or a member of the public, or in the event of a potentially high-risk incident, the Contractor shall:
 - Stop work,
 - Secure the Site to ensure the protection of employees and the public and to aid with the investigation,
 - Report the incident immediately to the Owner,
 - Provide notice to the proper authorities.
- 11.2 The Contractor shall complete a thorough investigation of any incident occurring during performance of the Work, whether or not the incident resulted in an occupational injury or illness to a Contractor's employee, an Owner's employee or member of the public, or in property damage. The Contractor shall provide the Owner with a detailed written report of its findings using **HSE Form G: Incident Investigation** attached as Appendix 7 (or an equivalent form approved by the Owner).
- 11.3 The Contractor shall assist the Owner in any investigation the Owner may undertake related to any incident, and in the implementation of any action plans relating to the incident.

12 EMERGENCIES

12.1 The Owner has the authority and the Contractor has the obligation to stop the Work whenever in the opinion of either party such stoppage may be necessary to ensure the safety of a life, or any equipment, structure or property. This includes the authority to make changes and to order the Contractor to stop working.

13 REMOVAL OF WORKERS

13.1 The Contractor shall employ only such persons as are careful and competent in their respective trades and callings. The Owner is at liberty to object to and to require the Contractor to remove from the Site forthwith any person employed by the Contractor in or about the execution of the Work who, in the opinion of the Owner, conducts himself inappropriately, is incompetent or negligent in the performance of its duties, or does not comply with applicable legislation, these **Contractor's Health and Safety Obligations**, including the Project Safety Plan or the Daily Job Safety Plans. Such person shall not be employed again at the Work Site without the prior written consent of the Owner.

14 FIRE PREVENTION AND PROTECTION

- 14.1 The Contractor shall comply with all laws, bylaws and regulations and with the instructions of the Owner with respect to fires and prevention of fires.
- 14.2 The Contractor shall provide and maintain portable fire extinguishing equipment and such equipment shall remain at Site until all Work is completed and accepted by the Owner.
- 14.3 The Contractor shall comply with all fire prevention requirements of the municipality and the Owner, and shall have at all times personnel at the Site who are experienced in the use of the prescribed equipment.
- 14.4 The Contractor shall report immediately any escaped fires to the local municipality and to the Owner.

15 PRODUCT TRANSPORT

- 15.1 When the Contractor is shipping to Site, or from Site, or planning to use at Site, any product which is categorized as a hazardous material or dangerous good, the Contractor shall conform to the relevant federal, provincial or state legislation and regulations pertaining to such materials. All such materials and their transport containers and/or vehicles shall be properly identified with the required warning labels.
- 15.2 The Contractor shall provide the Owner with one copy of the Material Safety Data Sheet (MSDS) for each hazardous material brought on to a Site.
- 15.3 Upon completion of the Work or when a particular product is no longer required on Site, whichever shall occur first, the Contractor shall remove all remaining quantities of the product and all empty containers.
- 15.4 Hazardous material or dangerous goods shall not be disposed of through the Owner's waste management system without written consent of the Owner or on the Owner's or third party's property (except for approved and appropriate waste disposal sites).
- 15.5 Hazardous material or dangerous goods shall not be left on-site or with the Owner without the prior written consent of the Owner.

16 PRODUCT DELIVERY SYSTEMS

16.1 Product delivery systems, including but not limited to, containers, valves, pumps, pipes, hoses, nozzles and vents, shall be in good working order and without leaks.

17 STUDENT EMPLOYMENT

- 17.1 The following activities are prohibited for all students:
 - Work in power plants
 - Work near energized electrical equipment
 - Work in forestry (e.g., right-of-way clearing)
 - Driving a vehicle or heavy operating equipment
 - Use of mechanical equipment (e.g., chainsaws)
 - Exposure to high-risk hazards or conditions such as falls greater than 3 meters (10 feet), falling objects, proximity to energized electrical equipment, rotating mechanical equipment, confined spaces, etc.

18 USE OF OFF-ROAD VEHICLES (ATVs)

- 18.1 The use of straddle-type all terrain vehicles and motorcycles is not permitted on the Site or for travel to and from the Site. All off-road vehicles used by the Contractor shall be designed for work travel and hauling, not recreation. The off-road vehicles shall have rollover protection that meets the regulatory design standards and shall be equipped with seat belts.
- 18.2 Operators and riders shall be belted in at all times when riding on off-road vehicles and shall wear approved safety helmets if the off-road vehicle is not equipped with a cab and windshield. Operators shall operate at prudent speeds for trail conditions and in no instance (unless approved in writing by the Owner) will exceed 50 kilometers per hour (30 mph).
- 18.3 Operators shall have completed a combination of both classroom and hands-on training regarding the safe operation of off-road vehicles.
- 18.4 The Contractor shall have an emergency plan in place for the use of off-road vehicles that includes emergency communication, survival gear appropriate for the weather and conditions, and an emergency rescue plan.

19 USE OF SNOWMOBILES

- 19.1 All snowmobiles used by the Contractor shall be designed for work travel and towing, not recreation: for example, a long track machine or a wide track machine.
- 19.2 Snowmobile operators shall have completed a combination of both classroom and handson training regarding the safe operation of snowmobiles.

- 19.3 Operators and riders shall wear approved full face shield helmets at all times when riding on a snowmobile and shall operate at prudent speeds for conditions, and in no instance (unless specifically approved in writing by the Owner) will exceed 50 kilometers per hour (30 mph). Furthermore, operators will respect the trail conditions and the posted speed limits on groomed snowmobiles trails.
- 19.4 The Contractor shall have an emergency plan in place for the use of snowmobiles that includes emergency communication, survival gear appropriate for the weather and conditions, and an emergency rescue plan.

20 USE OF CHAINSAWS AND BRUSHSAWS

- 20.1 When using a chainsaw or brushsaw for Work in which the general public may have access to the Site, a safe work zone of 5 meters (16 feet) shall be established and delineated with caution tape. The requirement to use caution tape does not necessarily apply to all right-of-way maintenance work; its use to be determined during the Site Hazard Assessment done prior to commencement of the Work on Site.
- 20.2 When using a chainsaw or brushsaw for minor construction and bucking work, a safe work zone of 5 meters (16 feet) shall be established and marked with cones or caution tapes, or monitored by a dedicated observer.
- 20.3 When using a chainsaw or brushsaw for brush clearing work, a safe work zone of 5 meters (16 feet) shall be maintained.
- 20.4 When using a chainsaw or brushsaw for felling small or large trees on level ground, a safe work zone shall be maintained at a minimum of 2 tree lengths of the trees being felled. For felling small or large trees on sloped terrain, the safe work zone shall be maintained greater than 2 tree lengths.
- 20.5 All workers performing Work involving the use of chainsaws or brushsaws shall be trained and competent for the type of work performed. The training shall include classroom sessions on the safe use of chainsaws or brushsaws, the use of personal protective equipment, and practical application related to the type of work performed.
- 20.6 All workers who use a chainsaw to perform line and right-of-way maintenance work shall have additional specialized training that includes specific procedures for this type of work.

21 WORK IN PROXIMITY TO ENERGIZED ELECTRICAL EQUIPMENT

- 21.1 Regardless of the voltage, the first alternative shall always be to de-energize, test and ground the equipment.
- 21.2 "Work in Proximity to Energized Electrical Equipment" is work where a person, or conducting tools, equipment or other objects are within the "Minimum Clearance Distance to Energized Electrical Equipment", or are physically capable of, through inadvertent movement, encroaching on the "Minimum Clearance Distance to Energized Electrical Equipment", as specified in the following table:

Voltage Range, Phase to Phase or Phase to Ground	Minimum Clearance Distance
750 V to 50 KV	1 meter (3 feet)
51 to 125 KV	1.5 meters (5 feet)
126 to 250 KV	2.5 meters (8 feet)
251 to 550 KV	4 meters (13 feet)
> 550 KV	6 meters (20 feet)

- 21.3 All "Work in Proximity to Energized Electrical Equipment" is subject to the Owner's prior written consent and shall comply with the following conditions:
 - A documented work procedure for the specific task shall be developed that includes a control barrier to prevent contact with energized equipment. The procedure shall be approved by the Owner.
 - The workers shall be qualified pursuant to prudent industry practices to perform work in Proximity to Energized Equipment and have been trained on the specific work procedure.
 - The specific task (except for switching operations) shall be monitored by a dedicated observer who is qualified and trained on the specific work procedure.
 - The Daily Job Safety Plan prepared by the workers involved in the Work shall specify the control barrier and the use of a dedicated observer.
 - If the task cannot be completed with the application of a control barrier, the job safety plan shall include multiple safety barriers and shall be approved by the Owner.

22 WORK ON ENERGIZED ELECTRICAL EQUIPMENT

- 22.1 Regardless of the voltage, the first alternative shall always be to de-energize, test and ground the equipment.
- 22.2 "Work on Energized Electrical Equipment" is work where contact is made with an energized conductor or equipment.

- 22.3 All "Work on Energized Electrical Equipment" is subject to the Owner's prior written consent and shall comply with the following conditions:
 - A documented work procedure for the specific task shall be developed that includes a control barrier to prevent the second point of contact. The procedure shall be approved by the Owner.
 - The workers shall be qualified to perform work on Energized Equipment and have been trained on the specific work procedure.
 - The specific task shall be monitored by a dedicated observer who is qualified and trained on the specific work procedure, except for tasks limited to testing, troubleshooting and isolating at voltages less than 600v.
 - The Daily Job Safety Plan prepared by the workers involved in the Work shall specify the control barrier and the use of a dedicated observer, and shall be approved by the Owner, except for tasks limited to testing, troubleshooting and isolating at voltages less than 600v.

23 USE OF HEAVY OPERATING EQUIPMENT

- 23.1 "Heavy Operating Equipment" is equipment used for construction, maintenance or transport activities, and includes but is not limited to bulldozers, mobile cranes, overhead fixed cranes, excavators, front end loaders, forklifts, manlifts, bucket trucks, digger derrick trucks, tractor trailers, dump trucks, compaction rollers, helicopters, etc.
- 23.2 The Contractor shall ensure that Operators of Heavy Operating Equipment have up-todate licenses to operate the Heavy Operating Equipment as per the regulatory requirements.
- 23.3 The Contractor shall ensure that Operators have received training within a structured program on the safe operation of the Heavy Operating Equipment and have a thorough understanding of the operating limitations of the specific equipment to be operated.
- 23.4 In the absence of formal training, the Contractor shall assist the Owner in conducting a formal evaluation of the Operator's skills to determine if the Operator's experience is equivalent to training provided within a structured program.
- 23.5 The Contractor shall ensure that orientation is provided to all Operators on the safe operation of any Heavy Operating Equipment that is new to the Site prior to the equipment being used on the Site.
- 23.6 The Contractor shall ensure that inspection and maintenance is performed as per the manufacturer's requirements for any Heavy Operating Equipment the Contractor used to perform the Work and that inspection and maintenance records are maintained.

- 23.7 Operators shall conduct pre-use checks on all Heavy Operating Equipment prior to performing Work with the equipment. Pre-use checklists shall be used by the Operators and records shall be maintained.
- 23.8 Operators shall prepare a separate Daily Job Safety Plan (as defined in section 7). The Daily Job Safety Plan shall include the details on the use of the equipment such as vehicle setup, stabilization, work zone protection, rigging requirements, the operating limitations of the Heavy Operating Equipment and minimum clearance distances to energized electrical equipment. The Operator's Daily Job Safety Plan shall be reviewed with the other workers on Site prior to the start of Work.
- 23.9 All Work requiring the use of mobile Heavy Operating Equipment near electrical supporting structures, such as towers, poles and guy wires, shall comply with the following conditions, except for Work performed by qualified powerline workers on transmission and distribution circuits:
 - Operators shall ensure that the mobile Heavy Operating Equipment is maintained at a minimum safe working distance of 3 meters (10 feet) from any electrical supporting structure.
 - A safe work zone shall be established around the electrical supporting structure. The perimeter of the zone and the structure shall be marked with cones, flags or caution tape. These visual aids shall be attached or positioned so the operator of the equipment has good visual contact with them while working in the area of the electrical supporting structures.
 - For any work required within 3 meters (10 feet) of an electrical supporting structure, the first alternative shall be to use hand tools. If the use of hand tools is not feasible, the work shall require the use of physical barriers or a dedicated observer.
 - If the above conditions cannot be met, a documented work procedure shall be approved by the Owner.

24 CLIMBING AND WORKING AT HEIGHT

- 24.1 Fall protection measures must be taken whenever there is a potential for a High-Risk event involving gravitational energy such as a worker
 - falling from a ladder
 - falling from a roof or platform
 - falling into operating machinery
 - falling into water or other liquid
 - falling into or onto a hazardous substance or object
 - falling through an opening on a work surface
- 24.2 For all temporary and permanent work, structures, equipment and installations, where conditions such as of the ones above exist, the first alternative is to change the design in order to eliminate the hazard. If it is not practical to implement design changes, the second alternative must be to implement fall prevention measures such as a guardrail system or travel restraint system. In the cases where neither design changes nor the

implementation of fall prevention measures are practical, the third alternative must be to implement a fall limiting or a fall arrest system.

24.3 Whenever there is a possibility of objects falling from a work platform onto persons below, an adequate safe work zone must be established to ensure that employees and personnel are not exposed to falling objects. The work zone should be delineated with caution tape or monitored by a dedicated observer. The work platform must have kick plates installed and the workers should tie off the tools and equipment whenever possible.

25 LIST OF APPENDICES

- o APPENDIX 1 HSE Form B: Site Hazard Assessment Form
- o APPENDIX 2 HSE Form A: Project Planning Decision Tree
- o APPENDIX 3 HSE Form D: Project Safety and Environmental Plan
- o APPENDIX 4 Example of Project Safety and Environmental Plan (for some projects)
- o APPENDIX 5 HSE Form E: Daily Job Safety and Environmental Plan
- o APPENDIX 6 HSE Form F: Safety and Environment Work Observation
- o APPENDIX 7 HSE Form G: Incident Investigation

PART A CAPABILITY OF THE APPLICANT

EXHIBIT 4 TECHNICAL CAPABILITY

Appendix 4G GLPTLP Environmental Policy

Great Lakes Power

Transmission



Environmental Policy

Our environmental principles are based on the fundamental values of accountability, partnership and open communication. We accept the responsibility entrusted to us to manage natural resources in ways to ensure sustainable development.

Our approach protects and enhances the ecosystems and communities affected by our activities while managing a successful business.

JU Routh P

Jeff Rosenthal
Chief Operating Officer
Canadian Transmission Operations
Brookfield Renewable Power Inc.

L. Cenhew M. Plece

Vice President and General Manager Great Lakes Power Transmission LP

May 2010

Principles

- We meet legislated requirements and we strive to achieve a level of performance not only governed by these requirements but also by considerations of the socio-economic and environmental expectations of stakeholders.
- We engage in open and transparent dialogue with stakeholders to achieve a greater understanding of expectations and constraints.
- We promote a partnership approach for the development of responsible and realistic solutions.
- We understand, minimize and manage the impacts and risks to the public and the environment associated with our operations, and we plan for emergency situations.
- We integrate environmental, public and socioeconomic considerations into our business processes.
- We ensure efficient and responsible use of natural resources in our operations and activities.
- We exercise leadership by encouraging and training our employees at all levels to ensure environmental stewardship and public safety.
- We ensure that our performance demonstrates our leadership position.
- We put in place environmental management systems that support this policy and ensure continual improvement.

PART A CAPABILITY OF THE APPLICANT

EXHIBIT 5 FINANCIAL CAPACITY

5. Financing Capacity

- 2 5.0 <u>Overview</u>
- 3 EWT LP projects the development, construction and financing of the East-West Tie Line (the
- 4 "Project") will require an investment of approximately \$465 million and take approximately 5
- 5 years to complete and commission. As outlined in Section 5.4 below, EWT LP plans on
- 6 financing the Project with 40% equity and 60% debt. As such, the construction of the Project will
- 7 require \$62 million¹ equity investment from each of its partners and \$280 million in third party
- 8 financing. At this time, EWT LP believes the financing will occur over three stages
- 9 (development, construction and operations) and potentially with two different third party lenders.
- In accordance with the Ontario Energy Board's (the "Board's") filing requirements, this Section
- includes the following:
- Capital Resources (5.1);
- Credit Rating (5.2);
- Creditworthiness and Financial Condition (5.3);
- Financing Plan (5.4);
- Raising Additional Debt or Equity (5.5);
- Ability to Finance in the Case of Cost Overruns, Delay and Other Factors (5.6);
- Relevant Experience (5.7); and
- Alternative Mechanisms (5.8).
- 20 5.0.1 Source of Equity
- 21 The source of equity to develop, construct and finance the Project comes from each of the
- partners of EWT LP: Hydro One Inc. ("Hydro One"); Bamkushwada LP ("BLP"); and Great
- 23 Lakes Power Transmission EWT LP ("GLPT-EWT"), through its indirect parent Brookfield
- 24 Infrastructure Partners LP ("Brookfield Infrastructure").

¹ Based on a total Project cost of \$465 million.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 5 Page 2 of 17

- 1 EWT LP was created to operate as a partnership of equals. Under the EWT LP structure, all
- 2 limited partners are required to provide equity financing to EWT LP in relation to their one third
- 3 limited partnership interest. The requirement to provide equity to the partnership runs throughout
- 4 the designation, development, construction and operation of the Project. If any limited partner
- 5 does not make the required contribution, remedies exist, including the right for contributing
- 6 limited partners to make additional contributions to EWT LP that dilute the partnership interest
- 7 of the limited partner that does not make the required contribution.
- 8 Collectively, the partners are well positioned to meet the \$186 million equity and \$280 million
- 9 financing requirements to develop, finance, construct, operate and maintain the Project. On a per
- partner basis, the equity contribution is estimated to be \$62 million. As of December 31, 2011,
- the partners had, collectively, over \$31.6 billion in total assets and \$12.3 billion in equity. Given
- the Project's proposed 60/40 debt to equity structure, the total Project cost represent 1.5% of
- total assets and 3.8% of total equity of the entities. In addition, the entities made capital
- expenditures/acquisitions in 2011 of more than \$2.2 billion, had annual revenue of more than
- \$4.4 billion (net of power purchase) and generated over \$1.7 billion of operating cash flow.
- In addition to the operating results noted above, the partners have access to an experienced
- 17 treasury team that has the knowledge and experience to access the financial market to acquire
- 18 funding. Given the magnitude of existing operations and the ability to access capital through the
- open market, the development, financing, construction, operation and maintenance of the Project
- would be considered normal course of business that could occur in any given year.
- 21 While the financial strength of the partners comes primarily from Hydro One and Brookfield
- 22 Infrastructure, it is important to understand that like Hydro One and GLPT-EWT, BLP is
- 23 obligated to provide its share of equity to EWT LP in consideration for BLP's limited
- 24 partnership interest. In the event BLP cannot obtain appropriate funding, Brookfield
- 25 Infrastructure and Hydro One will provide financing to BLP on strictly commercial terms and
- 26 BLP will invest the financial amount as its equity interest. Notwithstanding whether BLP raises
- funds for its equity through a third party lender or otherwise, BLP has and will continue to have
- 28 the rights and obligations of an equal partner to Hydro One and GLPT-EWT.

1 5.0.2 <u>Development, Construction and Operations</u>

- 2 As noted, EWT LP believes the financing will occur in three stages: development, construction
- and operations. The development of the Project will cost approximately \$22.1 million and will
- 4 occur over a period of approximately 3 years. EWT LP will finance the development of the
- 5 Project through partner loans from Hydro One and GLPT-EWT (through Brookfield
- 6 Infrastructure) to EWT LP. The partner loans are debt to the partnership and have no impact on
- 7 the equity of the partnership which will remain equally shared between Hydro One, BLP and
- 8 GLPT-EWT during development. While third party funding may be arranged during the
- 9 development stage, it is not expected to be required.
- 10 The construction stage will commence on execution of a construction contract after the Board
- approves EWT LP's leave to construct application made pursuant to Section 92 of the *Ontario*
- 12 Energy Board Act. Prior to the completion of the development stage and the filing of the leave
- to construct, EWT LP will finalize the construction financing. EWT LP projects the Project will
- 14 cost approximately \$427 million² to construct and finance and be constructed over a period of
- approximately 2 years.
- 16 The operations stage will commence once the Project is put into service. In anticipation of the
- 17 Project being put into service and the initial rate application, EWT LP will finalize the takeout
- 18 financing. Takeout financing is long-term financing used to retire the short-term construction
- 19 facility and is designed to meet the financing need of the operations.

20 5.0.3 Third Party Lenders

- 21 EWT LP will approach a number of lenders across various market sectors to ensure the financing
- rates, terms and conditions provide the most benefit to EWT LP and the ratepayer. At this time,
- 23 EWT LP believes that in order to maximize the benefit to the ratepayer, the financing may occur
- 24 with different lenders.

² See Section 6.5, based upon the Board's Reference Option using X10 towers.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 5 Page **4** of **17**

- 1 The two primary markets EWT LP will approach to provide financing include the traditional
- 2 financial institutions and the bond market. Based on the past experience of EWT LP's partners,
- 3 traditional financial institutions tend to be the preferred solution for short-term construction
- 4 financing while the bond market provides a better solution for long-term financing. While one
- 5 lender for all stages may be the preferred option, EWT LP will consider other viable financing
- 6 arrangement proposals provided by various lenders to address the financial needs of each stage.

7 5.0.4 <u>Specific Designation Plan Requirements</u>

- 8 As noted above, the financial capacity of EWT LP comes from the financial strength of its
- 9 partners. In the case of BLP, its financial capacity is back stopped by Hydro One and GLPT-
- 10 EWT (through Brookfield Infrastructure). As such, EWT LP primarily addresses the financial
- strength of Hydro One and Brookfield Infrastructure below.

1 5.1 <u>Capital Resources</u>

- 2 EWT LP is providing the most recent audited financial statements of Hydro One and Brookfield
- 3 Infrastructure as evidence that it has capital resources that are sufficient to develop, finance,
- 4 construct, operate and maintain the Project. Due to the size of the reports and the fact that they
- 5 are publicly available, EWT LP elected to provide a direct link to the reports rather than
- 6 providing hard copies.
- 7 Electronic copies of the audited financial statements of Hydro One can be found at:
- 8 http://www.hydroone.com/InvestorRelations/Pages/AnnualReports.aspx
- 9 Electronic copies of the audited financial statements and supplemental information of Brookfield
- 10 Infrastructure can be found at:
- 11 https://www.brookfieldinfrastructure.com/content/financial_reports/annual_reports_20f-
- 12 <u>2716.html</u>
- 13 and
- https://www.brookfieldinfrastructure.com/_Global/22/documents/relatedlinks/4971.pdf.
- 15 A summary of Hydro One and Brookfield Infrastructure's capital resources as at December 31,
- 16 2011 are highlighted below.
- 17 5.1.1 Hydro One
- In 2011, Hydro One earned revenue of \$2.8 billion (net of power purchase), incurred OM&A of
- \$1.1 billion, generated cash from operations of \$1.1 billion and invested more than \$1.4 billion
- in capital expenditures. It is evident through the performance of existing operations, Hydro One
- 21 will generate sufficient capital over the next 5 years to develop, finance, construct, operate and
- 22 maintain the Project.
- 23 In addition to capital generated through existing operations, Hydro One has available to it a
- \$1.25 billion committed unused revolving credit facility to fund any short-term capital

- requirements. For long-term capital requirements, Hydro One has experience with raising capital
- 2 in the open market. As noted in Section 5.3 below, in 2011 Hydro One raised \$700 million in the
- open market. Hydro One has an A+ Negative long-term credit rating.³
- 4 Through a combination of existing operations, revolving credit facilities and proven access to the
- 5 capital market, Hydro One has sufficient access to capital to develop, finance, construct, operate
- 6 and maintain the Project.

7

5.1.2 Brookfield Infrastructure

- 8 Brookfield Infrastructure is a global business that is comprised of high quality, long life assets that
- 9 provide essential products and services for the global economy. Brookfield Infrastructure has a
- stable cash flow profile with approximately 80% of their adjusted EBITDA supported by
- 11 regulated or contractual revenue.
- 12 In 2011, Brookfield Infrastructure earned revenue of \$1.6 billion and generated funds from
- operation of \$392 million. It is evident through the performance of existing operations, Brookfield
- 14 Infrastructure will generate sufficient capital over the next 5 years to develop, finance, construct,
- operate and maintain the Project.
- In addition to capital generated through existing operations, Brookfield Infrastructure has a \$700
- million committed revolving credit facility (of which \$92 million was utilized as at September
- 18 30, 2012) to fund any short-term capital requirements. For long-term capital requirements
- 19 Brookfield Infrastructure has a history of raising capital in the open market. As noted in Section
- 20 5.3 below, Brookfield Infrastructure has significant experience in the open market and continues to
- 21 maintain a BBB+ stable credit rating.⁴
- 22 Through a combination of existing operations, revolving credit facilities and proven access to the
- 23 capital market, Brookfield Infrastructure has sufficient access to capital to develop, finance,
- construct, operate and maintain the Project. Brookfield Infrastructure has raised more than US\$2

³ See Standard & Poor's June 27, 2012, Appendix 5A.

⁴ See Standard & Poor's, May 4, 2012, Appendix 5B.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 5 Page **7** of **17**

- billion through the issuance of equity since 2009, successfully issued C\$400 million in debt
- 2 financing in 2012 and maintains an investment grade credit rating.

1 5.2 <u>Credit Rating</u>

- 2 EWT LP is a new partnership and as such does not have a credit rating. EWT LP is providing the
- 3 current credit ratings for Hydro One and Brookfield Infrastructure as evidence to support its
- 4 financing capabilities. The current credit ratings for Hydro One⁵ and Brookfield Infrastructure
- 5 can be found at Appendix 5A and 5B respectively.
- 6 EWT LP plans on financing the construction of the Project through project level financing. As
- 7 evidence of the anticipated credit rating of EWT LP, EWT LP has attached a copy of Great
- 8 Lakes Power Transmission LP's ("GLPTLP") 2011 credit rating at Appendix 5C. GLPTLP is
- 9 indirectly controlled by Brookfield Infrastructure and is financed using project level financing.
- 10 GLPTLP's credit rating is a good indicator of the future credit rating of EWT LP.

11

⁵ Obtained from EB-2012-0031, Exhibit A, Tab 11, Schedule 1.

5.3 <u>Creditworthiness and Financial Condition</u>

- 2 EWT LP plans on financing the construction and takeout financing of the Project through project
- 3 level financing. Project level financing is preferred as it is long-term financing based upon the
- 4 projected cash flows of the project. The financing is typically secured by all project assets,
- 5 including the revenue-producing contracts. Lenders are given a security interest on all project
- 6 assets, and are able to assume control of a project if the project company is in default with the
- 7 loan terms.

1

- 8 EWT LP has experience in this type of financing and does not anticipate any issues in arranging
- 9 such financing. As noted in Section 5.2 above, EWT LP has attached a copy of GLPTLP's 2010
- 10 credit rating as an indicator of a potential future credit rating of EWT LP utilizing project level
- 11 financing. GLPTLP's current credit rating is A stable⁶ a credit rating which in turn will
- 12 facilitate financing at rates, terms and conditions that are beneficial to EWT LP and the
- 13 ratepayer.
- 14 Given the utility-level financing experience, the financial strength of Hydro One and Brookfield
- 15 Infrastructure, and the indicative credit rating of GLPTLP under similar financing conditions,
- 16 EWT LP does not anticipate the financing having a significant adverse effect on EWT LP's
- 17 credit worthiness or financial condition. EWT LP anticipates the financing will be loans but with
- 18 no recourse to the partners and thus will not have a significant adverse effect on the partners'
- 19 creditworthiness or financial condition.

20 5.3.1 Hydro One

- 21 Hydro One has a history of raising capital in the open market. Over the past three years Hydro
- One has raised more than \$3.3 billion in financing to fund their operations. During that period
- 23 Hydro One has actively issued and repaid debt to meet its operating and capital requirements. As
- 24 noted on page 3 of Hydro One's 2011 financial statements:

⁶ See DBRS, October 28, 2011, Appendix 5C.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 5 Page **10** of **17**

- 1 "We maintained "A" category credit ratings and successfully issued \$700 million in debt
- 2 financing, while repaying \$500 million of debt maturing in the year."
- 3 The table below highlights Hydro One's transmission specific rate base additions, debt
- 4 outstanding and change in financing during the last 3 year period.

5 <u>Table 5.1: Finance Experience</u>⁷

	Rate Base Additions	Amount Outstanding	Change in Financing
2011	\$917.8 million	\$4.3 billion	\$101 million
2010	\$936.1 million	\$4.2 billion	\$196.6 million
2009	\$810.2 million	\$4.0 billion	\$507.5 million

6

- 7 Evidence of Hydro One's ability to finance similar projects can be found in Hydro One's last two
- 8 transmission rate applications: EB-2012-0031 and EB-2010-0002. One example of Hydro One's
- 9 ability to finance a project is the Bruce to Milton Transmission Reinforcement Project, in which
- 10 Hydro One built a new 180 kilometre double-circuit 500 kV transmission line from the Bruce
- Power facility in Kincardine to Hydro One's Milton Switching Station in the Town of Milton.
- 12 The current cost estimate of this project totals \$709 million, which is approximately \$44 million
- less than the \$753 million outlined in proceeding EB-2010-0002, Exhibit A, Tab 11, Schedule 5.
- 14 As demonstrated by Hydro One's ability to fund its existing investment in its transmission and
- distribution businesses, the financing of the Project will not have a significant adverse effect on
- 16 its credit worthiness or financial condition.

⁷ Derived from EB-2012-0031 and EB-2010-0002.

⁸ EB-2012-0031, Exhibit D1, Tab 3, Schedule 3, p. 15 (August 15, 2012).

1 5.3.2 <u>Brookfield Infrastructure</u>

- 2 Brookfield Infrastructure actively raises capital in the open market and has maintained a BBB+
- 3 credit rating with a stable outlook as per its most recent credit rating. As discussed in Section
- 4 5.1.2, Brookfield Infrastructure has raised more than US\$2 billion through the issuance of equity
- 5 since 2009 and successfully issued C\$400 million in debt financing in 2012. Brookfield
- 6 Infrastructure completed these financings without adverse effects to its credit rating and should be
- 7 able to complete the Project without adverse effects to its creditworthiness.
- 8 As at December 31, 2011, Brookfield Infrastructure's investment in transmission operations are
- 9 comprised of approximately 10,500 km of transmission lines in North America and South
- 10 America. Brookfield Infrastructure has experience financing the acquisition of transmission
- businesses and development of transmission specific assets through its investment and
- management participation in the day to day activities of its transmission entities.
- For example, in 2003 GLPTLP sought and received Board approval⁹ to reinforce a significant
- 14 portion of its transmission facility (the "Transmission Reinforcement Project"). The
- Reinforcement Project consisted of two stages and at a cost of \$81 million. The Transmission
- 16 Reinforcement Project was successfully completed and now forms an integral part of GLPT's
- 17 transmission system.
- As described in Section 2.1.2, Cross-Sound Cable Company, LLC is operated under a contract
- 19 with the Long Island Power Authority and is regulated under the authority of the US Federal
- 20 Energy Regulatory Commission. Cross Sound Cable has assets of US\$198 million and revenues
- of US\$23 million. Brookfield Infrastructure financed and purchased Cross-Sound Cable in 2011.
- 22 In addition, Wind Energy Transmission of Texas ("WETT") is jointly owned by Brookfield
- 23 Infrastructure and includes 600 km of 345 kV transmission lines and five substations. The \$750
- 24 million asset is currently under construction and is expected to be in service by 2013. Brookfield
- 25 Infrastructure has been actively involved in arranging the construction and takeout financing for
- 26 this project.

⁹ EB-2003-0162.

1 5.4 <u>Financing Plan</u>

- 2 The primary goal of financing will be to arrange for a debt facility that provides the flexibility to
- 3 meet the needs of the business while minimizing costs to the ratepayer. To achieve this goal, the
- 4 partners, on behalf of EWT LP, will approach a minimum of three lenders across various market
- 5 sectors to provide information on financing to construct, operate and maintain the Project. EWT
- 6 LP's financing plan focuses on three stages: development, construction and operations (takeout
- 7 financing).

8 <u>Development</u>

- 9 As noted in Section 5.0.1 above, the partners plan on financing the development of the Project
- through partner loans from Hydro One and GLPT-EWT (through Brookfield Infrastructure) to
- 11 EWT LP. While third party funding may be arranged during the development stage, it is not
- 12 required.
- 13 A review of the financial statements referred to in Section 5.1 above clearly demonstrates the
- partner's ability to fund the Project during the development stage.

15 Construction

25

- 16 EWT LP will approach lenders for project level financing across various market sectors to ensure
- the financing rates, terms and conditions provide the most benefit to EWT LP and the ratepayer.
- 18 The two primary markets EWT LP will approach to provide financing are traditional financial
- institutions and the bond market. While EWT LP will evaluate all financing options, the ultimate
- 20 financing solution will be the one that provides the most benefit to the ratepayer. While one
- 21 lender for all stages may be the preferred option, EWT LP will consider other viable financing
- 22 arrangement proposals such as use of a traditional financial institution and arranging for takeout
- 23 financing utilizing a bond issuance or such combinations.
- 24 Actual financing decisions will depend on a number of factors, including:
 - The overall cost of borrowing (rate and fees);

- Specific terms and conditions governing term, amortization and security during the construction period;
- Lenders willingness to finance at a 60/40 debt to equity structure;
- Availability of a contingency facility to fund delays in construction or cost over runs (if
 required); and
 - Takeout credit facility terms: EWT LP would like to tie construction and takeout financing to achieve the best possible rates for the ratepayer but will enter into separate construction and takeout facilities if it is more beneficial to the ratepayer.
- 9 At this time, EWT LP believes the construction financing will be through a traditional financial
- institution, will be on a variable rate based off of LIBOR, and should attract an interest rate in the
- 11 5% range. While EWT LP can speculate on the lending facility, rates, terms and conditions, it
- must be noted that the construction phase will not begin for several years. Given the length of
- 13 time before the construction financing is drawn upon, the characteristics of the loan may be
- subject to change depending on the market conditions.
- Nearing the end of construction and in anticipation of the EWT LP initial cost of service rate
- application, EWT LP will finalize the terms and conditions of the takeout financing.
- 17 Operations (Takeout Financing)
- Bond market financing tends to be the preferred solution for long-term financing. At this time,
- 19 EWT LP believes the takeout financing will be through a long-term bond market offering and
- should attract a fixed interest rate in the 5% range. While EWT LP can speculate on the lending
- facility, rates, terms and conditions, it must be noted that the operations phase will not begin for
- 22 several years. Given the length of time before the takeout financing is drawn upon, the
- characteristics of the loan may be subject to change depending on the market conditions.

6

7

8

1 5.5 <u>Raising Additional Debt or Equity</u>

- 2 As noted in Section 5.0 above, EWT LP plans on financing the Project through project level
- 3 financing at a 60/40 debt to equity structure. EWT LP has produced a copy of GLPTLP's 2010
- 4 credit rating at Appendix 5C as an indicator of the future credit rating of EWT LP utilizing
- 5 project level financing. GLPTLP is a Brookfield Infrastructure controlled entity that is financed
- 6 under project level financing which is similar to the proposed financing strategy of EWT LP.
- 7 Assuming EWT LP will achieve a similar credit rate as GLPTLP (currently A stable), a credit
- 8 rating of A will not only facilitate financing the construction of the Project, it will also ensure
- 9 EWT LP has the ability to finance additional debt if required.
- To the extent that additional equity is required, that additional equity will be provided by the
- partners of EWT LP. Hydro One and GLPT-EWT (through Brookfield Infrastructure) will
- provide backstopping to BLP, if necessary, on commercial terms.

- 1 5.6 Ability to Finance in the Case of Cost Overruns, Delay and Other Factors
- 2 While EWT LP will work to avoid cost overruns or delays in the Project, EWT LP along with
- 3 the partners are in a position to finance the Project in the case of unanticipated cost overruns or
- 4 delays in the Project completion.
- 5 EWT LP's construction facility, as noted above in Section 5.4, will have a contingency facility to
- 6 address 60% of any prudently incurred cost overruns along with terms and conditions that will
- 7 allow for any delays in completion.
- 8 The financial strength of Hydro One and Brookfield Infrastructure will ensure all partners have the
- 9 ability to fund their respective equity requirement of unanticipated cost overruns or delays in
- 10 Project completion.

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 5 Page **16** of **17**

1 5.7 <u>Relevant Experience</u>

- 2 EWT LP's experience in financing similar projects is demonstrated through the experience of
- 3 Hydro One and GLPT-EWT's indirect parent Brookfield Infrastructure, as described in Section 8.3.

4

Filed: 2013-01-04 EB-2011-0140 Part A – Exhibit 5 Page **17** of **17**

1 5.8 <u>Alternative Mechanisms</u>

- 2 At this time, EWT LP has not identified any alternative mechanisms EWT LP will be requesting
- 3 or is likely to request.

PART A CAPABILITY OF THE APPLICANT

EXHIBIT 5 FINANCIAL CAPABILITY

Appendix 5A Hydro One Credit Rating

Updated: July 12, 2012 EB-2012-0031 Exhibit A Tab 11 Schedule 1 Page 1 of 1

RATING AGENCY REPORTS

4	7	
	_	

1

- Included in this Exhibit are copies of the most recent rating agency reports performed by
- Dominion Bond Rating Service, Moody's Investor Service and Standard & Poor's.

5

- 6 Attachment 1: Standard & Poor's, Full Ratings Report Dated: May 26, 2011
- Attachment 2: Standard & Poor's, Summary Ratings Report Dated: November 25, 2011
- 8 Attachment 3: DBRS Rating Report Dated September 23, 2011
- 9 Attachment 4: DBRS Rating Report Dated February 29, 2012
- Attachment 5: Moody's Investor Service, Credit Opinion Dated: September 8, 2011
- Attachment 6: Moody's Investor Service, Press Release Dated: December 16, 2011
- 12 Attachment 7: Standard & Poor's, Report Dated: April 25, 2012
- 13 Attachment 8: Moody's Investor Service, Dated: April 27, 2012
- 14 Attachment 9: DBRS, Report Dated: June 20, 2012
- 15 Attachment 10: Standard & Poor's, Report Dated: June 27, 2012

STANDARD &POOR'S

Global Credit Portal[®] RatingsDirect[®]

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 1 Page 1 of 17

May 26, 2011

Hydro One Inc.

Primary Credit Analyst:

Greg Pau, Toronto (1) 416-507-2518; greg_pau@standardandpoors.com

Secondary Contact:

Faye Lee, Toronto (1) 416-507-2568; faye_lee@standardandpoors.com

Table Of Contents

Major Rating Factors

Rationale

Outlook

Business Description

Rating Methodology

Excellent Business Risk Profile

Significant Financial Risk Profile

Related Criteria And Research

Hydro One Inc.

Major Rating Factors

Strengths:

- · Low-risk electricity transmission and distribution network businesses
- Natural monopoly position
- · Regulated cash flows
- Supportive shareholder

Weaknesses:

- · Deteriorating cash flow measures and financial risk profile
- Large capital expenditure program

Corporate Credit Rating A+/Stable/A-1

Rationale

The ratings on Hydro One Inc., a large, regulated transmission and local electricity distribution company in the Province of Ontario (AA-/Stable/A-1+), reflect Standard & Poor's Ratings Services' opinion of the company's low-risk monopoly electricity transmission and distribution assets; secure and relatively predictable regulated cash flows; and the support of its owner, the province. We believe the utility has an excellent business risk profile and view its financial risk profile as significant on our expanded risk matrix. The company had C\$7.8 billion in reported total debt outstanding as of March 31, 2011.

We base our 'A+' rating on Hydro One on what we assess as the company's stand-alone credit risk profile (SACP) of 'a' and our opinion that there is a "high" likelihood that the province would provide timely and sufficient extraordinary support in the event of financial distress. We view the company's role as "important" to the province and the link between it and the province as "very strong."

We believe the company's monopoly position, the business' asset-intensive nature, and regulatory oversight limiting competitive risk, all support an excellent stand-alone business risk profile. Hydro One owns and operates substantially all of Ontario's electricity transmission system, and its distribution service territory covers about 75% of the province. In our view, the business carries relatively low operating risk and exhibits average operational efficiency and reliability.

The Ontario Energy Board's (OEB) regulatory framework supports Hydro One's cash flow stability, and we view cost recovery as generally predictable. We have no near-term expectation of major energy policy shifts that would affect the credit quality, although we expect the OEB to be mindful of overall electricity costs to consumers in the current weak economic conditions and stagnant load growth in approving proposed prudent spending by utilities. The framework allows for the recovery of prudent transmission and distribution costs and the opportunity to earn a modest-but-predictable return. Furthermore, the company's exposure to commodity risk is limited. Commodity costs flow through to the customer and the utility has no obligation to ensure an adequate supply of electricity in the province.

• In our view, Hydro One has a significant financial risk profile. We believe its cash flow strength relative to its debt obligations has weakened since 2009 due to a material capital expenditure program. The company's annual

capital expenditures were C\$1.5 billion in 2009 and 2010, exceeding its internal cash flow generations (C\$916 million and C\$1 billion in adjusted funds from operations [AFFO] in 2009 and 2010, respectively). As the company has budgeted annual capital expenditures of about C\$1.8 billion-C\$1.9 billion over the next three years, we believe that it will continue to face significantly sizable negative free operating cash flows of about C\$550 million-C\$660 million per year. Hence, despite expected moderate revenue improvements following the last rate decision, we believe Hydro One's financial measures are unlikely to return to the levels they were before 2009. The company's financial risk profile remains supported by its strong access to capital markets, adequate liquidity, the stability and predictability of its cash flows, and low merger and acquisition risk. We expect Hydro One to manage this cycle of regulated rate base growth and significantly large negative free operating cash flows such that its leverage would not exceed 65% adjusted total debt-to-capital (compared with 63% at Dec. 31, 2010), or 60% on an unadjusted basis, AFFO-to-debt of about 12%, and AFFO interest coverage of about 3x. We understand that Hydro One has some flexibility in its planned capital expenditures and dividend payments. AFFO interest coverage was 3.0x in 2010, modestly improved from 2.8x in 2009, but still lower than the pre-2009 level of 3.5x-4.0x. AFFO-to-total debt in 2010 was 12.2%, marginally improved from 11.4% in 2009, but still lower than the pre-2009 level of about 14.0%-15.0%. We consider these financial measures weak for the ratings, and therefore, leave no cushion for the company's financial measures to deteriorate from our expectations (see related research, Corporate Criteria: Business Risk/Financial Risk Matrix Expanded, published May 27, 2009, on RatingsDirect on the Global Credit Portal). We believe the SACP and consequently the rating could be pressured if its financial measures worsen from our expectations because of weaker-than-expected cash flows or a material increase in debt as Hydro One proceeds with its heavy capital spending.

Liquidity

The short-term rating on Hydro One is 'A-1'. The company has adequate liquidity to cover its needs in the near term, even in the event of unforeseen earnings declines. Standard & Poor's assessment of Hydro One's liquidity profile incorporates the following expectations and assumptions:

- The company's liquidity sources, including liquid short-term investments, FFO, and credit facility availability, will likely exceed its uses by 1.2x or more in the next 12-18 months.
- Liquidity sources include an expectation of about C\$1.2 billion of FFO, access to C\$1.25 billion of Hydro One's committed revolving credit facility with syndicated of banks, and C\$154 million liquid short-term investments as of March 31, 2011. The C\$1.25 billion credit facility was fully available as of March 31, and will expire in June 2014. The company remains well within its banking covenant of 75% total debt-to-total capital.
- Liquidity uses include C\$250 million of maturing debt, an estimated dividend payment of C\$170 million, and about C\$1.8 billion of capital expenditures, of which about C\$400 million is considered discretionary.

The company has what we consider good relationships with its banks and good standing in the debt market, having issued C\$1.5 billion in debt of its medium-term note (MTN) shelf program at attractive prices (coupon rates range from 2.95%-5.49%) in 2010. Its C\$3 billion MTN shelf program will mature in August 2011, C\$950 million of which was available as of March 31, 2011. We expect the company to renew the shelf program in a timely manner. We understand that Hydro One also holds a C\$250 million note issued by the province that matures in 2014, which it could liquidate if needed. Hydro One could also reduce its dividend payment to help satisfy its cash requirements. The company's debt maturities are well-spread with annual scheduled repayment in the next seven years averaging about C\$600 million.

Hydro One provides the Independent Electricity System Operator (IESO) with C\$325 million in parental guarantees

in lieu of prudential support. If all the ratings on the utility were to fall, the IESO's prudential requirements would likely increase.

Outlook

The stable outlook reflects what we view as Hydro One's consistent performance and our expectation of continued predictable regulatory support despite its large capital expenditure program and negative free operating cash flows. In the event of lower-than-expected cash flows and earnings, we expect the company to maintain its leverage within the deemed capital structure of 60% reported debt-to-capital, AFFO-to-debt of about 12%, and AFFO interest coverage of about 3x, by curtailing its capital spending and additional debt financing. In our view, there is no cushion for the company to deteriorate from our expectations on its key credit measures to maintain its existing ratings.

A material adverse regulatory ruling or market restructuring (such as the assumption of the obligation to supply, not just deliver, electricity), or any deterioration of financial measures beyond our expectation, could lower the existing 'a' SACP and consequently the current ratings.

An improvement in Hydro One's SACP is unlikely without the assurance of a much stronger balance sheet, and deeper cash flow-interest and debt coverage.

All else being equal, a negative outlook or further downgrade on the province could affect the ratings on Hydro One, but likely not by more than a notch, given the company's underlying stand-alone credit strength. Conversely, all else being equal, a positive outlook or upgrade of up to two notches on the province will not affect the ratings on Hydro One. A change in the relationship with the province that leads us to reconsider the likelihood of Hydro One receiving support from the province could also move the ratings.

Business Description

Hydro One owns and operates a low-risk, regulated transmission system that represents about 57% of its total assets as of Dec. 31, 2010. Substantially all of Ontario's electricity transmission system is owned and operated by Hydro One, which has contributed to the company becoming one of the largest transmission companies in North America. It can accommodate exports of about 6,000 megawatts (MW) and imports of 4,600 MW to and from interconnected Canadian provinces and the U.S. The system transmitted 142 terawatt-hours (TWh) of electricity in 2010 compared with an average of 139 TWh in 2009.

The company also owns and operates a low-risk, regulated distribution system that represents about 40% of its total assets as of Dec. 31. It is one of the country's largest LDCs and delivered about 29 TWh of electricity to about 1.3 million customers in rural and urban areas in Ontario. Apart from the system operated under Hydro One Brampton, its regulated LDC subsidiary serving 134,000 customers in the City of Brampton (AAA/Stable/--), the system covers mainly rural areas and remote communities in the province. It has a low customer density, covering 75% of Ontario but delivering about 30% of consumed electricity.

The marketing of surplus fiber optic capacity through subsidiary Hydro One Telecom is not material to our credit analysis, given the operation's small size (consisting of about 3% of total assets).

Rating Methodology

We base our 'A+' rating on Hydro One on the company's SACP and our view that there is a "high" likelihood that the province would provide timely and sufficient extraordinary support to Hydro One in the event of financial distress. We assess Hydro One's stand-alone credit quality at 'a'.

In accordance with our criteria for government-related entities (GREs), we base our view of a "high" likelihood of extraordinary government support on the following assessment:

- Within the context of our GRE methodology and scale for assessing the importance of a GRE's role to its government owner, we view Hydro One's role as "important" to the province. The utility operates as a profit-seeking enterprise and its credit standing is important to the government because it provides an essential infrastructure service, particularly in the distribution of electricity to remote communities in the province. In addition, part of its activities relate to its public policy role for the current government. Through its Green Energy Act, the province is relying on Hydro One and other electricity transmitters and distributors to facilitate a smart grid, and the quick connection of small renewable generation assets to the grid. Furthermore, although we do not believe that default or credit stress would lead to a disruption of Hydro One's physical operations, it would affect the credibility of the entire electricity sector in Ontario, which we believe would have an overall negative economic impact.
- Within the context of our GRE methodology and scale for assessing strength and durability, we view the link between Hydro One and the province as "very strong." The government is a strong and stable shareholder, and it has a policy and track record of providing support to the utility. Government policy has a strong influence on the company's strategic and business plans. Financial support is available to the company from the province through the Ontario Electricity Finance Corp., an established provincial agency with a legislated mandate "to provide financial assistance to the successor corporations of Ontario Hydro," of which Hydro One is one. Ontario's track record is consistent with our view. In the past, the government has offered the utility access to government treasury resources when unforeseen changes in government policy exposed the company's distribution operations to liquidity pressures. We expect that liquidity support would be available again under similar circumstances. Furthermore, the province appoints Hydro One's board of directors, and the government reviews the company's business plan and dividend policy before implementation. Management updates government staff on the company's monthly financial and operational performance.

After the government had considered selling Crown assets, which include Hydro One, since December 2009, the province's finance minister indicated in July 2010 that there would be no short-term consideration of selling any material Crown assets. While we maintain our view that the company's privatization could weaken its link with the province and the likelihood of extraordinary support in times of need, we now do not consider such an event imminent. Should the idea of privatization resurface, we would treat this as an event risk and reevaluate the likelihood of extraordinary support at that time.

Excellent Business Risk Profile

A stable regulatory regime supports credit quality

OEB provides regulatory oversight of Hydro One's operations. Prudent costs incurred are generally recovered through tariffs, but rate base adjustments can lag capital requirements up to three years unless the company returns

to the regulator with a resource consuming, full cost-of-service application each year. We understand that the company's strategy is to file a full cost-of-service application every two years and to receive the OEB's approval on its capital expenditure program before actual capital spending in response to rapid fixed assets growth; this mitigates the potential time lag between Hydro One's capital expenditure spending and cost recovery through rate base adjustments.

Based on Hydro One's cost submissions, the OEB sets rates by estimating the utility's revenue requirement, given forecast consumption. The company submits separate transmission and distribution applications to the regulator, which determines revenue requirements on a forward test-year basis. The regulated revenue requirement includes the cost of capital based on a deemed capital structure of 60% debt and a modest return on equity (ROE). The allowed ROE is based on a formula linked to long-term Government of Canada (GOC; AAA/Stable/A-1+) bonds, long-term utility bond spreads, plus a modest risk premium.

There is a long history of regulated entities in Ontario being allowed to recoup unforeseen previously incurred costs (regulatory assets) and having to refund the customer (regulatory liabilities) after the fact through rates. Cash recovery (or repayment) is subject to a prudency review and regulatory approval. Depending on the magnitude, the OEB might spread the recovery over several years to avoid rate shock. To date, mandated refunds to customers have not caused undue financial duress for most utilities. For Hydro One, total unrecovered regulatory assets and liabilities on the balance sheet as of Dec. 31, 2010, were C\$381 million (net of nonrecurring regulatory future income tax asset) and C\$612 million, respectively, representing about 2% of total assets and 5% of total liabilities, respectively. From a credit perspective, Standard & Poor's does not view these as a concern.

Profitability is predictable but constrained by regulatory directives

Weather-induced changes in energy delivered subject Hydro One's cash flows to modest fluctuations that we factor into the rating. The transmission tariff is levied on monthly peak load. The distribution tariff is levied on a mix of fixed- and variable-charges for each of 12 customer classes (formerly 80) the OEB approved in late 2008.

Hydro One's profitability is largely dictated by regulatory directives that generally allow the company to earn a modest return. In December 2009, the OEB announced a change in the cost-of-capital computation formula, originally put in place since 1998. The new formula is now linked to both utility bond spreads and the long-term GOC bond rate; in our view, the often inverse relationship between the two rates could reduce volatility of future ROE adjustments. The revised formula has resulted in favorable ROE adjustments on Hydro One's 2011-2012 transmission rates and its 2010-2011 distribution rates (see table 1). Hydro One estimated that a 1% decrease in the forecast long-term GOC bond yield or utility bond spread used in setting rates could reduce net income in transmission by about C\$16 million and in distribution by about C\$10 million.

Table 1

Hydro One IncHistorical Parameters Used To Set Regulated Rates									
Fiscal year ended Dec. 31	Rate-setting year	Approved transmission rate base (used to determine revenue requirement)	Approved distribution rate base (used to determine revenue requirement)	OEB-deemed capital structure (used to set rates)	OEB-allowed ROE in rates (%)¶				
2004	May 1, 2004	C\$5.7 billion	Rate base was not adjusted.	60% debt; 4% preferred equity; 36% common equity	9.88				
2005	May 1, 2005	C\$5.7 billion	Rate base was not adjusted.	60% debt; 4% preferred equity; 36% common equity	9.88				

Table 1

Hydro 0	ne IncHistorical P	arameters Used 1	fo Set Regulated Rates (cont.)	- 19 (19 (19 (19 (19 (19 (19 (19 (19 (19	
2006	Rate base was not adjusted.	N/A	C\$3.7 billion	60% debt; 40% equity	9.0 (distribution); 9.88 (transmission)
2007*	May 1, 2007	C\$ 6.3 billion	Rate base was not adjusted.	56% long-term debt; 4% short-term debt; 40% equity	9.0 (distribution); 8.35 (transmission)
2008	Rate base was not adjusted.	N/A	C\$4.3 billion	56% long-term debt; 4% short-term debt; 40% equity	8.57 (distribution); 8.35 (transmission)
2009	May 1, 2009	C\$7.0 billion	Rate base was not adjusted.	56% long-term debt; 4% short-term debt; 40% equity	8.35 (distribution); 8.01 (transmission)
2010	May 1, 2010	C\$7.6 billion	C\$4.8 billion	56% long-term debt; 4% short-term debt; 40% equity	9.85 (distribution); 8.39 (transmission)
2011	Jan. 1, 2011	C\$8.4 billion	C\$5.1 billion	56% long-term debt; 4% short-term debt; 40% equity	9.66 (distribution); 9.66 (transmission)
2012	Jan 1, 2012	C\$8.7 billion	N.A.	56% long-term debt; 4% short-term debt; 40% equity	N.A. (distribution); 10.09§ (transmission)

^{*}The Ontario Energy Board's (OEB) second-generation incentive rate mechanism resulted in increased distribution rates for Hydro One without a full cost-of-service application. ¶After 2005, allowed ROEs were determined based on a formula linked to long-term Government of Canada rates. §Subject to the OEB update process in fourth-quarter 2011. ROE--Return on equity. N/A--Not applicable. N.A.--Not available.

The regulatory relationship is temperate, but the spending budget could come under tighter scrutiny In our view, large differences between rate applications and final regulatory decisions could cause a rating concern as they might indicate increased regulatory risk. The OEB acknowledges Hydro One's higher cost of operations due to low density franchise and has generally accepted the company's forward cost estimates without significant haircuts in the past. With much lower customer density than that of its municipal peers, the system is by nature more expensive on a capital- and operating-cost per customer basis.

Although we do not expect allowance of the recovery of prudent operating and capital spending to change, we expect that the OEB, in its approval of prudent spending, would be mindful of overall electricity costs to consumers in the current weak economy and stagnant load growth, as well as the province's priority to green energy, a smart grid, and conservation and demand management (CDM). In the OEB's decision on Hydro One's 2010-2011 rate application, the board required a relatively high 7% (or C\$40 million) haircut to Hydro One's proposed operating, management, and administrative expenses budget. The OEB also did not approve capital expenditures related to renewable generation (other than those related to express feeders, CDM, and a smart grid) as prudent due to inadequate specificity of planned projects.

On the transmission side, the haircut on revenue requirements for its 2011 transmission rate applications was mainly due to a modest discrepancy in the requested and approved ROE; the OEB's disapproval on recovery of the cost of capital on the construction work-in-progress for Bruce to Milton; and the haircut on Hydro One's proposed operating, management, and administrative expenses budget. The OEB also did not approve capital expenditure related to renewable generation. A higher-than-requested transmission rate in 2012 was mainly due to the company's international financial reporting standards (IFRS) accounting adoption as indirect overheads that used to be capitalized under Canadian generally accepted accounting principles (GAAP) is accounted for as operating expenses under IFRS.

Notwithstanding these cuts, the decisions did not result in a materially lower revenue requirement than what Hydro One applied for.

Table 2

Hydro One Inc.	Requested	Versus Approved Revenue Req	uirement	
(Mil. C\$)	Year	Requested revenue requirement	Approved revenue requirement	Approved revenue requirement
Distribution	2010	1,150	1,146	0.3% lower than requested
Distribution	2011	1,264	1,218	3.6% lower than requested
Transmission	2011	1,446	1,346	6.9% lower than requested
Transmission	2012	1,547	1,658	7.2% higher than requested

Turnaround time on rate decisions of five-to-nine months is manageable but not optimal, in Standard & Poor's view. In April 2010, the OEB approved Hydro One's 2010-2011 distribution application filed in July 2009. The 2010 distribution rates were implemented on May 1, 2010. However, in November 2010, 2011's distribution revenue requirement was adjusted to C\$1.218 billion from the OEB's initial April 2010 decision of C\$1.236 billion mainly to reflect an updated ROE of 9.66%. The company received approval in December 2010 for its transmission rate application for 2011-2012, which was filed in May 2010.

Formula-based ratemaking (FBR) is generally a quicker process than a cost-of-service application but does not fully reflect major changes in the rate base and associated capital costs. As long as inflation remains greater than the OEB's productivity targets and other adjustments, however, the use of FBR is an improvement. Before 2006, there was no generic mechanism to implement annual rate increases between full cost-of-service applications. Hydro One received its May 1, 2009, distribution rate increase based on FBR on May 13, 2009. It included a C\$20 million increase in its revenue requirement and an additional C\$12 million adjustment given its large capital program. The OEB's rate adjustment of 1.18% in 2009 includes an inflation factor minus a productivity factor and several other minor adjustments (see table 1).

The asset-intensive nature of the monopoly business reduces competitive risk

Although some competitive pressures exist, Hydro One's existing transmission system is largely shielded from direct competition due to its natural monopoly position. However, the company does not hold a legal monopoly on its service territory. There is no restriction on other transmission businesses' building and operating transmission networks in Ontario. Nevertheless, we believe the capital cost that would be involved in large-scale duplication of the network reduces the risk of bypass. Should bypass strand an individual asset, we expect tariffs would be rebalanced across remaining customers with minimal financial impact, given the territory's size.

Customer profile supports Hydro One's stable revenues

We believe the diversity of Hydro One's customer base supports the overall stability of its revenues and severely limits exposure to any particular customer or customer class. In the transmission business, municipally owned investment-grade LDCs and the utility's own distribution business collect transmission revenues and forward them to Hydro One through the IESO. The company's distribution operation also collects distribution revenues from a relatively stable customer base that is about 50% residential, about 29% commercial, 13% large industrial, and 8% embedded LDCs (on a distribution revenues basis in 2010).

A well-diversified economy in the company's service territory

Hydro One owns and operates substantially all of Ontario's electricity transmission system, accounting for about 96% of Ontario's transmission capacity by revenue in 2010. Its distribution system is the largest in Ontario and

spans about 75% of the province, serving the more rural areas and remote communities of Ontario except for the company's Brampton network business covering an outer suburb of Toronto.

The province has a large and well-diversified economy and Hydro One delivers an essential service. Ontario's economy rebounded in 2010, after bottoming out in mid-2009. The government estimates that real GDP rebounded by 2.8% in 2010 after declining by 3.6% in 2009. According to the government's estimates, real GDP should continue to advance by 2.4% in 2011. The recession's impact was felt chiefly in the construction and manufacturing sectors (vehicle assembly and part production). Nevertheless, we believe Ontario has a large and well-diversified economy with depth and scale in many sectors, and we believe that the provincial economy has a number of key strengths, including a large, well-educated workforce, and proximity to important northeastern U.S. markets. While recognizing that uncertainty about the tenuous recovery in Europe and the U.S. is a risk to the economic outlook, we believe that the government's forecast real GDP growth of 2.4% for 2011 is achievable. (For more information on the Province of Ontario, please see the full analysis published May 12, 2011, on RatingsDirect on the Global Credit Portal.) The company estimates about 1% of load growth associated with economic growth in Ontario. However, Hydro One expects the overall load to decline by 1.3% in 2011 mainly due to the impact of CDM. From a credit perspective, this does not cause us a significant concern about the company's future financial performances as long as there is no large discrepancy between Hydro One's estimated and actual load growth.

Commodity-related risk remains, no matter how remote

While we believe that the LDCs are not exposed to material commodity-related risks, these risks could still have a material impact on the business risk profiles of LDCs as a result of potential policy changes down the road. For instance, once generation adequacy and provincial environmental targets (such as shutting down the province's coal plants and fostering renewable energy sources) are met, the province could very well turn its attention back to the wires sector. On the backburner for the past decade, there has been a consistent underlying desire in the sector to foster, or force, more economic efficiency by rationalizing and consolidating the approximately 80 LDCs in Ontario into fewer than 10. The resulting companies would be large enough to retain the skilled staff necessary to manage the obligation to supply, and the government could choose at that time to transfer related commodity risk to the LDC sector from the Ontario Power Authority (OPA).

Low-risk operations

Hydro One's regulated retail obligation is also a relatively low-risk operation, in Standard & Poor's view. The LDC is not engaged in commodity price or volume risk management and does not engage in contractual commitments to ensure adequate supply. Energy costs are a pass-through to consumers with no markup. Any variance is recouped or rebated through the OEB-regulated retail price in the following fiscal quarter.

We believe the operational performance of Hydro One's transmission assets remains good; the system achieved top quartile transmission reliability compared with that of other large Canadian peers (as reported to the Canadian Electricity Association). The electricity market rules and transmission license governing Hydro One's transmission operations required the transmitter to comply with reliability standards established by the North American Reliability Corp. and Northeast Power Coordinating Council Inc. Those standards include penalties for noncompliance. As of Dec. 31, 2010, Hydro One is compliant with the standards and has never paid any penalties.

The company's distribution reliability, although consistently weaker than that of other rated municipal peers largely because of its expansive rural service territory, does not pose a material credit risk, in Standard & Poor's opinion. The regulator tracks performance metrics but has not yet imposed generic industry standards or penalties for

substandard service.

An aging labor force causes concern

An aging workforce remains an issue that could affect Hydro One's operations. The company expects about 22% of its workforce to be eligible for retirement by 2012. We understand that it is making an effort to address the issue by employing a larger number of apprentices, investing in co-op power engineering programs with universities, and outsourcing some capital programs. During this period of workforce renewal, we expect staff levels to be higher than normal as new employees are trained to enable the execution of the large capital program. The utility's cost-of-service determination includes the related labor costs. Hydro One employed about 5,363 permanent employees at year-end 2010, up 5% from 2009.

Significant Financial Risk Profile

Consistent financial policies

Hydro One's financial policies have historically been consistent, in our view. While total leverage has increased in the past three years to support the company's large capital program, we understand that Hydro One intends to maintain its capital structure within the regulatory deemed structure (reported debt to capital of 60%). Debt maturities are well-spread, in our opinion, with annual scheduled repayment in the next seven years averaging about C\$600 million. We believe derivative instruments manage interest rate exposure nonspeculatively. The company is not exposed to foreign currency risk other than through the purchase of some materials. In its annual report, Hydro One discloses its target to maintain a long-term credit rating in the 'A' category.

The company's board of directors declares common dividends, with consideration of management's recommendation based on Hydro One's operating results. Also, the shareholder agreement requires the company to consult with its owner, the province, regarding dividend payments. We understand that Hydro One could reduce dividend payments to help satisfy its cash requirement and to maintain its capital structure within the regulatory deemed capital structure of a 60% debt layer.

Management advocates an enterprisewide approach to risk management directed at balancing regulatory, strategic, operational, and financial risk exposure, and the returns allowed within the Ontario regulatory framework.

Accounting

Hydro One prepares consolidated financial statements in accordance with Canadian GAAP. The Canadian Accounting Standards Board has called for a convergence to IFRS by 2012 (effective Jan. 1, 2012) and the company began its preparations in 2006. The change in accounting practice itself should not affect Standard & Poor's credit analysis in the absence of changes in the company's economic substances.

Canadian GAAP allows utilities to defer costs or revenues that they expect the regulator to allow them to recover to the balance sheet. Assets and liabilities are recouped from or rebated to customers in periods that typically vary from one-to-four years. To date, the regulatory disallowances for assets and liabilities that Hydro One and other Ontario-based utilities have declared have been minor.

We have made material adjustments to the balance sheet related to Hydro One's postretirement benefit obligations, and negligible operating lease adjustments. Both are reviewed by the OEB but subject to prudency review, and are included in the cost-of-service determination. Given the perpetual nature of transmission and distribution utility assets, it is a generally accepted practice in Canada that asset retirement obligations cannot be reasonably estimated

since asset retirement dates cannot be pinpointed. We expect that these costs would also be recouped through regulated revenues.

Standard & Poor's treats Hydro One's C\$323 million 5.5% cumulative preferred shares as equity. The shares are held by the province, and are entitled to an annual cumulative dividend of 5.5% or C\$18 million. To date, the preferred dividends have not been deferred. The shares are redeemable at the option of the Province of Ontario; however, Hydro One, at its own discretion, can pay all or part of the redemption price by issuing additional common shares to the province. We do not expect the company to do so in the near term. The shares carry voting rights under limited circumstances and rank in priority above the common shares upon liquidation. The company can issue an unlimited number of preferred and common shares.

Hydro One has C\$133 million of goodwill on its balance sheet that arose when it acquired LDCs for totals exceeding their fair value. The OEB does not recognize goodwill in the regulated rate base used to determine electricity tariffs. The amount is not material to Standard & Poor's analysis but indicates the risk to the balance sheet and Hydro One's returns that acquisitions could pose. (See table 3 for reconciliation.)

Table 3

skeeonemanio	III Or Flyt	iro One Inc. Re	nortea Am	omne vvi	ui Sannari	1 & F 0 0 F S	s Aujusteu A	Amounts (IV	11.053)		
		Fiscal year ended Dec. 31, 2010									
Hydro One Inc. reported amounts											
	Debt	Shareholders' equity	Revenues	EBITDA	Operating income	Interest expense	Cash flow from operations	Cash flow from operations	Dividends paid	Capital expenditures	
Reported	7,778.0	5,981.0	5,124.0	1,572.0	989.0	355.0	1,174.0	1,174.0	28.0	1,570.0	
Standard & Po	or's adjus	stments									
Operating leases	38.1	N/A	N/A	2.3	2.3	2.3	4.7	4.7	N/A	N/A	
Postretirement benefit obligations	1,017.8	(629.3)	N/A	146.0	146.0	82.0	39.3	39.3	N/A	N/A	
Capitalized interest	N/A	N/A	N/A	N/A	N/A	54.0	(54.0)	(54.0)	N/A	(54.0)	
Reclassification of nonoperating income (expenses)	N/A	N/A	N/A	N/A	13.0	N/A	N/A	N/A	N/A	N/A	
Reclassification of working-capital cash flow changes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	(77.0)	N/A	. N/A	
Debtaccrued interest not included in reported debt	84.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total adjustments	1,139.8	(629.3)	0.0	148.3	161.3	138.3	(10.0)	(87.0)	0.0	(54.0)	

Table 3

Reconciliation Of Hydro One Inc. Reported Amounts With Standard & Poor's Adjusted Amounts (Mil. CS) (cont.)

Standard & Poor's adjusted amounts

	Debt	Equity	Revenues	EBITDA	EBIT	Interest expense	Cash flow from operations	Funds from operations	Dividends paid	Capital expenditures
Adjusted	8,917.8	5,351.7	5,124.0	1,720.3	1,150.3	493.3	1,164.0	1,087.0	28.0	1,516.0

N/A--Not applicable.

Cash flow is predictable but insufficient to fully fund capital needs

Hydro One's cash flow coverage measures have weakened since 2009 as the company increased its borrowing to finance its capital expenditure to sustain its aging infrastructure and to install smart meters as required by regulator. AFFO-to-debt declined to 12% in 2010 and 11% in 2009, compared with 14%-15% from 2006-2008; while adjusted FFO interest coverage was 3.0x in 2010 and 2.8x in 2009, down from 3.5x-4.0x in the earlier three-year period.

We expect Hydro One to generate annual FFO of about C\$1.2 billion in 2011, which should be adequate to cover common dividend payments and part of the company's capital expenditure program in 2011. It has budgeted C\$1.8 billion, C\$1.9 billion, and C\$1.8 billion of capital expenditure in 2011, 2012 and 2013, respectively. Although FFO should increase with the revised higher ROE, increasing rate base, and cost recovery, we expect that the company still needs to increase its total borrowing to support its significantly large negative free operating cash flows of about C\$550 million-C\$660 million per year, which in turn would keep its financial measures from materially improving from their current level.

With the many major transmission network projects Hydro One expects in the medium term to sustain its aging infrastructure, relieve transmission congestion, and extend transmission extension as identified in the OPA's Integrated Power System Plan for Ontario, we expect about 60% of the budgeted capital spending in the next three years to be for the transmission business. The remaining spending on the distribution side would be largely for new connections, a smart grid, distributed generation connections, and overall system reinforcement.

Credit metrics are strained

Mainly due to its large capital expenditure program and negative free operating cash flows, we believe that Hydro One's financial metrics could be under pressure in this heavy growth period. What offsets this somewhat is that rates are based on forward test years, so the regulatory scrutiny of capital programs occurs before spending, thus reducing the risk of nonrecovery, in our view. We expect AFFO-to-debt and AFFO interest coverage to remain close to 12%-13% and 3x, respectively, depending on the timing dynamics of capital execution and regulatory rate base adjustment and tariff approvals. Nevertheless, there could be negative rating consequences if its key financial measures worsen further from their current levels as a result of weaker-than-expected cash flows and material increase in debt as Hydro One proceeds with its heavy capital spending.

The balance sheet is likely to stay within the regulatory deemed structure

We understand that Hydro One intends to maintain its capital structure within the regulated deemed capital structure with debt-to-capital of 60% on a reported basis in the long term. With higher borrowing to support capital expenditure, the company's reported debt-to-capital increased to 56.5% in 2010 (62.5% adjusted) and 56.2% in 2009 (62.3% adjusted) from the three-year average of 53.5% (59.2% adjusted) from 2006-2008. We

expect total adjusted debt to increase by about C\$700 million-C\$1.4 billion in each of the next two years from the 2010 level of C\$9 billion, unless planned capital spending is deferred.

Manageable debt profile and financial flexibility

Although the company has about C\$600 million maturing in each of the next several years, we believe Hydro One's debt profile is manageable, in view of its good access to the debt capital market and regulated cash flows. The company's financing strategy limits debt maturities in any single year from exceeding C\$600 million (about 10% of the current debt load). Furthermore, about 50% of Hydro One's C\$6.9 billion reported debt outstanding as of Dec. 31, 2010, had a maturity date of more than 10 years and the company targets a weighted-average term of 12-18 years for its debt portfolio.

As a fully government-owned company, Hydro One has effectively no access to the equity market, although we do not consider this a rating concern. The company could derive additional financial flexibility from its ability to reduce dividends, as demonstrated in 2009 and 2010 when it reduced dividend payments by C\$137 million and C\$160 million, respectively, from that of the previous year (see the table 4). Furthermore, we consider that about C\$400 million-C\$450 million of the company's total annual capital expenditure is discretionary. Under extraordinary conditions, the government shareholder is also a potential source of financing and backup liquidity. Although we believe access to new equity in the form of cash injections from the shareholder is unlikely, partial or full reduction of dividend payments is a credible option for Hydro One.

Table 4

Hydro One Inc. Dividend Payı	ment Hi	story			
(Mil. C\$)	2006	2007	2008	2009	2010
Common dividend	332.0	332.0	307.0	170.0	10.0
Preferred dividend	18.0	18.0	18.0	18.0	18.0
Common dividend payout ratio (%)	76.0	87.1	64.0	37.6	1.7

The pension shortfall is likely to rise

We believe Hydro One's current shortfall in its pension fund is manageable. The OEB recognizes pension contribution costs as a prudent component of the cost of service and so they are largely recovered through rates. We estimate that the company would need to make a pension contribution of C\$143 million in 2011. Pension deficits added about C\$205 million of adjusted debt in 2010, up from C\$154 million in 2009. While we expect pension obligations to increase as the utility's workforce ages, the size of pension deficits would also depend on future discount rates and asset value.

Hydro One uses derivatives to manage interest-rate exposure

Management uses derivative financial instruments and interest rate swap contracts primarily to manage exposure to interest rate fluctuations. Hydro One manages related credit risk by dealing primarily with highly rated counterparties. Employing master agreements that allow for net settlements reduces exposure to large collateral calls. Using derivatives, the company generally maintains less than 20% of debt (including debt maturing within the year) at floating rates. Hydro One carries no debt-related foreign exchange exposure, with all debt in Canadian dollars.

Table 5

Industry Sector: Electric Utility	11.1.0.1.2	0. 4 4.0==	46 17 1 1 55	T . H . D .
Deting on of Mou 2C 2012	Hydro One Inc.¶§	A+/Stable/A-1	AltaLink L.P.¶	Toronto Hydro Corp.§
Rating as of May 26, 2011	A+/Stable/A-1		A-/Stable/	A/Stable/
11.5%		-Average of pa	st three fiscal ye	
(Mil. mixed currency)	C\$	NOK	-	C\$
Revenues	4,821.7	4,788.3	259.2	2,485.3
EBITDA	1,568.2	1,997.0	177.9	310.8
Net income from continuing operations	519.7	1,078.3	54.5	51.7
Funds from operations (FFO)	1,003.3	1,577.6	122.0	233.8
Capital expenditures	1,437.7	2,973.0	279.5	263.6
Free operating cash flow	(378.7)	(1,424.1)	(148.9)	(19.5)
Dividends paid	158.3	316.3	24.3	55.5
Discretionary cash flow	(537.1)	(1,740.4)	(173.2)	(75.0)
Cash and short-term investments	62.7	331.7	7.0	294.0
Debt	7,959.4	11,820.9	1,020.9	1,412.9
Preferred stock	323.0	0.0	0.0	0.0
Equity	4,988.4	6,325.9	664.7	1,001.2
Debt and equity	12,947.8	18,146.8	1,685.6	2,414.1
Adjusted ratios				
FFO interest coverage (x)	3.2	4.4	2.9	3.5
FFO/debt (%)	12.6	13.3	11.9	16.5
Free operating cash flow/debt (%)	(4.8)	(12.0)	(14.6)	(1.4)
Discretionary cash flow/debt (%)	(6.7)	(14.7)	(17.0)	(5.3)
Net cash flow/capex (%)	58.8	42.4	34.9	67.6
Debt/EBITDA (x)	5.1	5.9	5.7	4.5
Total debt/debt plus equity (%)	61.5	65.1	60.6	58.5
Return on capital (%)	8.0	8.3	6.6	6.5
Return on common equity (%)	9.0	15.8	6.7	5.0
Common dividend payout ratio (unadjusted) (%)	32.4	29.2	44.5	107.3

^{*}Fully adjusted (including postretirement obligations). ¶Tranmission company. §Distribution company.

Hydro One Inc.--Financial Summary

Table 6

Industry Sector: Electric Utility								
	Fiscal year ended Dec. 31							
	2010	2009	2008	2007	2006			
Rating history	A+/Stable/A-1	A+/Stable/A-1	A+/Stable/A-1	A/Positive/A-1	A/Stable/A-1			
(Mil. C\$)								
Revenues	5,124.0	4,744.0	4,597.0	4,655.0	4,545.0			
EBITDA	1,720.3	1,497.5	1,486.7	1,505.8	1,597.9			
Net income from continuing operations	591.0	470.0	498.0	399.0	455.0			
Funds from operations (FFO)	1,087.0	916.2	1,006.7	884.6	908.8			

Table 6

Hydro One IncFinancial Summary (cor	nt.)				
Capital expenditures	1,516.0	1,512.7	1,284.5	1,071.9	790.9
Free operating cash flow	(352.0)	(634.6)	(149.7)	(52.3)	26.0
Dividends paid (common and preferred)	28.0	188.0	259.0	325.0	350.0
Discretionary cash flow	(380.0)	(822.6)	(408.7)	(377.3)	(324.0)
Cash and short-term investments	172.0	0.0	16.0	0.0	0.0
Debt	8,917.8	8,023.6	6,936.9	6,367.5	6,304.9
Preferred stock	323.0	323.0	323.0	323.0	323.0
Equity	5,351.7	4,847.2	4,766.2	4,530.8	4,226.3
Debt and equity	14,269.5	12,870.7	11,703.1	10,898.3	10,531.1
Adjusted ratios					
FFO interest coverage (x)	3.0	2.8	4.0	3.7	3.5
FFO/debt (%)	12.2	11.4	14.5	13.9	14.4
Free operating cash flow/debt (%)	(3.9)	(7.9)	(2.2)	(0.8)	0.4
Discretionary cash flow/debt (%)	(4.3)	(10.3)	(5.9)	(5.9)	(5.1)
Net cash flow/capex (%)	69.9	48.1	58.2	52.2	70.7
Debt/EBITDA (x)	5.2	5.4	4.7	4.2	3.9
Debt/debt and equity (%)	62.5	62.3	59.3	58.4	59.9
Return on capital (%)	8.1	7.6	8.4	9.2	10.6
Return on common equity (%)	9.7	8.0	9.5	7.9	9.0
Common dividend payout ratio (unadjusted) (%)	1.7	37.6	64.0	87.1	76.0

Related Criteria And Research

- Key Credit Factors: Business And Financial Risks In the Investor-Owned Utility Industry, Nov. 26, 2008
- 2008 Corporate Criteria: Analytical Methodology, April 15,2008
- Corporate Criteria: Business Risk/Financial Risk Matrix Expanded, May 27, 2009
- General Criteria: Enhanced Methodology And Assumptions For Rating Government-Related Entities, published June 29, 2009
- Criteria | Corporates | General: Methodology And Assumptions: Standard & Poor's Standardizes Liquidity Descriptors For Global Corporate Issuers, July 2, 2010

Ratings Detail (As 01 May 26, 2011)*	
Hydro One Inc.	
Corporate Credit Rating	A+/Stable/A-1
Commercial Paper	
Local Currency	A1
Canadian National Scale Commercial Paper Bating	A-1(MID)
Senior Unsecured (19 Issues)	A+
Corporate Credit Ratings History	
03-Jun-2008	A+/Stable/A-1
26-Mar-2007	A/Positive/A-1
15-Jul-2005	A/Stable/A-1

Business Risk Profile	Excellent
Financial Risk Profile	Significant
Related Entities	
Ontario Power Generation Inc.	
Issuer Credit Rating	A-/Stable/
Commercial Paper	
Canadian National Scale Commercial Paper Rating	A-1(LOW)
Ontario (Province of)	
Issuer Credit Rating	AA-/Stable/A-1+
Commercial Paper	A-14
Canadian National Scale Commercial Paper Rating	A-1(HiGH)
Senior Unsecured (174 Issues)	AA-
UMH Energy Partnership	
Senior Secured (1 Issue)	A/Stable

^{*}Unless otherwise noted, all ratings in this report are global scale ratings. Standard & Poor's credit ratings on the global scale are comparable across countries. Standard & Poor's credit ratings on a national scale are relative to obligors or obligations within that specific country.

Copyright © 2011 by Standard & Poors Financial Services LLC (S&P), a subsidiary of The McGraw-Hill Companies, Inc. All rights reserved.

No content (including ratings, credit-related analyses and data, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P. The Content shall not be used for any unlawful or unauthorized purposes. S&P, its affiliates, and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, inclidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P's opinions and analyses do not address the suitability of any security. S&P does not act as a fiduciary or an investment advisor. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

The McGraw-Hill Companies

STANDARD &POOR'S

Global Credit PortalRatingsDirect*

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 2 Page 1 of 5

November 25, 2011

Summary:

Hydro One Inc.

Primary Credit Analyst:

Stephen Goltz, Toronto (1) 416-507-2592; stephen_goltz@standardandpoors.com

Secondary Contact:

Nicole Martin, Toronto (1) 416-507-2560; nicole_martin@standardandpoors.com

Table Of Contents

Rationale

Outlook

Related Criteria And Research

Summary:

Hydro One Inc.

Credit Rating: A+/Stable/A-1

Rationale

The ratings on Hydro One Inc., a large, regulated transmission and local electricity distribution company in the Province of Ontario (AA-/Stable/A-1+), reflect Standard & Poor's Ratings Services' opinion of the company's low-risk monopoly electricity transmission and distribution assets; secure and relatively predictable regulated cash flows; and the support of its owner, the province. We believe the utility has an excellent business risk profile and view its financial risk profile as significant on our expanded risk matrix. The company had C\$8.2 billion in reported total debt outstanding as of Sept. 30, 2011.

We base our 'A+' rating on Hydro One on our assessment of the company's stand-alone credit risk profile (SACP) of 'a' and our opinion that there is a "high" likelihood that the province would provide timely and sufficient extraordinary support in the event of financial distress. We view the company's role as "important" to the province and the link between it and the province as "very strong."

We believe Hydro One's monopoly position, the business' asset-intensive nature, and regulatory oversight limiting competitive risk, all support an excellent stand-alone business risk profile. The utility owns and operates substantially all of Ontario's electricity transmission system, and its distribution service territory covers about 75% of the province. In our view, the business carries relatively low operating risk and exhibits average operational efficiency and reliability.

The Ontario Energy Board's (OEB) regulatory framework supports Hydro One's cash flow stability, and we view cost recovery as generally predictable. The framework allows for the recovery of prudent transmission and distribution costs and the opportunity to earn a modest-but-predictable return. Furthermore, the company's exposure to commodity risk is limited. Commodity costs flow through to the customer and the utility has no obligation to ensure an adequate supply of electricity in the province. In our view, the OEB has exhibited increased scrutiny of requested cost increases in the distribution and transmission sector and the associated rate pressure (largely associated with commodity costs) on customers. While we expect tempering rate increases will remain an important regulatory consideration, we believe the regulatory compact remains consistent in the province and that the OEB will continue to honor its mandate to balance the needs of customer and the ability of the utilities to earn a modest return.

In our view, Hydro One has a significant financial risk profile. We believe its cash flow strength relative to its debt obligations has weakened since 2008 due to a material capital expenditure program. The company's annual capital expenditures were C\$1.5 billion in 2009 and 2010, exceeding its internal cash flow generations (C\$916 million and C\$1 billion in adjusted funds from operations [AFFO] in 2009 and 2010, respectively). Because Hydro One has budgeted annual capital expenditures of about C\$1.8 billion in each of the next two years, we believe that it will continue to face significantly sizable negative free operating cash flows of about C\$550 million-C\$660 million per year. So despite expected moderate revenue improvements following the most recent rate decision, we believe Hydro One's financial measures are unlikely to return to the levels they were before 2009. The company's financial risk

profile remains supported by its strong access to capital markets, adequate liquidity, the stability and predictability of its cash flows, and low merger and acquisition risk. We expect Hydro One to manage this cycle of regulated rate base growth and significantly large negative free operating cash flows such that its leverage would not exceed 65% adjusted total debt-to-capital (compared with 63% at Dec. 31, 2010), or 60% unadjusted, AFFO-to-debt of about 12%, and AFFO interest coverage of about 3x. We understand that the company has some flexibility in its planned capital expenditures and dividend payments. At Sept. 30, 2011, its rolling 12-month (RTM) AFFO interest coverage was stable at 3.0x, compared with 3.1x at Sept. 30, 2010, but lower than the pre-2009 level of 3.5x-4.0x. Its RTM AFFO-to-total debt at Sept. 30, 2011 was stable at 11.8%, compared with 11.9% a year earlier, but lower than the pre-2009 level of 14.0%-15.0%. We consider these financial measures weak for the ratings, and they leave no cushion for deterioration from our expectations. We believe the SACP and consequently the ratings could face stress if financial measures are below our expectations because of weaker-than-expected cash flows or a material increase in debt as the utility proceeds with its heavy capital spending.

Liquidity

The short-term rating on Hydro One is 'A-1'. We believe the company has adequate liquidity to cover its needs in the near term, even in the event of unforeseen earnings declines. Standard & Poor's assessment incorporates the following expectations and assumptions:

- The company's liquidity sources, including liquid short-term investments, FFO, and credit facility availability, will likely exceed its uses 1.2x or more in the next 12 months.
- Liquidity sources include an expectation of about C\$1.3 billion of FFO, access to C\$1.25 billion of Hydro One's committed revolving credit facility with syndicated of banks, and C\$492 million liquid short-term investments as of Sept. 30, 2011. The C\$1.25 billion credit facility was fully available as of Sept. 30, and will expire in June 2014. The company remains well within its banking covenant of 75% total debt-to-total capital.
- Liquidity uses include C\$600 million of maturing debt in 2012, an estimated dividend payment of C\$170 million, and about C\$1.8 billion of capital expenditures, of which about C\$400 million is considered discretionary.
- The company has what we consider good relationships with its banks and good standing in the debt market, having issued C\$1.5 billion and C\$600 million under its medium-term note (MTN) shelf program at attractive prices (fixed coupon rates range from 2.95%-5.49%) in 2010 and 2011, respectively. As expected, in August 2011, Hydro One renewed its C\$3 billion MTN shelf program (of which C\$2.7 billion was available as of Sept. 30) for another 25 months. We understand that the utility also holds a C\$250 million note issued by the province that matures in 2014, which it could liquidate if needed. It could also reduce its dividend payment to help satisfy its cash requirements. The company's debt maturities are well-spread, in our view, with annual scheduled repayment in the next six years averaging about C\$600 million.
- Hydro One provides the Independent Electricity System Operator (IESO) with C\$325 million in parental guarantees in lieu of prudential support. If all the ratings on the utility were to fall, the IESO's prudential requirements would likely increase.

Outlook

The stable outlook reflects what we view as Hydro One's consistent performance and our expectation of continued predictable regulatory support despite, its large capital expenditure program and negative free operating cash flows. In the event of lower-than-expected cash flows and earnings, we expect the company to maintain its leverage within the deemed capital structure of 60% reported debt-to-capital, AFFO-to-debt of about 12%, and AFFO interest

coverage of about 3x, by curtailing its capital spending and additional debt financing. In our view, there is no cushion for Hydro One to deteriorate from our expectations on its key credit measures to maintain the ratings. A material adverse regulatory ruling or market restructuring (such as the assumption of the obligation to supply, not just deliver, electricity), or any deterioration of financial measures beyond our expectation, could lead us to lower the existing 'a' SACP and consequently the ratings. An improvement in Hydro One's SACP is unlikely without the assurance of a much stronger balance sheet, and deeper cash flow-interest and debt coverage. All else being equal, a negative outlook or further downgrade on the province could affect the ratings on the utility, but likely not by more than a notch, given the company's underlying stand-alone credit strength. Conversely, all else being equal, a positive outlook or upgrade of up to two notches on the province will not affect the ratings on Hydro One. A change in the relationship with the province that leads us to reconsider the likelihood of the company receiving support from the province could also move the ratings.

Faye Lee contributed research to this report.

Related Criteria And Research

- 2008 Corporate Criteria: Analytical Methodology, April 15, 2008
- Key Credit Factors: Business And Financial Risks In The Investor-Owned Utilities Industry, Nov. 26, 2008
- Criteria Methodology: Business Risk/Financial Risk Matrix Expanded, May 27, 2009
- Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Sept. 28, 2011
- General Criteria: Rating Government-Related Entities: Methodology And Assumptions, Dec. 9, 2010

Copyright © 2011 by Standard & Poors Financial Services LLC (S&P), a subsidiary of The McGraw-Hill Companies, Inc. All rights reserved.

No content (including ratings, credit-related analyses and data, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P. The Content shall not be used for any unlawful or unauthorized purposes. S&P, its affiliates, and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis, S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P's opinions and analyses do not address the suitability of any security. S&P does not act as a fiduciary or an investment advisor. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

The McGraw-Hill companies

Rating Report

Report Date: September 23, 2011 Previous Report: August 26, 2010 Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 3 Page 1 of 11



Insight beyond the rating

Hydro One Inc.

Analysts Robert Filippazzo

+1 416 597 7340 rfilippazzo@dbrs.com

Adeola Adebayo +1 416 597 7421

aadebayo@dbrs.com

James Jung

+1 416 597 7577 jjung@dbrs.com

The Company

Hydro One Inc., through its wholly owned subsidiaries, owns and operates electric power transmission and distribution assets, as well as a fibre-optic network, across most of Ontario. Hydro One is the largest transmission and distribution operator in Ontario (servicing more than 97% of the province's transmission throughput). It is wholly owned by the Province of Ontario (rated AA (low)).

Commercial Paper

Authorized Limit of \$1.0 Billion

Recent Actions January 14, 2011

\$250 Million Issue Rated A (high)

Rating

Debt Rated	Rating	Rating Action	Trend
Commercial Paper	R-1 (middle)	Confirmed	Stable
Senior Unsecured Debentures	A (high)	Confirmed	Stable

Rating Rationale

DBRS has confirmed the Senior Unsecured Debentures rating of Hydro One Inc. (Hydro One or the Company) at A (high) and its Commercial Paper rating at R-1 (middle), both with Stable trends. The rating confirmations reflect Hydro One's low level of business risk, stemming from its regulated electric power transmission and distribution operations, and its solid financial profile.

Hydro One continues to invest in its significant capital program, which will be the greatest challenge for the Company over the medium term. The capital program is focused on sustaining aging infrastructure, development projects for growth and government-led initiatives. Hydro One anticipates that its capital expenditure for 2011 was budgeted to be approximately \$1.8 billion; however, the Company expects capital expenditures to be lower than budget by approximately \$200 million, mainly due to lower costs and the timing of investments, as well as lower distributed generation capital expenditures and higher investments by generators. The extensive capital program is projected to result in manageable free cash flow deficits over the medium term. The capital expenditures are expected to be approximately \$5.5 billion over the next three years. Based upon these levels of capital expenditures, DBRS expects cash flow deficits of approximately \$700 million to \$850 million per year, allowing for rate base growth throughout the build-out cycle. (Continued on page 2.)

Rating Considerations

Strengths

- Low-risk, regulated electric power transmission and distribution businesses
- (2) Solid balance sheet and credit metrics
- (3) Strong and extensive transmission and distribution franchise area

* DBRS adjusted Transmission earnings for non-cash items to normalize impact from OEB rate decision.

(4) Top quartile for transmission reliability

Challenges

- (1) Substantial capital expenditure program
- (2) Significant external financing required
- (3) Approved return on equity sensitive to interest rates
- (4) Earnings sensitive to monthly peak demand for electricity and, to a lesser extent, to the volume of electricity sold
- (5) Lack of access to equity capital markets

Financial Information

	As at June 30	For year ended D	ecember 31		
(CAD millions)	2011	2010	2009	2008	2007*
Cash flow from operations	1,204	1,087	930	927	1,006
EBIT gross interest coverage (1)	2.72	2.43	2.22	2.68	2.83
Fixed charge coverage (1)	2.58	2.31	2.08	2.50	2.59
Total adjusted debt-to-capital (%) (1)	55.8%	56.6%	56.4%	54.7%	53.6%
Cash flow-to-total adjusted debt (1)	15%	14%	13%	15%	18%
Cash flow/capital expenditures (times)	0.80	0.69	0.59	0.72	0.92
Gross free cash flow	(394)	(511)	(824)	(616)	(410)
Return on average equity (before non-recurring items) (%)	11.6%	11.0%	9.5%	10.7%	8.8%
Approved ROE - Distribution	9.66%	9.85%	8.35%	8.57%	9.00%
Approved ROE - Transmission	9.66%	8.39%	8.01%	8.35%	8.35%
(1) DBRS-adjusted for operating lease debt and interest expense equivalents as	well as alternate liquidity				

¹ Corporates: Utilities & Independent Power

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 3 Page 2 of 11



Hydro One Inc.

Report Date:

September 23, 2011

Rating Rationale (Continued from page 1.)

The free cash flow deficits are expected to be entirely debt financed, continuing to restrain the Company's balance sheet and coverage ratios during the build-out period as the invested capital is not included in the rate base until projects are completed. Also, given that a material portion of Hydro One's capital expenditures are for large transmission projects that involve lengthy construction times and the potential for delays caused by the intervenor process, timely project completion within budget is important. DBRS views the pressure on the Company's balance sheet and coverage metrics as temporary, with the expectation of a modest improvement over the medium term. Financial metrics are expected to remain within a range supportive of the assigned ratings given the extent of the capital projects in the medium term. DBRS expects Hydro One to continue to manage dividends in order to support its heightened capital program.

While credit metrics have trended modestly downward over recent years, the Company has witnessed a slight improvement in metrics for 2010 and the last 12 months ending June 30, 2011, as a result of favourable rulings by the Ontario Energy Board (OEB), which has allowed for recovery of assets from prior years as well as a higher rate of return for utilities. The increase in rate of return is a result of the OEB changes in methodology for calculating return on equity (ROE).

In August 2011, Hydro One renewed its \$3.0 billion Medium Term Note (MTN) Program under the Preliminary Short Form Base Shelf Prospectus dated August 16, 2011. The proceeds from the MTNs issuance are used to finance Hydro One's working capital requirements; repay outstanding bank loans/credit facilities, debentures, notes or other indebtedness; make advances to subsidiaries of the Company; for capital expenditures; acquisitions and for other general corporate purposes. Liquidity remains strong for Hydro One, supported by the \$3.0 billion MTN Program, its \$1.0 billion commercial paper (CP) program, which is supported by a total of \$1,500 million in liquidity consisting of \$1,250 million of committed revolving credit facilities with a syndicate of banks, and \$250 million of Province of Ontario floating-rate notes.

Rating Considerations Details

Strengths

- (1) Hydro One is a regulated electric power transmission and distribution utility. As such, the Company's business risk profile is low for the following reasons: (a) Hydro One can recover all prudently incurred operating costs and approved capital project costs within a reasonable time frame as revenue requirements are predetermined based on forward-looking cost of service; (b) the Company will not undertake large capital expenditures without a reasonable expectation of recovering them in its rates; and (c) the regulatory environment continues to become more transparent with respect to the regulatory treatment of equity thickness and ROE methodology. DBRS believes that the OEB will be supportive in the recovery of capital costs as well as operating expenses that are necessary for a safe and reliable electricity system.
- (2) Hydro One's credit metrics remain solid for an A (high)-rated regulated utility in a capital growth phase: the debt-to-capital ratio is 56%, EBIT-to-interest coverage is 2.72 times and cash flow-to-debt is 15%. DBRS expects coverage ratios to continue to be constrained in the near term; however, given higher overall capital expenditures driving sizable free cash flow deficits, the Company's financial metrics are expected to modestly improve as a result of increases in ROEs and revenue requirements and remain within a range that is consistent with its business risk level and the assigned ratings.
- (3) Hydro One owns and operates substantially all of Ontario's electric power transmission system. With 26 facilities interconnected to the transmission system, Hydro One can accommodate imports of about 4,600 megawatts (MW) and exports of approximately 6,000 MW of electricity. The Company's distribution system is the largest in Ontario and spans roughly 75% of the province, serving approximately 1.3 million rural and urban customers and 44 large industrial customers. The large geographic area and low population density translates into a higher rate of service for its distribution business relative to other electric power distribution companies.
- (4) Hydro One's transmission business continues to achieve top-quartile reliability measures, which should continue to facilitate a healthy relationship with the regulator.

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 3 Page 3 of 11

Hydro One Inc.

Report Date: September 23, 2011

Challenges

- (1) Hydro One is currently in the midst of an aggressive build-out program that will continue over the next several years. Capital expenditures are expected to be approximately \$5.5 billion over the next three years. The Company announced that capital expenditures are expected to be lower than 2011 budget by approximately \$200 million, mainly due to lower costs and the timing of investments, as well as lower distributed generation capital expenditures and higher investments by generators. Therefore, DBRS expects that annual capital expenditures could exceed operating cash flows by approximately \$700 million to \$850 million per year over the next three years. These sizable free cash flow deficits, combined with lengthy construction times, will continue to put temporary pressure on the balance sheet and coverage ratios during the build-out. DBRS notes that capital projects are spread out over time, which helps to minimize liquidity issues that accompany such large projects. The size and magnitude of Hydro One's upcoming designated projects, combined with the continued increases in material and labour costs and the significant number of intervenors involved, could potentially expose Hydro One to rising project costs beyond the amount forecast in its regulatory applications. There is no assurance that cost overruns beyond the regulatory-approved amounts will be recovered if deemed imprudent by the OEB. However, DBRS notes that Hydro One is experienced in managing projects and is focused on mitigating the risk of cost overruns.
- (2) Hydro One will have to go to the debt markets to fund its significant free cash flow deficits and refinance a heavy-but-manageable debt repayment schedule over the medium term. Maintaining adequate access to the public debt market and adequate availability under its liquidity facilities (\$1.5 billion) is important during this build-out period. Hydro-One's short-term liquidity is supported by its \$1 billion CP program. The Company renewed its \$3.0 billion MTN Program in August 2011.
- (3) Regulatory-approved ROE levels have risen from historically low levels in the past several years. DBRS notes that in December 2009, the OEB changed its methodology for calculating return on equity. As a result of updated parameters, this has led to an increase in 2011 ROE to 9.66% for both transmission and distribution and 10.09% for 2012 (subject to update in October 2011). For 2011, the OEB issued its decision on the Company's transmission revenue requirement, which resulted in a reduction in revenue requirement for 2011 from \$1,446 million to approximately \$1,350 million and increased the 2012 revenue requirement to \$1,660 million from \$1,547 million. The 9.66% ROE for the distribution business produced a revenue requirement of \$1,218 million.
- (4) Earnings and cash flows for the transmission segment and, to a lesser extent, distribution operations, are sensitive to monthly peak demand and volume of electricity sold given that rates typically include a variable-rate component. Seasonality, economic cyclicality, weather patterns and Conservation Demand Management (CDM) programs directly affect the volume of electricity sold or peak monthly electrical demand and, therefore, revenue earned from electricity sales.
- (5) Because Hydro One is owned by the Province of Ontario (the Province, rated AA (low) with a Stable trend), it is unable to access the equity capital markets. This limits the Company's financial flexibility as free cash flow deficits will likely be financed through its \$1 billion CP program (fully backstopped by \$1.5 billion in liquidity facilities) or debt issuance under its \$3.0 billion MTN program. Given the increasing capital expenditures, DBRS expects Hydro One to continue to manage dividends to maintain the deemed regulatory capital structure. Dividends are declared at the sole discretion of Hydro One's board of directors, as recommended by its management based on the Company's financial performance, maintaining its deemed regulatory capital structure and overall capital or financial requirements.

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 3 Page 4 of 11



Hydro One Inc.

Report Date:

September 23, 2011

Regulation

Hydro One's electric power distribution operations are regulated by the OEB under the *Ontario Energy Board Act*, 1998 (the OEB Act) and *Electricity Act*, 1998.

The OEB continues to use a capital structure and ROE methodology to establish transmission and distribution rates based on a deemed debt-to-equity structure of 60% to 40%, divided into 56% long-term and 4% short-term, and 40% equity.

In December 2009, the OEB changed its methodology in calculating ROEs. Based on the methodologies set out in the Report and January 2011 data from the Bank of Canada, Consensus Forecasts and Bloomberg LLP, the OEB has determined that the updated cost of capital parameters for 2011 cost of service rate applications for rates effective May 1, 2011, has resulted in an ROE of 9.58% for utilities filing applications. This is slightly lower than the 9.66% granted to Hydro One.

Transmission

Hydro One filed its transmission revenue requirement and rate application for 2011 and 2012. In December 2010, the OEB issued its decision on the Company's 2011 and 2012 transmission revenue requirement, which resulted in a reduction in revenue requirement for 2011 from \$1,446 million to approximately \$1,350 million and increased the 2012 revenue requirement to \$1,660 million from \$1,547 million. The 9.66% ROE for the distribution business produced a revenue requirement of \$1,218 million. The primary sources of the changes include a lower ROE of 9.66% in 2011 and 10.09% in 2012 (subject to update in October 2011).

Distribution

In June 2010, Hydro One Brampton Networks Inc. submitted its application for 2011 distribution rates. On November 8, 2010, the Company submitted a revised request for a revenue requirement of \$62.8 million because it deferred the adoption of International Financial Reporting Standards (IFRS). Subsequent to the revised request for 2011 revenue requirement, the OEB issued its report on cost of capital parameter updates for 2011 cost of service applications for rates effective January 1, 2011 and Hydro One Brampton Networks Inc. agreed to adjust its requested revenue requirement to \$62.4 million.

In April 2011, the OEB issued its decision regarding Hydro One Brampton Networks Inc.'s 2011 cost-of-service rate application. The revised rates were approved with an effective date of January 1, 2011 and an implementation date of May 1, 2011. The new rates result in a total bill increase of approximately 0.5% for an average customer.

For Hydro One Networks Inc., the OEB adjusted the 2011 revenue requirement to reflect some OEB decisions to decrease OM&A expenditures and a reduction in the capital program. As a result of the new ROE value for 2011 of 9.66%, the revenue requirement was revised to \$1.2 billion.

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 3 Page 5 of 11



Hydro One Inc.

Report Date:

September 23, 2011

Earnings and Outlook

Segmented Information		12 mos ended	For the year end	led December 3	1	
(CAD millions)		<u>Jun-11</u>	2010		2008	2007 *
Net revenues						
Transmission	49.2%	1,369	1,307	1,147	1,212	1,242
Distribution	48.6%	1,354	1,280	1,208	1,153	1,142
Other	2.2%	62	63	63	51	31
Total net revenues	-	2,785	2,650	2,418	2,416	2,415
EBIT by segment						
Transmission	60.5%	665	618	469	571	585
Distribution	40.3%	443	378	357	335	320
Other	-0.8%	(9)	(7)	(2)	(3)	(6)
Total EBIT		1,099	989	824	903	899
Income Statement		12 mos ended	For the year	ar ended Decen	nber 31	
(CAD millions)		<u>Jun-11</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007 *</u>
Net revenues		2,785	2,650	2,418	2,416	2,415
OM&A expense		1,091	1,078	1,057	965	995
EBITDA		1,694	1,572	1,361	1,451	1,420
EBIT		1,099	989	824	903	899
Interest expense (1)		406	409	369	333	312
Core net income (before non-recurring items and prefs)		671	591	470	498	399
Reported net income (after prefs)		671	591	470	497	402

⁽¹⁾ Interest expense on short-term and long-term debt balances, excludes deferred financing charges.

Return on average equity (before non-recurring items)

Summary

Operating margin

Earnings, as measured by EBIT, have trended higher since 2009 as a result of favourable rulings by the OEB, which has allowed for recovery of assets from prior years as well as a higher rate of return for utilities and rate base. The increase in the rate of return is a result of changes in the OEB's methodology for calculating return on equity.

39%

11.6%

37%

11.0%

34%

9.5%

37%

10.7%

37%

8.8%

The increased ROE is the largest single driver of higher revenues at the Company's Transmission and Distribution segments. Transmission revenues increased during 2010 and the LTM ending June 30, 2011, when compared with the period ending December 31, 2009, due to higher transmission rates and the resulting revenue requirement. The increase in revenue requirement is tied to the change in ROE. Transmission revenues are also based on demand, which is driven by weather patterns and economic conditions. During 2010 and for the LTM ending June 30, 2011, the Company witnessed higher average monthly peak demand. Weather was generally milder over the winter months and unseasonably hot during the summer months of 2010 (compared with conditions in 2009) and during the first quarter of 2011.

The impact of the OEB's decisions in the last couple of years is directly attributable to higher Distribution revenue in 2011 and during the LTM ending June 30, 2011. The tariff rate increases are to support investments in expanding and maintaining the Company's distribution network.

Interest expense has trended upward, largely tracking higher debt levels and partially offset by lower average long-term borrowing rates and higher interest capitalized, which is reflective of higher levels of construction work in progress, consistent with the ongoing capital program.

^{*} DBRS adjusted Transmission earnings for non-cash items to normalize the impact from the recent OEB rate decision.

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 3 Page 6 of 11



Hydro One Inc.

Report Date:

September 23, 2011

Outlook

Hydro One should continue to witness stable financial performance as a result of distribution rate increases and the growth in rate base as a result of regulatory approved transmission projects, which will ultimately increase Hydro One's earnings profile. In addition, Hydro One should witness the positive effects of smart meter revenues, as well as higher EBIT and net income over the medium term as the Company has been granted a higher revenue requirement for both 2011 and 2012.

The Company's regulated electricity distribution and transmission operations, together with its strong franchise area and dominant transmission and distribution operations in Ontario, are expected to provide a high degree of certainty to revenues and stability to consolidated earnings and cash flow over the longer term.

Despite the growth in revenues and earnings, key credit metrics are expected to continue to be constrained over the medium term, primarily as a result of increased debt levels and free cash flow deficits as capital expenditures remain steady over the medium term.

The Company notes that the Minister of Energy has requested that the Company plan and begin development work on transmission projects that are geared to adding renewable energy. The amounts have been estimated to be up to approximately \$1 billion over a period to the in-service dates of these projects. Therefore, should a portion or all of the projects that are in the planning or development stage proceed, this could further constrain the Company's financial performance.

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 3 Page 7 of 11



Hydro One Inc.

Report Date:

September 23, 2011

Financial Profile

Statement of Cash Flow	LTM Sept 30	For the year en	ded December	31	
(CAD millions)	<u>2011</u>	2010	2009	2008	2007
Core net income, (before non-recurring, after pfd.)	671	591	470	498	399
Depreciation & amortization	532	526	487	502	482
Amortization of debt re-couponing	0	0	0	2	5
Other recurring non-cash items	1	(30)	(27)	(75)	120
Cash Flow from Operations	1,204	1,087	930	927	1,006
Capital expenditures	(1,505)	(1,570)	(1,566)	(1,284)	(1,091)
Common dividends	(93)	(28)	(188)	(259)	(325)
Free Cash Flow before Working Capital Changes	(394)	(511)	(824)	(616)	(410)
Change in working capital	(10)	77	(37)	125	135
Net Free Cash Flow	(404)	(434)	(861)	(491)	(275)
Other investments/acquisitions/disposition	283	37	13	6	8
Other non-recurring, incl. retail settlement variance	0	0	0	0	0
Cash flow before financing	(121)	(397)	(848)	(485)	(267)
Net debt financing	350	845	805	510	285
Equity financing	0	0	0	0	0
Other financing	(252)	(250)	1	3	(1)
Net change in cash	(23)	198	(42)	28	17
	LTM June 30	For the year ended December 31			
	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	2007
Total adjusted debt (CAD millions) (1)	7,882	7,796	7,016	6,175	5,645
EBITDA/Interest Covereage	4.20	3.86	3.66	4.31	4.46
Fixed charges coverage (times) (1)	2.58	2.31	2.50	2.59	2.57
Total adjusted debt-to-capital (%) (1)	55.8%	56.6%	56.4%	54.7%	53.6%
Cash flow/total adjusted debt (1)	15%	14%	13%	15%	18%
Cash flow/capital expenditures (times)	0.80	0.69	0.59	0.72	0.92
Dividend payout ratio	13.9%	4.7%	40.0%	52.0%	81.5%
1) DDDC adjusted for anaroting loose dabt and interest avnonce equivalen	to ac wall ac alternata liquidity				

⁽¹⁾ DBRS-adjusted for operating lease debt and interest expense equivalents as well as alternate liquidity.

Summary

Hydro One's financial profile has improved and remains strong, with cash flow from operations increased during the LTM ending June 30, 2011, and fiscal year-end December 31, 2010, largely tracking net income. The improvement in the Company's financials is directly attributable to the changes in regulatory accounts, higher ROE and net income, as well as depreciation.

The Company has witnessed an increase in operating cash flow over the years. However, growth in sustaining and development capital spending, combined with dividends, continues to drive up net free cash flow deficits. The recent upward trend in capital investment reflects investments to expand, refurbish or replace transmission infrastructure. This is consistent with government policy, Ontario Power Authority (OPA) planning information (including the Integrated Power System Plan (IPSP)), local supply requirements and the preventive and corrective maintenance needs to manage aging assets and projects critical to the connection of renewable generation that have been identified by the OPA as part of the Province's green energy agenda.

While the Company continues to generate consistent free cash flow deficits, key credit metrics have improved gradually since 2009, even though debt levels have increased, as cash flow deficits have been entirely debt financed. Hydro One has witnessed a growing equity base and lower interest as a result of higher capitalized interest, which is reflective of higher levels of construction work in progress, consistent with the ongoing capital program. DBRS notes that the Company has a reasonable financial profile, reflecting a solid and stable balance sheet.

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 3 Page 8 of 11



Hydro One Inc.

Report Date: September 23, 2011

Outlook

While Hydro One is in the midst of its aggressive build-out program, capital expenditures are expected to be approximately \$5.5 billion over the next three years. The Company announced that capital expenditures are expected to be lower than 2011 budget by approximately \$200 million, mainly due to lower costs and the timing of investments, as well as lower distributed generation capital expenditures and higher investments by generators. Therefore, DBRS expects that annual capital expenditures could exceed operating cash flows by approximately \$700 million to \$850 million per year over the next three years. These sizable free cash flow deficits, combined with lengthy construction times, will continue to put temporary pressure on the balance sheet and coverage ratios during the build-out. DBRS notes that capital projects are spread out over time, which helps to minimize the liquidity issues that often accompany such large projects.

DBRS believes that the Company will finance the resultant free cash flow deficits with incremental debt; therefore, continued access to capital markets is critical for Hydro One. If Hydro One were temporarily delayed in accessing the markets for longer-term debt, the Company should be able to finance its obligations with its \$1 billion CP program, which is fully backstopped by a credit facility.

The size and magnitude of Hydro One's upcoming designated projects, combined with the continued increases in material and labour costs and the significant number of intervenors involved, could potentially expose Hydro One to rising project costs beyond the amount forecast in its regulatory applications. There is no assurance that cost overruns beyond the regulatory-approved amounts will be recovered if deemed imprudent by the OEB. However, DBRS notes that Hydro One is experienced in managing projects and is focused on mitigating the risk of cost overruns. Furthermore, the Company could be exposed to an even greater increase in capital expenditures as a result of Green Energy initiatives requested by the provincial Minister of Energy. The amounts have been estimated to be up to approximately \$1 billion over the period to the in-service dates of these projects. Therefore, should a portion or all of the projects that are in the planning or development stage proceed, the Company's financial performance could be further constrained.

DBRS does not expect the Company's financial profile to change significantly over the medium term; its credit metrics should remain commensurate with the current rating category.

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 3 Page 9 of 11

Hydro One Inc.

Report Date:

September 23, 2011

Long-Term Debt Maturities and Bank Lines

Long-term principal repayments as at June 30, 2011					
<u>Year</u>	<u>%</u>	(CAD millions)			
2011	3.2%	250			
2012	7.7%	600			
2013	7.7%	600			
2014	9.6%	750			
2015	7.0%	550			
Thereafter	64.9%	5,075			
Total		7,825			

(CAD millions) As at June 30, 2011	Committed	Outstanding	<u>Available</u>	Maturity
Commercial Paper backup facility*	1,250	0	1,250	6/1/2014
* Multi year revolving standby credit facility with a	syndicate of banks.			

Long-Term Debt

Hydro One finances its operations and capital programs with long-term debt (\$7,825 million senior unsecured debt as at June 30, 2011) and a \$1.0 billion CP program (fully backed up by a credit facility and holdings of Province of Ontario floating-rate notes). Hydro One has \$2.75 billion maturing in the next five years. Refinancing the debt should be well within its financing capacity given its solid financial profile and good access to the public debt markets.

Hydro One's long-term financing is provided primarily through its \$3.0 MTN Program, which was renewed in August 2011 under the Preliminary Short Form Base Shelf Prospectus dated August 16, 2011. The proceeds from future MTN issuances will be used to finance Hydro One's working capital requirements; repay outstanding bank loans/credit facilities, debentures, notes or other indebtedness; make advances to subsidiaries of the Company; for capital expenditures; acquisitions and for other general corporate purposes. There are no amounts outstanding under this program.

During the first six months of 2011, Hydro One issued \$300 million in long-term debt under its MTN program, made up of a 2.95% \$250 million MTN issuance due September 11, 2015, as well as a \$50 million issuance in floating-rate notes under its MTN Program with a maturity date of July 24, 2015.

The CP program is supported by a total of \$1,500 million in liquidity comprising \$1,250 million of committed revolving credit facilities with a syndicate of banks and \$250 million of Province of Ontario floating-rate notes. The short-term liquidity under this program and anticipated levels of funds from operations should be sufficient to fund normal operating requirements. On April 1, 2011, the term of the \$1,250 million credit facility was extended from June 2013 to June 2014.

The trust indenture pertaining to all senior unsecured issuance includes the following covenants, subject to customary exceptions:

- Any additional indebtedness is subject to a 75% capitalization ratio test.
- Negative pledge clause.
- Limitations on ability to sell principal properties.

Liquidity

Liquidity requirements will increase over the medium term to accommodate higher capital expenditures and regulatory working capital needs. DBRS notes that Hydro One has sufficient flexibility to accommodate its rising liquidity needs, via its authorized CP program and availability under its MTN program. At June 30, 2011, the Company had no short-term notes outstanding.

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 3 Page 10 of 11



Hydro One Inc.

Report Date: September 23, 2011

Hydro One Inc.

Balance Sheet							
(CAD millions)	As at June. 30	As at December 31			As at June. 30	As at Decen	nber 31
Assets	<u>2011</u>	<u>2010</u>	2009	Liabilities & Equity	<u>2011</u>	<u>2010</u>	<u>2009</u>
Cash + short-term investments	118	172	-	Short-term debt	33	0	81
Accounts receivable	977	911	843	L.t. debt due one year	250	500	600
Material, supplies & other	92	106	130	A/P + accr'ds	971	1,040	974
Current Assets	1,187	1,189	973	Current Liabilities	1,254	1,540	1,655
Net fixed assets	14,415	14,053	12,998	Long-term debt	7,581	7,278	6,281
Post-employment benefits	464	460	424	Post-employ. benefits	1,014	980	940
Def'd debt costs + long-term rec.	489	474	249	L.t. pay. + other liab.	1,658	1,543	1,516
Regulatory asset	1,070	1,013	1,033	Preferred shares	323	323	323
Goodwill	133	133	133	Shareholders' equity	5,928	5,658	5,095
Total	17,758	17,322	15,810	Total	17,758	17,322	15,810

Ratio Analysis	As at June. 30	For the year en	ded December 31		
Liquidity Ratios	<u>2011</u>	<u>2010</u>	<u>2009</u>	2008	2007*
Current ratio	0.95	0.77	0.59	0.67	0.62
Cash flow/total debt (1)	15%	14%	13%	15%	18%
Total adjusted debt-to-capital (1)	55.8%	56.6%	56.4%	54.7%	53.6%
Cash flow/capital expenditures	0.80	0.69	0.59	0.72	0.92
Cash flow-dividends/capital expenditures	0.74	0.67	0.47	0.52	0.62
Adj. total debt/EBITDA (1)	4.65	4.96	5.16	4.26	3.98
Hybrids in capital structure	2.3%	2.3%	2.6%	2.9%	3.1%
Deemed common equity	40.0%	40.0%	40.0%	40.0%	40.0%
Common dividend payout (before extras.)	14.2%	4.9%	41.6%	54.0%	85.3%
Coverage Ratios					
EBIT gross interest coverage (1)	2.72	2.43	2.22	2.68	2.83
EBIT net interest coverage (1)	3.24	2.89	2.66	3.08	3.04
EBITDA gross interest coverage (1)	4.20	3.86	3.66	4.31	4.46
EBITDA net interest coverage (1)	4.99	4.59	4.39	4.94	4.79
Fixed-charges coverage (1)	2.58	2.31	2.08	2.50	2.59
Earnings Quality/Operating Efficiencies & Statistics					
Operating margin	39.5%	37.3%	34.1%	37.4%	37.2%
Net margin (before non-recurring, after pfd.)	24.1%	22.3%	19.4%	20.7%	16.4%
Return on avg. equity (before non-recurring items)	11.6%	11.0%	9.5%	10.7%	8.8%
Approved ROE (Distribution)	9.66%	9.85%	8.35%	8.57%	9.00%
Approved ROE (Transmission)	9.66%	8.39%	8.01%	8.35%	8.35%
Rate base - distribution (\$ millions)	4,969	4,787	4,247	4,247	3,711
Rate base - transmission (\$ millions)	7,853	7,636	7,032	6,657	6,341
Transmission throughputs (TWh)	n/a	142.2	139.2	148.7	152.2
Distribution throughputs (TWh)	n/a	29.1	28.9	29.9	30.2
Average annual 60-minute peak demand (MWh)	n/a	25,075	24,380	24,195	25,737
(1) DBRS-adjusted for operating lease debt and interest expense equivalents as	well as alternate liquidity.				

st DBRS adjusted Transmission earnings for non-cash items to normalize the impact from the recent OEB rate decision.

¹⁰ Corporates: Utilities & Independent Power

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 3 Page 11 of 11



Hydro One Inc.

Report Date:

September 23, 2011

Ratings

Debt Rated	Rating	Rating Action	Trend	
Commercial Paper	R-1 (middle)	Confirmed	Stable	
Senior Unsecured Debentures	A (high)	Confirmed	Stable	

Rating History

						_
	Current	2010	2009	2008	2007	
Commercial Paper	R-1 (middle)					
Senior Unsecured Debentures	A (high)					

Note

All figures are in Canadian dollars unless otherwise noted.

Copyright © 2011, DBRS Limited, DBRS, Inc. and DBRS Ratings Limited (collectively, DBRS). All rights reserved. The information upon which DBRS ratings and reports are based is obtained by DBRS from sources DBRS believes to be accurate and reliable. DBRS does not audit the information it receives in connection with the rating process, and it does not and cannot independently verify that information in every instance. The extent of any factual investigation or independent verification depends on facts and circumstances. DBRS ratings, reports and any other information provided by DBRS are provided "as is" and without representation or warranty of any kind. DBRS hereby disclaims any representation or warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability, fitness for any particular purpose or non-infringement of any of such information. In no event shall DBRS or its directors, officers, employees, independent contractors, agents and representatives (collectively, DBRS Representatives) be liable (1) for any inaccuracy, delay, loss of data, interruption in service, error or omission or for any damages resulting therefrom, or (2) for any direct, indirect, incidental, special, compensatory or consequential damages arising from any use of ratings and rating reports or arising from any error (negligent or otherwise) or other circumstance or contingency within or outside the control of DBRS or any DBRS Representative, in connection with or related to obtaining, collecting, compiling, analyzing, interpreting, communicating, publishing or delivering any such information. Ratings and other opinions issued by DBRS are, and must be construed solely as, statements of opinion and not statements of fact as to credit worthiness or recommendations to purchase, sell or hold any securities. A report providing a DBRS rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. DBRS receives compensation for its rating activities from issuers, insurers, guarantors and/or underwriters of debt securities for assigning ratings and from subscribers to its website. DBRS is not responsible for the content or operation of third party websites accessed through hypertext or other computer links and DBRS shall have no liability to any person or entity for the use of such third party websites. This publication may not be reproduced, retransmitted or distributed in any form without the prior written consent of DBRS. ALL DBRS RATINGS ARE SUBJECT TO DISCLAIMERS AND CERTAIN LIMITATIONS. PLEASE READ THESE DISCLAIMERS AND LIMITATIONS AT http://www.dbrs.com/about/disclaimer. ADDITIONAL INFORMATION REGARDING DBRS RATINGS, INCLUDING DEFINITIONS, POLICIES AND METHODOLOGIES, ARE AVAILABLE ON http://www.dbrs.com.

Hydro One Inc.

Rating

Debt Rated	Rating	Rating Action	Trend
Commercial Paper	R-1 (middle)	Confirmed	Stable
Senior Unsecured Debentures	A (high)	Confirmed	Stable

Rating Rationale

DBRS has confirmed the Senior Unsecured Debentures and Commercial Paper ratings of Hydro One Inc. (Hydro One or the Company) at A (high) and R-1 (middle), respectively, both with Stable trends. The rating confirmation is based on the Company's low-risk regulated transmission and distribution businesses, a supportive regulatory environment in Ontario and the Company's strong financial profile. Hydro One's regulated transmission and distribution businesses in Ontario accounts for virtually 100% of total earnings.

Regulation in Ontario has remained supportive for Hydro One. The Ontario Energy Board (OEB) is expected to continue to allow the Company to maintain adequate coverage, cash flow and leverage ratios due to the government's commitment to address Hydro One's aging infrastructure while meeting the continued growth of electricity consumption and renewable energy developments in the province without compromising reliability. The confirmation assumes that Hydro One's transmission and distribution revenue base will continue to grow favourably to support a high level of capital expenditure (capex), which is expected to continue to far exceed depreciation. Project execution risk is expected to be manageable; the Company is experienced in managing projects and is focused on mitigating the risk of cost overruns.

Hydro One's credit metrics have remained relatively stable over the past four years. The Company generated a cash flow deficit of approximately \$451 million in 2011, which is debt-financed. The deficit was largely driven by the ongoing high capex attributable to smart meter and infrastructure sustainability spending. As a result of the ongoing high investment commitment (\$1.8 billion per annum for the 2012-2014 period) and resulting incremental debt issuances, DBRS expects a temporary, modest weakening of Hydro One's key credit metrics over the next several years. However, these ratios are expected to gradually recover when substantial capex plans are completed, and should remain well within the A (high) rating category.

Rating Considerations

(1) Low business risk

Strengths

- (2) Strong financial profile
- (3) Strong and extensive franchise area

Challenges

- (1) High level of planned capital expenditure
- (2) Project construction risk
- (3) Significant external financing requirements

Financial Information

	For the year ended December 31				
(\$ millions where applicable)	2011	2010	2009	2008	2007
Net income before extras.	632	579	470	498	399
Cash flow (before working cap. changes)	1,164	1,080	964	921	997
Return on equity	10.2%	10.2%	8.9%	10.0%	8.2%
Net debt in capital structure	55.3%	56.4%	56.1%	54.4%	53.4%
Total debt in capital structure	55.3%	56.5%	56.1%	54.5%	53.4%
Cash flow/net debt	14.6%	13.9%	13.9%	15.1%	17.8%
Cash flow/total debt	14.6%	13.9%	13.9%	15.0%	17.8%
EBIT interest coverage (times)	2.75	2.42	2.23	2.71	2.88

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 4 Page 2 of 8



Hydro One Inc.

Report Date:

February 29, 2012

Rating Considerations Details

Strengths

- (1) Low business risk: Almost all of the Company's EBIT is contributed by its low-risk regulated distribution and transmission business, which operates under a reasonable regulatory framework.
- (2) Strong financial profile: The Company continues to maintain strong and stable credit metrics and a healthy balance sheet (debt-to-capital ratio at 55.3% as at December 31, 2011, EBIT interest coverage at 2.75 times in 2011 and cash flow-to-debt at 14.6% in 2011).
- (3) Strong and extensive franchise area: Hydro One owns the largest transmission and distribution businesses in Ontario. The Company serves more than 97% of the province's transmission throughput. The distribution component of the Company spans approximately 75% of the province, serving 1.4 million customers (rural and urban) as well as 435 large-user customers.

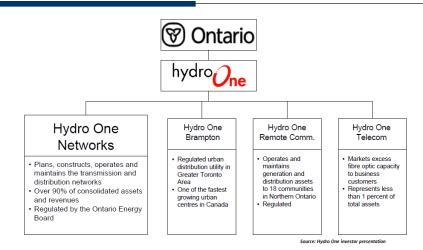
Challenges

- (1) High level of planned capital expenditure: Hydro One is currently in the midst of an aggressive buildout program that will continue over the next several years. Capital expenditures are expected to be approximately \$5.5 billion over the next three years. Therefore, DBRS expects that annual capex could exceed operating cash flows by approximately \$700 million to \$800 million per year over that time frame. These sizable free cash flow deficits, combined with lengthy construction times, will continue to put temporary pressure on the balance sheet and coverage ratios during the build-out.
- (2) **Project construction risk:** The size and magnitude of Hydro One's upcoming designated projects, combined with the continued increases in material and labour costs and the significant number of interveners involved, could potentially expose Hydro One to rising project costs beyond the amounts forecast in its regulatory applications. There is no assurance that cost overruns beyond the regulatory-approved amounts will be recovered if deemed imprudent by the OEB. However, DBRS notes that Hydro One is experienced in managing projects and is focused on mitigating the risk of cost overruns.
- (3) Significant external funding requirements: Significant external funding is required to finance the potentially sizable free cash flow deficits expected over the near to medium term. Maintaining adequate access to the public debt markets (term and commercial paper) is critical to the Company during this key build-out phase.

Major Projects (Potential and Under Construction)

- Bruce to Milton Transmission Project: Expected to be in construction by December 2012, this project has been fully approved and consists of a 180-kilometre, double 500-kilovolt (kV) transmission line extending from Kincardine to Hydro One's Milton switching station. This is one of the Company's 'green' initiatives, transporting 3,000 megawatts (MW) of power from nuclear and wind generation facilities. Construction is 50% complete, with costs expected to total \$755 million, making it the largest transmission project in Ontario over the last twenty years.
- West of London Transmission Lines: Projects with the aim of adding between 500 MW and 1,000 MW to the grid. These projects are in the early stages with an expected completion date in 2017, contingent on the necessary regulatory approvals. Estimated costs range from \$300 million to \$450 million.
- East-West Tie Project: Through the East-West Tie LP (an equal partnership between three entities, including Hydro One), Hydro One is looking to construct a 400-kilometre, 230 kV transmission line from Wawa to Thunder Bay with a total capacity of 650 MW.

Organizational Chart



Regulation

- Hydro One is a regulated electric utility under the jurisdiction of the Ontario Energy Board (OEB).
- The OEB uses a deemed debt-to-common equity structure of 60% to 40% for both transmission and distribution. Debt is divided into 56% long-term and 4% short-term.
- Approximately 60% of Hydro One's earnings are generated from transmission and the remainder from distribution.

Transmission

- Under the cost-of-service methodology, Hydro One is provided a reasonable opportunity to recover its forecast costs, including operating expenses, depreciation, costs of debt and taxes.
- The Company has no exposure to either commodity price risk or volume risk.
- Hydro One faces the risk of not recovering forecast operating expenses if the actual expenses exceed the forecast expenses, but this risk is considered manageable by DBRS.
- On December 20, 2011, the OEB came to a decision regarding revenue requirements for 2012 of \$1,418 million (up from \$1,346 million in 2011), translating into an increase of 5% in 2012.
- Return on equity (ROE) is increasing, with 2011 OEB levels set at 9.66%.
- In 2012, Hydro One's allowed ROE is 9.42% and deemed common equity is 40%, both of which are at reasonable levels.

Distribution

- The OEB uses a combination of an annual incentive regulation mechanism (IRM) and periodic cost-of-service (COS) reviews to set distribution rates.
- In DBRS's view, the IRM typically creates higher cost-cutting pressure than the COS does; however, the cost pressure has not resulted in a material reduction in the Company's earnings and cash flows.
- The Company is allowed to fully recover its purchased power costs in a timely fashion, eliminating its exposure to power price risk. DBRS views this as a positive factor in the current regulatory system in Ontario (regardless of whether the Company operates under the IRM or the COS).
- Hydro One is awaiting approval from the OEB to move to U.S. Generally Accepted Accounting Principles (GAAP) for its distribution business (moving to U.S. GAAP for transmission has been already approved).
- In 2011, ROE was .9.66% and deemed common equity was 40%, both of which are reasonable levels.

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 4 Page 4 of 8



Hydro One Inc.

Report Date: February 29, 2012

Earnings and Outlook

	For the year ended December 31					
(\$ millions (CAD) where applicable)	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	2007	
Operating revenues	5,471	5,124	4,744	4,597	4,655	
Operating Expenses	3,720	3,552	3,383	3,146	3,235	
EBITDA	1,751	1,572	1,361	1,451	1,420	
EBIT	1,135	989	824	903	899	
Gross interest expense	412	409	369	333	312	
Net income before extraordinary items	632	579	470	498	399	
Reported net income	641	591	470	498	399	
Return on equity	10.17%	10.16%	8.92%	9.95%	8.22%	

Summary

• Hydro One's earnings have continued to increase over the past five years, mainly due to the Company's increased regulatory asset base, driven by high capex.

Segmented Information	For the year ended December 31					
(CAD millions)		2011	2010	2009	2008	2007 *
Net revenues						
Transmission	48.9%	1,389	1,307	1,147	1,212	1,242
Distribution	48.9%	1,391	1,280	1,208	1,153	1,142
Other	2.2%	63	63	63	51	31
Total net revenues	100%	2,843	2,650	2,418	2,416	2,415
EBIT by segment						
Transmission	58.6%	665	618	469	571	585
Distribution	42.1%	478	378	357	335	320
Other	-0.7%	(8)	(7)	(2)	(3)	(6)
Total EBIT	100%	1,135	989	824	903	899

Outlook

- The Company's earnings for fiscal 2012 are expected improve further due to continued growth in rate base.
- The increase in rate base will be primarily due to Hydro One's growing capital expenditure needs in the near future, as it continues to service its aging infrastucture in the trasmission and distribution businesses.

Financial Profile

	Financial Profi	le Schedule	: :		
	For the year	ended Dece	ember 31		
(\$ millions)	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	2007
Net income before extraordinary items	632	579	470	498	399
Depreciation, depletion & amortization	550	526	487	502	482
Deferred income taxes and other	(18)	(25)	7	(79)	116
Cash flow (before working cap. changes)	1,164	1,080	964	921	997
Dividends paid	(168)	(28)	(188)	(259)	(325
Capital expenditures	(1,447)	(1,570)	(1,566)	(1,284)	(1,091
Free Cash Flow (bef. work. cap. changes)	(451)	(518)	(790)	(622)	(419
Changes in non-cash work. cap. items	196	94	(38)	125	135
Regulatory asset and liability	47	(10)	(34)	6	9
Net Free Cash Flow	(208)	(434)	(862)	(491)	(275
Acquisitions & Long-term Investments	0	(250)	0	0	0
Short-term Investments	0	(55)	55	0	(60
Net debt change	200	900	750	510	345
Other	25	37	15	9	7
Change in cash	17	198	(42)	28	17
Total debt	7,999	7,778	6,936	6,133	5,603
Cash and equivalents	0	33	0	16	0,000
Net debt in capital structure	55.3%	56.4%	56.1%	54.4%	53.4%
Total debt in capital structure	55.3%	56.5%	56.1%	54.5%	53.4%
Adjusted total debt in capital structure*	55.5%	56.6%	56.3%	54.7%	53.6%
Cash flow/net debt	14.6%	13.9%	13.9%	15.1%	17.89
Cash flow/total debt	14.6%	13.9%	13.9%	15.0%	17.89
Adj. cash flow/ total debt*	14.5%	13.8%	13.8%	14.9%	17.79
EBIT interest coverage (times)	2.75	2.42	2.23	2.71	2.88
Adjusted EBIT interest coverage (times)*	2.76	2.42	2.24	2.71	2.88
*Including operating leases.					

Summary

- Overall, Hydro One has maintained a strong financial profile, reflecting a stable balance sheet and reasonable credit metrics for the current ratings.
- Cash flow from operations remains strong, improving over time due to an increased rate base.
- Cash flow deficits persist primarily due to increased developmental capital expenditure.
- Sustaining capex represented approximately \$575 million or 40% of spending (Transmission: \$335 million, Distribution: \$240 million).
- Unlike other provincially and municipally owned distributors, Hydro One benefits from a flexible dividend program, unrestricted by an earnings threshold level.
- Key credit metrics including leverage, interest coverage and cash flow ratios have remained within the A (high) rating category.

Outlook

- DBRS expects a temporary modest weakening of Hydro One's key credit metrics over the next several years. However, these ratios are expected to gradually recover when substantial capex plans are completed, and remain reasonable for the current rating category.
- Cash flow from operations is expected to grow over the medium to long term, predominately driven by growth in the asset base.
- DBRS anticipates that free cash flow will continue to be affected by higher capital spending on the Company's aging infrastructure. Hydro One has budgeted \$1.8 billion per annum over the next three years, with maintenance capital expenditure expected to be \$700 million in 2012, \$950 million in 2013 and \$1,000 million in 2014.

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 4 Page 6 of 8



Hydro One Inc.

Report Date:

February 29, 2012

Description of Operations

- Hydro One is the largest electricity transmission and distribution company in Ontario.
- It operates three distinct business segments:

(1) Transmission

- One of the largest in North America, as measured by assets.
- Has 29,000 kilometres of high-voltage network serving its own distribution network as well as 50 local distribution companies (LDCs) and 92 transmission connected companies.
- Owns and operates approximately 96% of transmission capacity in Ontario, as measured by revenues.

(2) Distribution

- Largest distribution system in the province, based on assets, covering about 75% of Ontario.
- Distributes electricity over 120,500 kilometres, reaching approximately 1.4 million customers in a number of municipalities and rural areas.

(3) Other Businesses

- Services related to Hydro One Telecom Inc., marketing dark and lit fibre-optic capacity to commercial carriers and telecommunication carriers.

Long-Term Debt Maturities and Bank Lines

• The Company's liquidity profile remains reasonable for the Company's current rating.

(\$ millions - As at Dec. 31, 2011)	Amount	Draw/LOCs	Available	Maturity
Cash & Cash Equivalents	0	0		-
Committed Revolving Facility	1250	0	1250	1-Jun-14
Ontario Floating Rate Notes	250	0	250	2014
•	•	Total:	1.500	

- Hydro One has access to a \$1.0 billion commercial credit program supported by an unused revolving facility (\$1.25 billion) as well as the holding of Province of Ontario Floating-Rate Notes (\$250 million).
- On August 23, 2011, the Company filed a base shelf prospectus to renew its \$3.0 billion MTN program for another 25 months. As of December 31, 2011, this program had \$2.3 billion of availability.
 - A \$300 million, 3.2% MTN was issued on January 13, 2012, maturing January 13, 2022.
- Hydro One's continued access to the capital markets through its MTN and commercial paper programs will
 be crucial over the next few years, given its infrastructure upgrade mandate. Despite the Company's debt
 maturities in the medium term, DBRS does not anticipate that Hydro One will have any problem
 refinancing as needed.

Long-term Debt Maturities						
(\$ millions - As at Dec. 31, 2011)	2012	2013	2014	2015	2016+*	Total
Amount	600	600	750	550	5,775	8,275
% of Total	7.3%	7.3%	9.1%	6.6%	69.8%	100.0%

^{*}Includes a \$300 million issuance on Jan 13, 2012

		Hydro	One				
Balance Sheet (\$ millions)	Dec. 31	Dec. 31	Dec. 31		Dec. 31	Dec. 31	Dec. 31
Assets	<u>2011</u>	2010	2009	Liabilities & Equity	2011	2010	2009
Cash & equivalents	0	33	0	S.T. borrowings	0	0	55
Accounts receivable	961	911	843	Accounts payable	1,071	884	800
Inventories	25	21	21	Current portion L.T.D.	600	500	600
Prepaid expenses & other	291	224	109	Deferred tax	0	0	0
Total Current Assets	1,277	1,189	973	Other current liab.	149	156	200
				Total Current Liab.	1,820	1,540	1,655
Net fixed assets	14,903	14,061	12,998	Long-term debt	7,399	7,278	6,281
Future income tax assets	17	19	18	Deferred income taxes	758	693	533
Goodwill & intangibles	357	322	351	Other L.T. liab.	1,937	1,830	1,748
Investments & others	1,814	1,731	1,295	Shareholders equity	6,454	5,981	5,418
Total Assets	18,368	17,322	15,635	Total Liab. & SE	18,368	17,322	15,635

Balance Sheet &	For the year ended December 31					
Liquidity & Capital Ratios (1)	<u>2011</u>	<u>2010</u>	2009	2008	2007	
Current ratio	0.70	0.77	0.59	0.67	0.62	
Net debt in capital structure	55.3%	56.4%	56.1%	54.4%	53.4%	
Total debt in capital structure	55.3%	56.5%	56.1%	54.5%	53.4%	
Adj. total debt in capital structure*	55.5%	56.6%	56.3%	54.7%	53.6%	
Cash flow/net debt	14.6%	13.9%	13.9%	15.1%	17.8%	
Cash flow/total debt	14.6%	13.9%	13.9%	15.0%	17.8%	
Adj. cash flow/ total debt*	14.5%	13.8%	13.8%	14.9%	17.7%	
(Cash flow - dividends)/capex (2)	0.69	0.67	0.50	0.52	0.62	
Dividend payout ratio	26.6%	4.8%	40.0%	52.0%	81.5%	
Coverage Ratios (times) (3)						
EBIT interest coverage	2.75	2.42	2.23	2.71	2.88	
EBITDA interest coverage	4.25	3.84	3.69	4.36	4.55	
Fixed-charge coverage	2.75	2.41	2.24	2.73	2.86	
Adjusted EBIT interest coverage*	2.76	2.42	2.24	2.71	2.88	
Profitability Ratios						
EBITDA margin	32.0%	30.7%	28.7%	31.6%	30.5%	
EBIT margin	20.7%	19.3%	17.4%	19.6%	19.3%	
Profit margin	11.6%	11.3%	9.9%	10.8%	8.6%	
Return on equity	10.2%	10.2%	8.9%	10.0%	8.2%	
Return on capital	6.3%	6.3%	5.7%	6.4%	5.6%	

⁽¹⁾ Minority interests treated as equity equivalents. (2) Capital expenditures excluding acquisitions and equity investments.

⁽³⁾ Before capitalized interest is deducted.

^{*}Including operating leases.

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 4 Page 8 of 8



Hydro One Inc.

Report Date: February 29, 2012

Ratings

Debt Rated	Rating	Rating Action	Trend
Commercial Paper	R-1 (middle)	Confirmed	Stable
Senior Unsecured Debentures	A (high)	Confirmed	Stable

Rating History

						_
	Current	2011	2010	2009	2008	
Commercial Paper	R-1 (middle)					
Senior Unsecured Debentures	A (high)					

Note

All figures are in Canadian dollars unless otherwise noted.

Copyright © 2012, DBRS Limited, DBRS, Inc. and DBRS Ratings Limited (collectively, DBRS). All rights reserved. The information upon which DBRS ratings and reports are based is obtained by DBRS from sources DBRS believes to be accurate and reliable. DBRS does not audit the information it receives in connection with the rating process, and it does not and cannot independently verify that information in every instance. The extent of any factual investigation or independent verification depends on facts and circumstances. DBRS ratings, reports and any other information provided by DBRS are provided "as is" and without representation or warranty of any kind. DBRS hereby disclaims any representation or warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability, fitness for any particular purpose or non-infringement of any of such information. In no event shall DBRS or its directors, officers, employees, independent contractors, agents and representatives (collectively, DBRS Representatives) be liable (1) for any inaccuracy, delay, loss of data, interruption in service, error or omission or for any damages resulting therefrom, or (2) for any direct, indirect, incidental, special, compensatory or consequential damages arising from any use of ratings and rating reports or arising from any error (negligent or otherwise) or other circumstance or contingency within or outside the control of DBRS or any DBRS Representative, in connection with or related to obtaining, collecting, compiling, analyzing, interpreting, communicating, publishing or delivering any such information. Ratings and other opinions issued by DBRS are, and must be construed solely as, statements of opinion and not statements of fact as to credit worthiness or recommendations to purchase, sell or hold any securities. A report providing a DBRS rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. DBRS receives compensation for its rating activities from issuers, insurers, guarantors and/or underwriters of debt securities for assigning ratings and from subscribers to its website. DBRS is not responsible for the content or operation of third party websites accessed through hypertext or other computer links and DBRS shall have no liability to any person or entity for the use of such third party websites. This publication may not be reproduced, retransmitted or distributed in any form without the prior written consent of DBRS. ALL DBRS RATINGS ARE SUBJECT TO DISCLAIMERS AND CERTAIN LIMITATIONS. PLEASE READ THESE DISCLAIMERS AND LIMITATIONS AT http://www.dbrs.com/about/disclaimer. ADDITIONAL INFORMATION REGARDING DBRS RATINGS, INCLUDING DEFINITIONS, POLICIES AND METHODOLOGIES, ARE AVAILABLE ON http://www.dbrs.com.

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 5 Page 1 of 5



Credit Opinion: Hydro One Inc.

Global Credit Research - 08 Sep 2011

Toronto, Ontario, Canada

Ratings

CategoryMoody's RatingOutlookStableSenior Unsecured -Dom CurrAa3Commercial PaperP-1

Contacts

 Analyst
 Phone

 Allan McLean/Toronto
 416.214.3852

 William L. Hess/New York City
 212.553.3837

Key Indicators

[1] Hydro One Inc.

	[2] LTM	2010	2009	2008	2007
(CFO Pre-W/C + Interest) / Interest Expense	4.0x	3.7x	3.4x	3.7x	4.0x
(CFO Pre-W/C) / Debt	15.3%	14.1%	12.8%	14.3%	17.7%
(CFO Pre-W/C - Dividends) / Debt	14.3%	13.9%	10.4%	10.5%	12.2%
Debt / Book Capitalization	58.1%	59.2%	59.3%	59.5%	55.2%

[1] All ratios calculated in accordance with Moody's Regulated Electric and Gas Utilities Rating Methodology using Moody's standard adjustments. In addition, Moody's adjusts for one-time items [2] Last twelve months ended June 30, 2011

Note: For definitions of Moody's most common ratio terms please see the accompanying <u>User's Guide</u>.

Opinion

Rating Drivers

Large, low-risk regulated electric transmission and distribution (T&D) utility with no commodity price risk

Relatively supportive regulatory environment

Continued high capex could constrain improvement of financial metrics

Liquidity is adequate

High default dependence and high probability of extraordinary support from the Province of Ontario (Aa1)

Corporate Profile

Headquartered in Toronto, Ontario, Hydro One Inc. (HOI) is a commercial corporation, 100% owned by the Province of Ontario. Virtually all of HOI's revenues and cash flows are derived from its electricity T&D businesses, both of which are regulated by the Ontario Energy Board (OEB). HOI owns and operates virtually all of Ontario's electricity transmission system and a substantial portion of the province's electricity distribution assets.

SUMMARY RATING RATIONALE

HOl's Aa3, stable senior unsecured rating reflects its baseline credit assessment (BCA) of 8, high default dependence and high probability of extraordinary support from the Province of Ontario (Aa1). HOl's BCA of 8 reflects the company's low-risk business model. HOl is a cost of service-regulated electric T&D utility operating in a relatively supportive regulatory environment and it has no commodity price risk exposure. Rate increases and strong transmission demand in 2010 and 2011 have helped financial metrics improve but financial metrics remain somewhat weaker than other Baa1-rated T&D utilities. Continued high capital spending and rising debt levels could constrain further strengthening of financial metrics. HOl is not eligible to earn a cash return on construction work in progress so cash generation lags the increases in debt associated with capital spending. In recent years, HOl's actual capital spending has been below its budgeted levels as some

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 5 Page 2 of 5

spending in support of government energy policy initiatives has been delayed. Accordingly, we believe that HOl's actual future capital spending could exceed budgeted levels to the extent that some catch up occurs. HOl's BCA of 8 is consistent with the BCA indicated by our Regulated Electric and Gas Utility rating methodology.

DETAILED RATING CONSIDERATIONS

RATING METHODOLOGY FOR GOVERNMENT RELATED ISSUERS

In accordance with Moody's Government Related Issuer (GRI) rating methodology, HOI's Aa3 rating reflects the combination of the following inputs:

Baseline Credit Assessment (BCA) of 8 (on a scale of 1 to 21, where 1 represents the equivalent risk of a Aaa, 2 a Aa1, 3 a Aa2 and so on).

Aa1 local currency rating of the Province of Ontario.

High default dependence.

High probability of extraordinary support.

HOI's high default dependence reflects HOI's exposure to virtually all facets of the provincial economy and its operational and financial proximity to the government. HOI's high probability of extraordinary support reflects the strategic importance of HOI to the Provincial economy, the Province's history of providing support through dividend deferrals as well as the Province's role as the architect of electricity policy and regulation and its history of intervention in the electricity sector. As a 100%-owned subsidiary of the Province, HOI can be utilized as an instrument of public policy.

HOI's BCA reflects the following:

IMPROVED FINANCIAL METRICS REMAIN SOMEWHAT WEAKER THAN Baa1 PEERS

HOI's financial ratios improved in 2010 and the first half of 2011 primarily due to rate increases in both the transmission and distribution segments but also due to higher transmission revenues driven by favourable weather conditions and economic growth that resulted in improved demand in the transmission segment. The rate increases reflect a combination of a higher allowed ROE (effective May 1, 2010 in the distribution segment and January 1, 2011 in the transmission segment) and increased rate base as capital expenditures made in prior periods entered rate base. The improved metrics also reflect the reduction in dividends to \$28 million in 2010 (down from \$188 million in 2009) which moderately reduced the amount of debt that HOI incurred to finance its capital spending.

Despite the improvement of HOl's financial metrics in 2010 and the first half of 2011, the company's metrics, particularly CFO pre-WC to debt and CFO pre-WC less dividends to debt, remain somewhat weaker than those of other Baa1-rated T&D peers including FortisAlberta Inc., Newfoundland Power Inc., Public Service Electric and Gas Company and Connecticut Light and Power. We believe that the incremental debt burden associated with continued high capital spending could constrain further strengthening of HOl's financial metrics. HOl is not eligible to earn a cash return on construction work in progress so cash flow increases lag the increases in debt associated with capital spending.

HOl's actual capital spending for 2008, 2009 and 2010 was modestly below the company's budgeted levels due to a variety of factors. Some spending in support of government energy policy initiatives has been delayed while regulatory decisions regarding the allocation of the costs of connecting new generation to the HOl grid resulted in a greater share of those costs being borne by generators than HOl had assumed. Additionally, the OEB plans to introduce competition for the development of certain transmission expansion projects so HOl has removed any contestable transmission projects from its current capital spending forecasts. Consequently, HOl's current forecast of future capital expenditures is lower than management had forecast in prior years. However, depending on the outcome of the fall 2011 election and any changes to provincial energy policy that might follow, we believe that HOl's actual future capital spending could actually exceed the currently forecasted levels to the extent that some catch up occurs and/or that HOl wins some portion of contestable transmission projects. If this were to occur, we believe that further improvement in HOl's metrics would be constrained by the typical cash flow lag to capital spending. That said, a significant portion of HOl's future capital expenditures relate to Provincial policy priorities; therefore, we believe that these expenditures carry somewhat lower regulatory risk.

LOW-RISK, REGULATED ELECTRIC UTILITY OPERATING IN A RELATIVELY SUPPORTIVE REGULATORY ENVIRONMENT

HOI is considered to be a low-risk utility given that its operations are almost exclusively T&D and its T&D assets are wholly regulated and not exposed to commodity price risk. Furthermore, all of HOI's operations are located in Canada, a jurisdiction that we generally view as being one of the more supportive regulatory environments for utilities on a global basis. We consider the T&D segment to be a relatively lower risk segment of the electric utility industry since it is typically not exposed to commodity price and volume risks or the operational, financial and environmental risks that can be associated with electricity generation.

The OEB regulates both the T&D segments of HOl's business. The legislative environment in Ontario has been relatively stable since 2005 but the regulatory framework continues to evolve and HOl consistently experiences varying degrees of regulatory lag. In December 2009, the OEB amended its ROE formula and increased HOl's base ROE. HOl's 2011 transmission and distribution rates reflect an ROE of 9.66%, up from 8.39% for 2010 transmission rates although somewhat lower than the 9.75% allowed in 2010 distribution rates.

HOI's cash flow tends to be stable and predictable given its lack of commodity price exposure, nominal foreign exchange exposure and manageable exposure to floating interest rates. While HOI purchases power in its distribution segment, these commodity costs are a full pass-through to customers. In the transmission segment, HOI has no exposure to electricity prices. Like many cost of service utilities whose rates are established on a forward test year basis, HOI is exposed to a degree of forecast risk. Also, HOI has a degree of exposure to weather and the level of economic activity, primarily in the transmission segment, due to the fact that its transmission tariff is based on monthly peak transmission demand.

Liquidity Profile

We believe that HOI's liquidity is adequate. Our liquidity stress scenario indicates a liquidity surplus of approximately \$400 million for the twelve months ending June 30, 2012.

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 5 Page 3 of 5

We expect HOI to have negative free cash flow of approximately \$700 million for the twelve months ending June 30, 2012. HOI has scheduled debt maturities of \$250 million in this period, resulting in a net funding requirement of approximately \$950 million. Given HOI's undrawn committed credit facility availability of over \$1.1 billion and the \$250 million Province of Ontario floating rate note (FRN) held by HOI, which we believe can be liquidated at face value on short notice, HOI had liquidity resources of about \$1.35 billion at June 30, 2011. Our standard liquidity stress scenario assumes that an issuer loses access to new capital, other than credit available under its committed credit facilities, for a period of 12 months. On this basis, HOI has an estimated liquidity surplus of approximately \$400 million.

In addition to the \$250 million Province of Ontario FRN, HOI has a committed syndicated credit facility in the amount of \$1.25 billion. On April 1, 2011, the expiry date of this facility was extended to June 2014. The facility contains a covenant that requires HOI's to maintain a debt to capitalization ratio of not more than 75%. Given HOI's debt to capitalization of approximately 58% at June 30, 2011, the company had sufficient headroom under this covenant. The credit agreement does not contain material adverse change or other clauses that would inhibit access to funding in a financial stress scenario.

Rating Outlook

HOl's rating outlook is stable. During 2010 and the first half of 2011, HOl's financial metrics improved modestly but we believe that further improvement could be constrained by the inherent cash flow lag associated with continued high levels of capital investment.

What Could Change the Rating - Up

Moody's considers an upward revision in HOl's Aa3 rating to be unlikely in the near term. However, the company's senior unsecured rating could be positively impacted by a two notch improvement in its BCA to 6 or by a change in facts and circumstances that causes us to believe that the probability of extraordinary support should be higher than we currently believe it is. An improvement in HOl's BCA to 6 would require both a sustainable improvement in financial ratios (such as CFO pre-WC to Interest exceeding 4.5x, CFO pre-WC to Debt exceeding 22% and CFO pre-WC less Dividends to Debt exceeding 17%) and a more favourable assessment of HOl's regulatory and cost recovery environment.

What Could Change the Rating - Down

HOI's Aa3 senior unsecured rating could be negatively impacted by one or more of the following:

A reduction in both the Province's rating and HOI's BCA, or

A material reduction in the perceived probability of extraordinary support due to changes in the ownership, governance or management structures or other factors.

A one notch reduction in HOl's BCA to 9 could follow a sustained weakening of cash flow metrics such as CFO pre-WC to Interest coverage below 3.3x, CFO pre-WC to Debt below 13% and/or CFO pre-WC less Dividends to Debt below 9% combined with a deterioration in HOl's regulatory framework or its ability to recover its costs and earn its allowed return.

Rating Factors

Hydro One Inc.

Regulated Electric and Gas Utilities Industry [1]	[2]Current	
Factor 1: Regulatory Framework (25%)	Measure	Score
a) Regulatory Framework		Α
Factor 2: Ability To Recover Costs And Earn Returns (25%)		
a) Ability To Recover Costs And Earn Returns		Α
Factor 3: Diversification (10%)		
a) Market Position (10%)		Baa
b) Generation and Fuel Diversity (0%)		
Factor 4: Fin. Strength, Liquidity And Key Fin.		
Metrics (40%)		
a) Liquidity (10%)		Baa
b) CFO pre-WC + Interest/ Interest (3 Year Avg) (7.5%)	3.6x	Baa2
c) CFO pre-WC / Debt (3 Year Avg) (7.5%)	13.0%	Baa3
d) CFO pre-WC - Dividends / Debt (3 Year Avg) (7.5%)	11.1%	Baa3
e) Debt/Capitalization (3 Year Avg) (7.5%)	58.9%	Ba2
Rating:		
a) Indicated Baseline Credit Assessment from		8
Methodology Grid		(Baa1)
b) Actual Baseline Credit Assessment Assigned		8
		(Baa1)

[3]Moody's 12-18 month Forward View 09/02/2011	w As of
Measure	Score
	Baa
3.9-4.1x	Baa1
13%-16%	Baa3
11%-13%	Baa2
0.6	Ba2
	8
	(Baa1)

Source: Moody's Financial Metrics.

[1] All ratios calculated in accordance with Moody's Regulated Electric and Gas Utilities Rating Methodology using Moody's standard adjustments. In addition, Moody's adjusts for one-time items [2] Financial ratios reflect three year averages for 2008, 2009 and 2010. [3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 5 Page 4 of 5 divestitures.



© 2011 Moody's Investors Service, Inc. and/or its licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ARE MOODY'S INVESTORS SERVICE, INC.'S ("MIS") CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MIS DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. CREDIT RATINGS DO NOT CONSTITUTE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS ARE NOT RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. CREDIT RATINGS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MIS ISSUES ITS CREDIT RATINGS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SAI F

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED. REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources Moody's considers to be reliable, including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process. Under no circumstances shall MOODY'S have any liability to any person or entity for (a) any loss or damage in whole or in part caused by, resulting from, or relating to, any error (negligent or otherwise) or other circumstance or contingency within or outside the control of MOODY'S or any of its directors, officers, employees or agents in connection with the procurement, collection, compilation, analysis, interpretation, communication, publication or delivery of any such information, or (b) any direct, indirect, special, consequential, compensatory or incidental damages whatsoever (including without limitation, lost profits), even if MOODYS is advised in advance of the possibility of such damages, resulting from the use of or inability to use, any such information. The ratings, financial reporting analysis, projections, and other observations, if any, constituting part of the information contained herein are, and must be construed solely as, statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. Each user of the information contained herein must make its own study and evaluation of each security it may consider purchasing, holding or selling. NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

MIS, a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MIS have, prior to assignment of any rating, agreed to pay to MIS for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Shareholder Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Any publication into Australia of this document is by MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657, which holds Australian Financial Services License no. 336969. This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001.

Notwithstanding the foregoing, credit ratings assigned on and after October 1, 2010 by Moody's Japan K.K. ("MJKK")

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 5 Page 5 of 5

are MJKK's current opinions of the relative future credit risk of entities, credit commitments, or debt or debt-like securities. In such a case, "MIS" in the foregoing statements shall be deemed to be replaced with "MJKK". MJKK is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO.

This credit rating is an opinion as to the creditworthiness or a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be dangerous for retail investors to make any investment decision based on this credit rating. If in doubt you should contact your financial or other professional adviser.

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 6 Page 1 of 3



Announcement: Moody's Affirms outlook for Hydro One, lowers outlook for OPA and OEFC

Global Credit Research - 16 Dec 2011

Toronto, December 16, 2011 -- Moody's Affirms outlook for Hydro One, lowers outlook for OPA and OEFC

RATINGS RATIONALE

Moody's Investors Service affirmed its Aa3 Senior Unsecured and P-1 short-term ratings for Hydro One Inc. The outlook for the long-term rating remains stable. The Baseline Credit Assessment (BCA) was also affirmed at 8 (Baa1), together with High Default Dependence and High Probability of Support from the Province of Ontario, which is rated Aa1, but with its long-term rating outlook lowered to Negative from Stable yesterday. Moody's notes that Hydro One shows continuing improvement in key financial metrics that warrant this affirmation of its rating and stable outlook despite a lowering of the Province's own rating outlook. Hydro One's ratings outlook would likely be lowered to Negative should the Province's rating be downgraded to Aa2.

Moody's also affirmed the Aa1 Senior Unsecured rating of Ontario Electricity Financial Corporation ("OEFC"), but lowered its rating outlook to Negative from Stable in conjunction with the lowering of the Province of Ontario's rating outlook. All of OEFC's debt is either held by or guaranteed by the Province of Ontario. The rating would be lowered should the Province's long-term rating be lowered.

Finally, Moody's also affirmed the Aa1 Issuer rating of Ontario Power Authority ("OPA"), but lowered its rating outlook to Negative from Stable, in conjunction with the change in the Province's outlook. The BCA of OPA was affirmed at 4 (Aa3), while Default Dependence and Probability of Support from the Province both remain High. OPA's debt is not guaranteed by the Province. OPA's rating would likely be lowered should the Province be downgraded.

The methodologies used in this rating were Unregulated Utilities and Power Companies published in August 2009, and Government-Related Issuers: Methodology Update published in July 2010. Please see the Credit Policy page on www.moodys.com for a copy of these methodologies.

Hydro One Inc. is an electricity transmission and distribution company based in Ontario, Canada and wholly-owned by the Province of Ontario. Ontario Electricity Financial Corporation is a non-share capital corporation and the legal successor to the former Ontario Hydro. It is a Crown agency that is 100% controlled by the Province of Ontario. OEFC's mandate is to manage and retire the debt and certain other liabilities of the former Ontario Hydro including the power purchase agreements between the former Ontario Hydro and non-utility generators. Ontario Power Authority is a not-for-profit, non-share capital corporation established in 2004 by the Province of Ontario pursuant to the Electricity Restructuring Act and is regulated by the Ontario Energy Board (OEB). The OPA's broad mandate (ensuring a reliable, sustainable supply of electricity for Ontario) and specific objectives are set by the Province through legislation and regulation.

REGULATORY DISCLOSURES

Although this credit rating has been issued in a non-EU country which has not been recognized as endorsable at this date, this credit rating is deemed "EU qualified by extension" and may still be used by financial institutions for regulatory purposes until 31 January 2012. ESMA may extend the use of credit ratings for regulatory purposes in the European Community for three additional months, until 30 April 2012, if ESMA decides that exceptional circumstances arise that may imply potential market disruption or financial instability. Further information on the EU endorsement status and on the Moody's office that has issued a particular Credit Rating is available on www.moodys.com.

For ratings issued on a program, series or category/class of debt, this announcement provides relevant regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series or category/class of debt or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides relevant regulatory disclosures in relation to the rating action on the support provider and in relation to each particular rating action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides relevant regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the ratings tab on the issuer/entity page for the respective issuer on www.moodys.com.

Moody's considers the quality of information available on the rated entity, obligation or credit satisfactory for the purposes of issuing a rating.

Moody's adopts all necessary measures so that the information it uses in assigning a rating is of sufficient quality and from sources Moody's considers to be reliable including, when appropriate, independent third-party sources. However, Moody's is not an auditor and cannot in every instance independently verify or validate information received in the rating process.

Please see Moody's Rating Symbols and Definitions on the Rating Process page on www.moodys.com for further information on the meaning of each rating category and the definition of default and recovery.

Please see ratings tab on the issuer/entity page on www.moodys.com for the last rating action and the rating history. The date on which some ratings were first released goes back to a time before Moody's ratings were fully digitized and accurate data may not be available. Consequently, Moody's provides a date that it believes is the most reliable and accurate based on the information that is available to it. Please see the ratings disclosure page on our website www.moodys.com for further information.

Please see www.moodys.com for any updates on changes to the lead rating analyst and to the Moody's legal entity that has issued the rating.

In addition to the information provided below please find on the ratings tab of the issuer page at www.moodys.com, for each of the ratings covered, Moody's disclosures on the lead rating analyst and the Moody's legal entity that has issued each of the ratings.

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 6 Page 2 of 3 David Brandt

David Brandt
VP - Senior Credit Officer
Infrastructure Finance Group
Moody's Canada Inc.
70 York Street
Suite 1400
Toronto, ON M5J 1S9
Canada
(416) 214-1635

William L. Hess MD - Utilities Infrastructure Finance Group JOURNALISTS: 212-553-0376 SUBSCRIBERS: 212-553-1653

Releasing Office: Moody's Canada Inc. 70 York Street Suite 1400 Toronto, ON M5J 1S9 Canada (416) 214-1635



© 2011 Moody's Investors Service, Inc. and/or its licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE. INC. ("MIS") AND ITS AFFILIATES ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND CREDIT RATINGS AND RESEARCH PUBLICATIONS PUBLISHED BY MOODY'S ("MOODY'S PUBLICATIONS") MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources Moody's considers to be reliable, including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process. Under no circumstances shall MOODY'S have any liability to any person or entity for (a) any loss or damage in whole or in part caused by, resulting from, or relating to, any error (negligent or otherwise) or other circumstance or contingency within or outside the control of MOODY'S or any of its directors, officers, employees or agents in connection with the procurement, collection, compilation, analysis, interpretation, communication, publication or delivery of any such information, or (b) any direct, indirect, special, consequential, compensatory or incidental damages whatsoever (including without limitation, lost profits), even if MOODY'S is advised in advance of the possibility of such damages, resulting from the use of or inability to use, any such information. The ratings, financial reporting analysis, projections, and other observations, if any, constituting part of the information contained herein are, and must be construed solely as, statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. Each user of the information contained herein must make its own study and evaluation of each security it may consider purchasing, holding or selling. NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY

Filed: May 28, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 6 Page 3 of 3

PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

MIS, a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MIS have, prior to assignment of any rating, agreed to pay to MIS for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Shareholder Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Any publication into Australia of this document is by MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657, which holds Australian Financial Services License no. 336969. This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001.

Notwithstanding the foregoing, credit ratings assigned on and after October 1, 2010 by Moody's Japan K.K. ("MJKK") are MJKK's current opinions of the relative future credit risk of entities, credit commitments, or debt or debt-like securities. In such a case, "MIS" in the foregoing statements shall be deemed to be replaced with "MJKK". MJKK is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO.

This credit rating is an opinion as to the creditworthiness or a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be dangerous for retail investors to make any investment decision based on this credit rating. If in doubt you should contact your financial or other professional adviser.



Standard & Poor's Research

April 25, 2012

Filed: July 12, 2012 EB-2012-0031 Exhibit A-11-1

Research Update:

Hydro One Inc. Outlook To Negative From Stable Following Outlook Revision On Ontario

Primary Credit Analyst:

Nicole Martin, Toronto (1) 416-507-2560;nicole_martin@standardandpoors.com

Secondary Contact:

Stephen R Goltz, Toronto (1) 416-507-2592;stephen_goltz@standardandpoors.com

Table Of Contents

Overview

Rating Action

Rationale

Outlook

Related Criteria And Research

Ratings List

Research Update:

Hydro One Inc. Outlook To Negative From Stable Following Outlook Revision On Ontario

Overview

- We are revising our outlook on Hydro One Inc. to negative from stable.
- We are also affirming our ratings, including our 'A+' long-term corporate credit rating, on Hydro One.
- The outlook revision reflects that on the Province of Ontario.
- Despite the revision, our view that there is a "high" likelihood that the province would provide timely and sufficient extraordinary support in the event of financial distress has not changed.

Rating Action

On April 25, 2012, Standard & Poor's Ratings Services revised its outlook on electricity transmitter and distributor Hydro One Inc. to negative from stable. At the same time, Standard & Poor's affirmed its ratings, including its 'A+' long-term corporate credit rating on Hydro One.

The outlook revision reflects the outlook revision on the utility's owner, the Province of Ontario (AA-/Negative/A-1+), to negative from stable April 25, 2012. (For more information, see "Province of Ontario Outlook Revised To Negative From Stable On Risks To Fiscal Plan," published April 25, 2012, on RatingsDirect on the Global Credit Portal.) However, despite the outlook revision, our view that there is "high" likelihood the province would provide timely and sufficient extraordinary support in the event of financial distress has not changed.

Rationale

The ratings on Hydro One reflect Standard & Poor's opinion of the company's low-risk monopoly electricity transmission and distribution assets; secure and relatively predictable regulated cash flows; and the support of its owner, the province. We believe the utility has an excellent business risk profile and view its financial risk profile as significant on our expanded risk matrix. The company had C\$8.0 billion in reported total debt outstanding as of Dec. 31, 2011.

We base our 'A+' rating on Hydro One on our assessment of the company's stand-alone credit risk profile (SACP) of 'a' and our opinion that there is a "high" likelihood that the province would provide timely and sufficient extraordinary support in the event of financial distress. We view the company's role as "important" to the province and the link between it and the province as "very strong."

In our view, Hydro One has a significant financial risk profile. We believe its cash flow strength relative to its debt obligations has weakened in the past few years due to a material capital expenditure program. The company's annual capital expenditures were C\$1.5 billion in 2010 and 2011, exceeding its internal cash flow generation (C\$1.1 billion in adjusted funds from operations [AFFO] in both 2010 and 2011). Because Hydro One has budgeted annual capital expenditures of about C\$1.8 billion in each of the next two years, we believe that it will continue to face significantly sizable negative free operating cash flow in the next few years.

Liquidity

The short-term rating on Hydro One is 'A-1'. We believe the company has adequate liquidity to cover its needs in the near term, even in the event of unforeseen earnings declines. Standard & Poor's assessment incorporates the following expectations and assumptions:

- Hydro One's liquidity sources, including liquid short-term investments, FFO, and credit facility availability, will likely exceed its uses 1.2x or more in the next 12 months.
- Liquidity sources include an expectation of about C\$1.3 billion of FFO, access to C\$1.25 billion of the company's committed revolving credit facility with a syndicate of banks, and C\$228 million liquid short-term investments as of Dec. 31, 2011. The C\$1.25 billion credit facility was fully available as of Dec. 31, and will expire in June 2014. Hydro One remains well within its banking covenant of 75% total debt-to-total capital.
- Liquidity uses include C\$600 million of maturing debt in 2012, an estimated dividend payment of approximately C\$300 million, and about C\$1.8 billion of capital expenditures, of which about C\$400 million is discretionary.
- The company has what we consider good relationships with its banks and good standing in the debt market. We understand that the utility also holds a C\$250 million note issued by the province that matures in 2014, which it could liquidate if needed. It could also reduce its dividend payment to help satisfy its cash requirements. The company's debt maturities are well spread, in our view, with annual scheduled repayment in the next six years averaging about C\$600 million.

Hydro One provides the Independent Electricity System Operator (IESO) with C\$325 million in parental guarantees in lieu of prudential support. If all the ratings on the utility were to fall, the IESO's prudential requirements would likely increase.

Outlook

The negative outlook reflects the outlook revision on Ontario. Based on our criteria for government-related entities, given a high likelihood of extraordinary support, an 'a' SACP for Hydro One and our 'AA-' rating on the

province, a one- or two-notch downgrade on the province would affect the ratings on Hydro One, but likely not more than one notch given the company's underlying credit strength. We still consider Hydro One's performance to be consistent and expect continued predictable regulatory support despite its large capital expenditure program and negative free operating cash flows. In the event of lower-than-expected cash flows and earnings, we expect the company to maintain its leverage within the deemed capital structure of 60% reported debt-to-capital, AFFO-to-debt of about 12%, and AFFO interest coverage of about 3x, by curtailing its capital spending and additional debt financing. In our view, there is no cushion for Hydro One to deteriorate from our expectations on its key credit measures to maintain the ratings. A material adverse regulatory ruling or market restructuring (such as the assumption of the obligation to supply, not just deliver, electricity), or any deterioration of financial measures beyond our expectation, could lead us to lower the existing 'a' SACP and consequently the ratings, regardless of any changes to Ontario. An improvement in the company's SACP is unlikely without the assurance of a much stronger balance sheet, and deeper cash flow-interest and debt coverage. A change in the relationship with the province that leads us to reconsider the likelihood of Hydro One receiving support could also move the ratings.

Related Criteria And Research

- Rating Government-Related Entities: Methodology And Assumptions, Dec. 9, 2010
- Criteria Methodology: Business Risk/Financial Risk Matrix Expanded, May 27, 2009

Ratings List

Outlook Revised To Negative

To From

Hydro One Inc.

Corporate credit rating A+/Negative/A-1 A+/Stable/A-1

Ratings Affirmed

Hydro One Inc.

Senior unsecured debt A+

Commercial paper

Global scale A-1

Canada scale A-1(Mid)

Complete ratings information is available to subscribers of RatingsDirect on the Global Credit Portal at www.globalcreditportal.com. All ratings affected by this rating action can be found on Standard & Poor's public Web site at www.standardandpoors.com. Use the Ratings search box located in the left

Research Update: Hydro One Inc. Outlook To Negative From Stable Following Outlook Revision On Ontario column.

Copyright © 2012 by Standard & Poor's Financial Services LLC (S&P), a subsidiary of The McGraw-Hill Companies, Inc. All rights reserved.

No content (including ratings, credit-related analyses and data, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P. The Content shall not be used for any unlawful or unauthorized purposes. S&P, its affiliates, and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P's opinions and analyses do not address the suitability of any security. S&P does not act as a fiduciary or an investment advisor. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

The McGraw-Hill Companies

Filed: July 12, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 8 Page 1 of 4



Rating Action: Moody's downgrades Hydro One to A1, outlook stable

Global Credit Research - 27 Apr 2012

Toronto, April 27, 2012 – Moody's Investors Service has downgraded Hydro One Inc.'s senior unsecured rating to A1 from Aa3, and affirmed its P-1 short term rating. The Baseline Credit Assessment (BCA) was also affirmed at 8 (Baa1), together with high default dependence and high probability of support from the Province of Ontario ("Province"). The outlook for the long term rating is stable. Moody's notes that this rating action is being taken in conjunction with the downgrade of the Province's senior unsecured rating to Aa2, outlook stable, from Aa1, outlook negative. At the same time, this rating action reflects Moody's assessment that the improving financial metrics for Hydro One, cited as the basis for maintaining a stable outlook in December, 2011 when the outlook for the Province was changed to negative, are now likely to level off below measures Moody's anticipated.

RATINGS RATIONALE

Hydro One's A1 senior unsecured rating is a reflection of a Baseline Credit Assessment (BCA) of 8 (Baa1on a scale of 1-21, where 1 represents the equivalent risk of an Aaa, 2 an Aa1, 3 an Aa2 and so on) together with Moody's expectation of high default dependence and high probability of support from the Province of Ontario (Aa2). Hydro One's BCA of 8 is primarily driven by Moody's view that Hydro One is a well managed business with a deliverable business strategy that should not be unduly affected by the economic challenges facing the Province. However, slow growth expectations for the provincial economy and the Province's energy policy implications for Hydro One's capital expenditures do have an impact on financial performance and have stalled the improving metrics although the overall result remains a BCA of 8. At the same time, Moody's remains cognizant of the close linkage Hydro One has to the Province, as reflected in the uplift to Hydro One's rating, and the possibility that the Province's actions to address budget challenges may impact Hydro One's capital expenditures or dividend policy, either of which could have a negative effect on the financial performance of Hydro One.

WHAT COULD CHANGE THE RATING UP/DOWN

A change in the rating or outlook for the Province would put pressure, either up or down, on Hydro One's rating. Likewise, changes in government policy that would materially affect dividends, capital expenditures or revenue for Hydro One would affect the financial metrics although we would not expect there to be sufficient movement to move the overall rating in either direction.

The methodologies used in this rating were Regulated Electric and Gas Utilities published in August 2009, and Government-Related Issuers: Methodology Update published in July 2010. Please see the Credit Policy page on www.moodys.com for a copy of these methodologies.

Headquartered in Toronto, Ontario, Hydro One is a commercial corporation, 100% owned by the Province of Ontario. Virtually all of Hydro One's revenues and cash flows are derived from its electricity transmission and distribution businesses, both of which are regulated by the Ontario Energy Board (OEB). Hydro One owns and operates virtually all of Ontario's electricity transmission system and a substantial portion of the province's electricity distribution assets.

REGULATORY DISCLOSURES

Although this credit rating has been issued in a non-EU country which has not been recognized as endorsable at this date, this credit rating is deemed "EU qualified by extension" and may still be used by financial institutions for regulatory purposes until 30 April 2012. Further information on the EU endorsement status and on the Moody's office that has issued a particular Credit Rating is available on www.moodys.com.

For ratings issued on a program, series or category/class of debt, this announcement provides relevant regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series or category/class of debt or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides relevant regulatory disclosures in relation to the rating action on the support provider and in relation to each particular rating action for

securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides relevant regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the ratings tab on the issuer/entity page for the respective issuer on www.moodys.com.

Information sources used to prepare the rating are the following: parties involved in the ratings, parties not involved in the ratings, public information, and confidential and proprietary Moody's Investors Service information.

Moody's considers the quality of information available on the rated entity, obligation or credit satisfactory for the purposes of issuing a rating.

Moody's adopts all necessary measures so that the information it uses in assigning a rating is of sufficient quality and from sources Moody's considers to be reliable including, when appropriate, independent third-party sources. However, Moody's is not an auditor and cannot in every instance independently verify or validate information received in the rating process.

Please see the ratings disclosure page on www.moodys.com for general disclosure on potential conflicts of interests.

Please see the ratings disclosure page on www.moodys.com for information on (A) MCO's major shareholders (above 5%) and for (B) further information regarding certain affiliations that may exist between directors of MCO and rated entities as well as (C) the names of entities that hold ratings from MIS that have also publicly reported to the SEC an ownership interest in MCO of more than 5%. A member of the board of directors of this rated entity may also be a member of the board of directors of a shareholder of Moody's Corporation; however, Moody's has not independently verified this matter.

Please see Moody's Rating Symbols and Definitions on the Rating Process page on www.moodys.com for further information on the meaning of each rating category and the definition of default and recovery.

Please see ratings tab on the issuer/entity page on www.moodys.com for the last rating action and the rating history.

The date on which some ratings were first released goes back to a time before Moody's ratings were fully digitized and accurate data may not be available. Consequently, Moody's provides a date that it believes is the most reliable and accurate based on the information that is available to it. Please see the ratings disclosure page on our website www.moodys.com for further information.

Please see www.moodys.com for any updates on changes to the lead rating analyst and to the Moody's legal entity that has issued the rating.

David Brandt VP - Senior Credit Officer Infrastructure Finance Group Moody's Canada Inc. 70 York Street Suite 1400 Toronto, ON M5J 1S9 Canada (416) 214-1635

William L. Hess MD - Utilities Infrastructure Finance Group JOURNALISTS: 212-553-0376 SUBSCRIBERS: 212-553-1653

Releasing Office: Moody's Canada Inc. 70 York Street Suite 1400 Toronto, ON M5J 1S9 Canada (416) 214-1635



© 2012 Moody's Investors Service, Inc. and/or its licensors and affiliates (collectively, "MOODY'S"), All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. ("MIS") AND ITS AFFILIATES ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND CREDIT RATINGS AND RESEARCH PUBLICATIONS PUBLISHED BY MOODY'S ("MOODY'S PUBLICATIONS") MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR, MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources Moody's considers to be reliable, including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process. Under no circumstances shall MOODY'S have any liability to any person or entity for (a) any loss or damage in whole or in part caused by, resulting from, or relating to, any error (negligent or otherwise) or other circumstance or contingency within or outside the control of MOODY'S or any of its directors, officers, employees or agents in connection with the procurement, collection, compilation, analysis, interpretation, communication, publication or delivery of any such information, or (b) any direct, indirect, special, consequential, compensatory or incidental damages whatsoever (including without limitation, lost profits), even if MOODY'S is advised in advance of the possibility of such damages, resulting from the use of or inability to use, any such information. The ratings, financial reporting analysis, projections, and other observations, if any, constituting part of the information contained herein are, and must be construed solely as,

statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. Each user of the information contained herein must make its own study and evaluation of each security it may consider purchasing, holding or selling. NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

MIS, a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MIS have, prior to assignment of any rating, agreed to pay to MIS for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Shareholder Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Any publication into Australia of this document is by MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657, which holds Australian Financial Services License no. 336969. This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001.

Notwithstanding the foregoing, credit ratings assigned on and after October 1, 2010 by Moody's Japan K.K. ("MJKK") are MJKK's current opinions of the relative future credit risk of entities, credit commitments, or debt or debt-like securities. In such a case, "MIS" in the foregoing statements shall be deemed to be replaced with "MJKK". MJKK is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO.

This credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be dangerous for retail investors to make any investment decision based on this credit rating. If in doubt you should contact your financial or other professional adviser.

Rating Report

Report Date: June 20, 2012 Previous Report: February 29, 2012

Filed: July 12, 2012 EB-2012-0031 Exhibit A-11-1 Attachment 9 Page 1 of 8



Insight beyond the rating.

Hydro One Inc.

Analysts James Jung, CFA, FRM, CMA

+1 416 597 7577 jjung@dbrs.com

Chenny Long +1 416 597 7451

clong@dbrs.com

The Company

Hydro One Inc. is the largest regulated electric transmission and distribution utility in Ontario, serving more than 97% of the province's transmission throughout. The Company also owns a fibre-optic network across most of Ontario. Hydro One is wholly owned by the Province of Ontario (rated AA (low)).

Commercial Paper

Authorized Limit of \$1.0 Billion

Recent Actions February 29, 2012 Confirmed

January 11, 2012 \$300 Million Issue Rated A (high)

Rating	
T. MOS ON KANA	

Debt Rated	Rating	Trend							
Commercial Paper	R-1 (middle)	Stable							
Senior Unsecured Debentures	A (high)	Stable							

Rating Rationale

The credit quality of Hydro One Inc. (Hydro One or the Company) is based on the Company's low-risk regulated transmission and distribution businesses, a supportive regulatory environment in Ontario and the Company's strong financial profile. Hydro One's regulated transmission and distribution businesses in Ontario account for virtually 100% of total earnings.

Regulation in Ontario has remained supportive for Hydro One. The Ontario Energy Board (OEB) is expected to continue to allow the Company to maintain adequate coverage, cash flow and leverage ratios due to the government's commitment to address Hydro One's aging infrastructure while meeting the continued growth of electricity consumption and renewable energy developments in the province without compromising reliability. The confirmation assumes that Hydro One's transmission and distribution revenue base will continue to grow favourably to support a high level of capital expenditure (capex), which is expected to continue to far exceed depreciation. Project execution risk is expected to be manageable; the Company is experienced in managing projects and is focused on mitigating the risk of cost overruns. On June 19, 2012, Hydro One's Bruce to Milton Transmission line came in-service, which transports 3,000 megawatts (MW) of power from nuclear and wind facilities.

Hydro One's credit metrics have remained relatively stable over the past four years. The Company generated a cash flow deficit of approximately \$225 million for the three months ended March 31, 2012 (Q1 2012), which is debt-financed. The deficit was largely driven by ongoing high capex attributable to the Advanced Distribution System project and infrastructure sustainability spending. As a result of the ongoing high investment commitment (\$1.8 billion per annum for the 2012-2014 period) and resulting incremental debt issuances, DBRS expects a temporary modest weakening of Hydro One's key credit metrics over the next several years. However, these ratios are expected to gradually recover when substantial capex plans are completed, and should remain well within the A (high) rating category.

Rating Considerations

Strengths

- (1) Low business risk
- (2) Strong financial profile
- (3) Strong and extensive franchise area

Challenges

- (1) High level of planned capital expenditure
- (2) Project construction risk
- (3) Significant external financing requirements

Financial Information

	USGAAP	USGAAP	USGAAP	CGAAP	CGAAP	CGAAP	CGAAP	CGAAF
Hydro One	3 mos.	Mar. 31	12 mos. Mar. 31		For the year	ber 31		
(CA\$ millions where applicable)	2012	2011	2012	2011	2010	2009	2008	2007
EBIT gross interest coverage (times)	3.13	3.28	2,72	2.75	2.42	2.23	2.71	2.88
Total debt in capital structure	56.6%	56.1%	56.6%	55.5%	56.5%	56.2%	54.5%	53.5%
Cash flow/Total debt	16.9%	18.5%	14.4%	15.1%	13.8%	13.4%	15.1%	17.9%
Cash flow/Capital expenditure (times)	1.19	1.31	0.86	0.88	0.69	0.63	0.78	0.92
Net income before extraordinary items	208	209	632	632	579	470	498	399
Cash flow from operations	352	362	1,201	1,211	1,070	930	927	1,006



Report Date: June 20, 2012

Rating Considerations

Strengths

- (1) Low business risk. Almost all of the Company's EBIT is contributed by its low-risk regulated distribution and transmission business, which operates under a reasonable regulatory framework.
- (2) Strong financial profile. The Company continues to maintain strong and stable credit metrics and a healthy balance sheet (debt-to-capital ratio at 56.6%, EBIT interest coverage at 2.72 times and cash flow-to-debt at 14.4%, for the twelve months ended March 31, 2012).
- (3) Strong and extensive franchise area. Hydro One owns the largest transmission and distribution businesses in Ontario. The Company serves more than 97% of the province's transmission throughput. The distribution component of the Company spans approximately 75% of the province, serving 1.4 million customers (rural and urban) as well as 435 large-user customers.

Challenges

- (1) High level of planned capital expenditure. Hydro One is currently in the midst of an aggressive build-out program that will continue over the next several years. Capex is expected to be approximately \$5.5 billion over the next three years. Therefore, DBRS expects that annual capex could exceed operating cash flows by approximately \$700 million to \$800 million per year over that time frame. These sizable free cash flow deficits, combined with lengthy construction times, will continue to put temporary pressure on the balance sheet and coverage ratios during the build-out.
- (2) Project construction risk. The size and magnitude of Hydro One's upcoming designated projects, combined with the continued increases in material and labour costs and the significant number of interveners involved, could potentially expose Hydro One to rising project costs beyond the amounts forecast in its regulatory applications. There is no assurance that cost overruns beyond the regulatory-approved amounts will be recovered if deemed imprudent by the OEB. However, DBRS notes that Hydro One is experienced in managing projects and is focused on mitigating the risk of cost overruns.
- (3) Significant external funding requirements. Significant external funding is required to finance the potentially sizable free cash flow deficits expected over the near to medium term. Maintaining adequate access to the public debt markets (term and commercial paper) is critical to the Company during this key build-out phase.

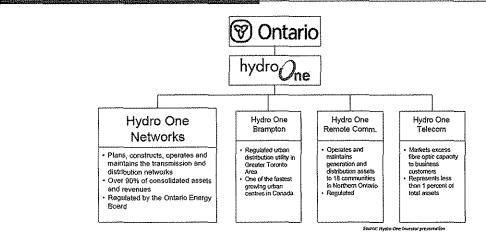
Major Projects (Potential and Under Construction)

- West of London Transmission Lines. Projects with the aim of adding between 500 MW and 1,000 MW to the grid. These projects are in the early stages with an expected completion date in 2017, contingent on the necessary regulatory approvals. Estimated costs range from \$300 million to \$450 million.
- East-West Tie Project. Through the East-West Tie LP (an equal partnership between three entities, including Hydro One), Hydro One is looking to construct a 400-kilometre, 230 kV transmission line from Wawa to Thunder Bay with a total capacity of 650 MW.



Report Date: June 20, 2012

Organization Chart



Regulation

- Hydro One is a regulated electric utility under the jurisdiction of the OEB.
- The OEB uses a deemed debt-to-common equity structure of 60% to 40% for both transmission and distribution. Debt is divided into 56% long term and 4% short term.
- Approximately 54% of Hydro One's earnings are generated from transmission and the remainder from distribution.

Transmission

- Under the cost-of-service methodology, Hydro One is provided a reasonable opportunity to recover its forecast costs, including operating expenses, depreciation, costs of debt and taxes.
- The Company has no exposure to either commodity price risk or volume risk.
- Hydro One faces the risk of not recovering forecast operating expenses if the actual expenses exceed the forecast expenses, but this risk is considered manageable by DBRS.
- On December 20, 2011, the OEB came to a decision regarding revenue requirements for 2012 of \$1,418 million (up from \$1,346 million in 2011), translating into an increase of 5% in 2012.
- In 2012, Hydro One's allowed return on equity (ROE) is 9.42%, a decrease from 9.66% in 2011, and deemed common equity is 40%, both of which are at reasonable levels.
- On May 28, 2012, Hydro One filed a rate application with OEB for its 2013/2014 revenue requirement.

Distribution

- The OEB uses a combination of an annual incentive regulation mechanism (IRM) and periodic cost-of-service (COS) reviews to set distribution rates.
- In DBRS's view, the IRM typically creates higher cost-cutting pressure than the COS does; however, the cost pressure has not resulted in a material reduction in the Company's earnings and cash flows.
- The Company is allowed to fully recover its purchased power costs in a timely fashion, eliminating its exposure to power price risk. DBRS views this as a positive factor in the current regulatory system in Ontario (regardless of whether the Company operates under the IRM or the COS).
- In 2012, Hydro One's allowed ROE is 9.42%, a decrease from 9.66% in 2011, and deemed common equity was 40%, both of which are at reasonable levels.
- On May 28, 2012 Hydro One filed an IRM rate application with the OEB for 2013.



Report Date: June 20, 2012

Earnings and Outlook

			KS#					
	USGAAP	USGAAP	USGAAP	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP
	3 mos.	Mar. 31	12 mos. Mar. 31		For the year	r ended Deceml	oer 31	
(CA\$ millions)	2012	2011	2012	2011	2010	2009	2008	2007
Net revenues	1,468	1,460	5,479	5,471	5,124	4,744	4,597	4,655
EBITDA	477	479	1,749	1,751	1,572	1,361	1,451	1,420
EBIT	325	335	1,125	1,135	989	824	903	899
Gross interest expense	(104)	(102)	(414)	(412)	(409)	(369)	(333)	(312)
Earning before taxes	. 239	247	771	779	630	516	611	604
Net income before non-recurring items	208	209	632	632	579	470	498	399
Reported net income	210	212	639	641	591	470	498	399
Return on equity	13.5%	14.5%	10.1%	10.2%	10.2%	8.9%	10.0%	8.2%

2011 Summary

• Hydro One's earnings have continued to increase over the past five years, mainly due to the Company's increased regulatory asset base, driven by high capex.

Segmented Information	3 mos. Ma	r. 31	For the year ended December 31					
(CA\$ millions)	%	2012	2011	2010	2009	2008	2007 *	
Net revenues				***************************************				
Transmission	48.8%	361	1,389	1,307	1,147	1,212	1,242	
Distribution	49.0%	362	1,391	1,280	1,208	1,153	1,142	
Other	2.2%	. 16	63	63	63	51	31	
Total net revenues	100.0%	739	2,843	2,650	2,418	2,416	2,415	
EBIT by segment					-			
Transmission	53.5%	174	665	618	469	571	585	
Distribution	45.2%	147	478	378	357	335	320	
Other	1.2%	4	(8)	(7)	(2)	(3)	(6)	
Total EBIT	100.0%	325	1,135	989	824	903	899	

^{*} DBRS adjusted Transmission earnings for non-cash items to normalize impact from OEB rate decision.

2012 Outlook

- The Company's earnings for fiscal 2012 are expected improve further due to continued growth in rate base.
- The increase in rate base will be primarily due to Hydro One's growing capex needs in the near future, as it continues to service its aging infrastucture in the trasmission and distribution businesses.



Report Date: June 20, 2012

Financial Profile

	USGAAP	USGAAP	USGAAP	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP
	3 mos	. Mar. 31	12 mos. Mar. 31	For the year ended December 31			ber 31	
(CA\$ millions)	2012	2011	2012	2011	2010	2009	2008	2007
Net income before non-recurring items	208	209	632	632	579	470	498	399
Depreciation & amortization	139	131	558	550	526	487	502	482
Deferred income taxes and other	5	22	12	29	(35)	(27)	(73)	125
Cash flow (bef. working cap. changes)	352	362	1,201	1,211	1,070	930	927	1,006
Dividends paid	(281)	(42)	(407)	(168)	(28)	(188)	(259)	(325)
Capital expenditures	(296)	(277)	(1,390)	(1,371)	(1,557)	(1,473)	(1,185)	(1,091)
Free cash flow (bef. working cap. changes)	(225)	43	(596)	(328)	(515)	(731)	(517)	(410)
Changes in non-cash work, cap, items	(115)	(122)	203	196	94	(38)	125	135
Net Free Cash Flow	(340)	(79)	(393)	(132)	(421)	(769)	(392)	(275)
Acquisitions & long-term investments	(21)	(18)	(79)	(76)	(263)	(93)	(99)	0
Short-term investments	0	0	0	0	0	0	0	0
Proceeds on asset sales	0	0	0	0	0	0	0	0
Net equity change	0	0	0	0	0	0	0	0
Net debt change	300	50	450	200	845	805	510	285
Other	1	3	23	25	37	15	9	7
Change in cash	(60)	(44)	1	17	198	(42)	28	17
Total debt	8,330	7,846	8,330	8,038	7,778	6,962	6,133	5,615
Cash and equivalents	0	0	0	0	33	0	16	0
Total debt in capital structure	56.6%	56.1%	56,6%	55.5%	56.5%	56.2%	54.5%	53.5%
Cash flow/Total debt	16.9%	18.5%		15.1%	13.8%	13.4%	15.1%	17.9%
EBIT gross interest coverage (times)	3.13	3,28		2,75	2.42	2.23	2.71	2.88
Dividend payout ratio	135.1%	20.1%	: .	26.6%	4.8%	40.0%	52.0%	81.5%

2011 Summary

- Overall, Hydro One has maintained a strong financial profile, reflecting a stable balance sheet and reasonable credit metrics for the current ratings.
- · Cash flow from operations remains strong, improving over time due to an increased rate base.
- Cash flow deficits persist primarily due to increased developmental capex.
- Unlike other provincially and municipally owned distributors, Hydro One benefits from a flexible dividend program, unrestricted by an earnings threshold level.
- Key credit metrics including leverage, interest coverage and cash flow ratios have remained within the A (high) rating category.

2012 Outlook

- DBRS expects a temporary modest weakening of Hydro One's key credit metrics over the next several years. However, these ratios are expected to gradually recover when substantial capex plans are completed, and remain reasonable for the current rating category.
- Cash flow from operations is expected to grow over the medium to long term, predominately driven by growth in the asset base.
- DBRS anticipates that free cash flow will continue to be affected by higher capital spending on the Company's aging infrastructure. Hydro One has budgeted \$1.8 billion per annum over the next three years, with maintenance capex expected to be \$700 million in 2012, \$950 million in 2013 and \$1,000 million in 2014.



Report Date: June 20, 2012

Description of Operations

- Hydro One is the largest electricity transmission and distribution company in Ontario.
- It operates three distinct business segments:

(1) Transmission

- One of the largest in North America, as measured by assets.
- Has 29,000 kilometres of high-voltage network serving its own distribution network, as well as 48 local distribution companies and 93 transmission connected companies.
- Owns and operates approximately 96% of transmission capacity in Ontario, as measured by revenues.

(2) Distribution

- Largest distribution system in the province, based on assets, covering about 75% of Ontario.
- Distributes electricity over 120,500 kilometres, reaching approximately 1.4 million customers in a number of municipalities and rural areas.

(3) Other Businesses

 Services related to Hydro One Telecom Inc., marketing dark and lit fibre-optic capacity to commercial carriers and telecommunication carriers.

Long-Term Debt Maturities and Bank Lines

• The Company's liquidity profile remains reasonable for the Company's current rating.

(CA\$ millions - As at Mar. 31, 2012)	Amount	Draw/LOCs	Available	Maturity
Cash & Cash Equivalents	**	-	-	
Committed Revolving Facility	1,250	~	1,250	1-Jun-17
Ontario Floating Rate Notes	250	-	250	2014
	······································	Total	1 500	

- Hydro One has access to a \$1.0 billion commercial paper program supported by an unused revolving facility (\$1.25 billion), as well as the holding of Province of Ontario Floating-Rate Notes (\$250 million).
- Hydro One has a \$3 billion base shelf prospectus, of which approximately \$1.9 billion still available for issuance, that expires in September 2013.
- On January 12, 2012, Hydro One issued \$300 million in 3.20% notes under its Medium Term Notes (MTN) Program with a maturity date of January 12, 2022.
- On May 22, 2012, Hydro One issued \$125 million in 4.0% MTN maturing December 22, 2051 and \$300 million in 3.20% MTN maturing January 13, 2022.
- Hydro One's continued access to the capital markets through its MTN and commercial paper programs will
 be crucial over the next few years, given its infrastructure upgrade mandate. Despite the Company's debt
 maturities in the medium term, DBRS does not anticipate that Hydro One will have any problem
 refinancing as needed.

Long-term Debt Maturities								
(CA\$ millions - As at March 31, 2012)	2012	2013	2014	2015	2016+	Total		
Amount	600	600	750	550	5,775	8,275		
% of Total	7.3%	7.3%	9.1%	6.6%	69.8%	100.0%		



Report Date: June 20, 2012

			Hydro (One			
	USGAAP	CGAAP	CGAAP	•	USGAAP	CGAAP	CGAAP
Balance Sheet (CA\$ millions)	Mar. 31	Dec. 31	Dec. 31		Mar. 31	Dec. 31	Dec. 31
Assets	<u>2012</u>	2011	2010	Liabilities & Equity	<u>2012</u>	2011	<u>2010</u>
Cash & equivalents	0	0	33	S.T. borrowings	32	39	0
Accounts receivable	994	961	911	Accounts payable	146	1,071	884
Inventories	24	25	21	Current portion L.T.D.	600	600	500
Prepaid expenses & other	218	291	224	Deferred tax	0	0	0
				Other current liab.	935	110	156
Total Current Assets	1,236	1,277	1,189	Total Current Liab.	1,713	1,820	1,540
Net fixed assets	15,072	14,903	14,061	Long-term debt	7,698	7,399	7,278
Future income tax assets	16	17	19	Deferred income taxes	798	758	693
Goodwill & intangibles	366	357	322	Other L.T. liab.	2,411	1,937	1,830
Investments & others	2,313	1,814	1,731	Shareholders' equity	6,383	6,454	5,981
Total Assets	19,003	18,368	17,322	Total Liab. & SE	19,003	18,368	17,322

	USGAAP	USGAAP	USGAAP	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP
Balance Sheet &	3 mos.	Mar. 31	12 mos. Mar. 31		For the year ended December 31			
Liquidity & Capital Ratios	2012 2011		2012	2011	2010	2009	2008	2007
Current ratio	0.72	1.00	0,72	0.70	0.77	0.59	0.67	0.62
Total debt in capital structure	56,6%	56.1%	56.6%	55.5%	56.5%	56,2%	54.5%	53.5%
Cash flow/Total debt	16.9%	18.5%	14.4%	15.1%	13.8%	13.4%	15.1%	17.9%
Cash flow/Adjusted total debt	16.8%	18.4%	14,3%	15.0%	13.7%	13.3%	15.0%	17.8%
(Cash flow-dividends)/Capex	0.24	1.16	0,57	0.76	0.67	0.50	0.56	0.62
Dividend payout ratio	135.1%	20.1%	64.4%	26.6%	4.8%	40.0%	52.0%	81.5%
Coverage Ratios (times)								
EBIT gross interest coverage	3.13	3.28	2.72	2.75	2.42	2,23	2.71	2.88
EBITDA gross interest coverage	4.59	4.70	4.22	4.25	3.84	3.69	4.36	4.55
Fixed-charge coverage	3.13	3.28	2.71	2.75	2.41	2.24	2.73	2.86
Profitability Ratios								
EBITDA margin	32.5%	32.8%	31.9%	32.0%	30.7%	28.7%	31.6%	30.5%
EBIT margin	22.1%	23.0%	20.5%	20.8%	19.3%	17.4%	19.6%	19.3%
Profit margin	14.2%	14.3%	11.5%	11.6%	11.3%	9.9%	10.8%	8.6%
Return on equity	13.5%	14.5%	10.1%	10.2%	10.2%	8.9%	10.0%	8.2%
Return on capital	7.4%	8.2%	6.0%	6.3%	6.3%	5.7%	6.4%	5.6%



Report Date: June 20, 2012

Ratings

Debt Rated	Rating	Trend
Commercial Paper	R-1 (middle)	Stable
Senior Unsecured Debentures	A (high)	Stable

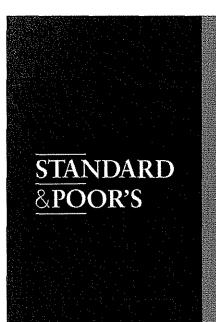
Rating History

·	Current	2011	2010	2009	2008					
Commercial Paper	R-1 (middle)									
Senior Unsecured Debentures	A (hìgh)	A (high)	A (hìgh)	A (high)	A (high)					

Note

All figures are in Canadian dollars unless otherwise noted.

Copyright © 2012, DBRS Limited, DBRS, Inc. and DBRS Ratings Limited (collectively, DBRS). All rights reserved. The information upon which DBRS ratings and reports are based is obtained by DBRS from sources DBRS believes to be accurate and reliable. DBRS does not audit the information it receives in connection with the rating process, and it does not and cannot independently verify that information in every instance. The extent of any factual investigation or independent verification depends on facts and circumstances. DBRS ratings, reports and any other information provided by DBRS are provided "as is" and without representation or warranty of any kind. DBRS hereby disclaims any representation or warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability, fitness for any particular purpose or non-infringement of any of such information. In no event shall DBRS or its directors, officers, employees, independent contractors, agents and representatives (collectively, DBRS Representatives) be liable (1) for any inaccuracy, delay, loss of data, interruption in service, error or omission or for any damages resulting therefrom, or (2) for any direct, indirect, incidental, special, compensatory or consequential damages arising from any use of ratings and rating reports or arising from any error (negligent or otherwise) or other circumstance or contingency within or outside the control of DBRS or any DBRS Representative, in connection with or related to obtaining, collecting, compiling, analyzing, interpreting, communicating, publishing or delivering any such information. Ratings and other opinions issued by DBRS are, and must be construed solely as, statements of opinion and not statements of fact as to credit worthiness or recommendations to purchase, sell or hold any securities. A report providing a DBRS rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. DBRS receives compensation for its rating activities from issuers, insurers, guarantors and/or underwriters of debt securities for assigning ratings and from subscribers to its website. DBRS is not responsible for the content or operation of third party websites accessed through hypertext or other computer links and DBRS shall have no liability to any person or entity for the use of such third party websites. This publication may not be reproduced, retransmitted or distributed in any form without the prior written consent of DBRS. ALL DBRS RATINGS ARE SUBJECT TO DISCLAIMERS AND CERTAIN LIMITATIONS, PLEASE READ THESE DISCLAIMERS AND LIMITATIONS AT http://www.dbrs.com/about/disclaimer. ADDITIONAL INFORMATION REGARDING DBRS RATINGS, INCLUDING DEFINITIONS, POLICIES AND METHODOLOGIES, ARE AVAILABLE ON http://www.dbrs.com.



Bile Billing Basings EB-2012-0091 Exhibit A-H-I Attachment 10 Page Lof 14

Standard & Poor's Research

Hydro One Inc.

Primary Credit Analyst:

Stephen R Goltz, Toronto (1) 416-507-2592; stephen_goltz@standardandpoors.com

Secondary Contact:

Faye Lee, Toronto (1) 416-507-2568; faye_lee@standardandpoors.com

Table Of Contents

Major Rating Factors

Rationale

Outlook

Business Description

Rating Methodology

Excellent Business Risk Profile

Significant Financial Risk Profile

Related Criteria And Research

See Terms of Use/Disclaimer on the last page.

Major Rating Factors

Strengths:

- · Low-risk electricity transmission and distribution network businesses
- · Natural monopoly position
- Regulated cash flows
- · Supportive shareholder

Weaknesses:

- · Large capital expenditure program
- Weak financial measures that leave no cushion for the current ratings

Corporate Credit Rating A+/Negative/A-1

Rationale

The ratings on Hydro One Inc., a large, regulated transmission and electricity distribution company in the Province of Ontario (AA-/Negative/A-1), reflect Standard & Poor's Ratings Services' opinion of the company's low-risk monopoly electricity transmission and distribution assets; secure and relatively predictable regulated cash flows; and the support of its owner, the province. We believe the utility has an excellent business risk profile and view its financial risk profile as significant.

We base our 'A+' rating on Hydro One on what we assess as the company's stand-alone credit risk profile (SACP) of 'a' and our opinion that there is a "high" likelihood that the province would provide timely and sufficient extraordinary support in the event of financial distress. We view the company's role as "important" to the province and the link between it and the province as "very strong."

We believe the company's monopoly position, the business' asset-intensive nature, and regulatory oversight limiting competitive risk all support an excellent business risk profile. Hydro One owns and operates substantially all of Ontario's electricity transmission system, and its distribution service territory covers about 75% of the province. In our view, the business carries relatively low operating risk and exhibits average operational efficiency and reliability.

The Ontario Energy Board's (OEB) regulatory framework supports Hydro One's cash flow stability, and we view cost recovery as generally predictable. We do not expect any near-term shift in energy policy that would affect the credit quality, although we expect the OEB to be mindful of overall electricity costs to consumers in the current economic environment and stagnant load growth in approving proposed prudent spending by utilities. The framework allows for the recovery of prudent transmission and distribution costs and the opportunity to earn a modest-but-predictable return. Furthermore, the company's exposure to commodity risk is limited. Commodity costs flow through to the customer and the utility has no obligation to ensure an adequate supply of electricity in the province.

In our view, Hydro One has a significant financial risk profile. Its cash flow strength relative to its debt obligations has weakened since 2009 due to a material capital expenditure program. Adjusted funds from operations (AFFO)-to-debt

declined to 11%-12% in 2009-2011, compared with 14%-15% in 2006-2008. Based on our forecast, we expect that Hydro One will generate annual FFO of about C\$1.2 billion-C\$1.3 billion in 2012 and 2013, which should be adequate to cover dividend payments and part of the company's capital expenditure program. Our forecast assumes that there will be no material disallowance from the OEB on the company's recent filed transmission cost-of-service application for the next two years. We also assume that it will maintain its reported capital structure within the deemed capital structure of 60% debt layer and keep its capital expenditure level consistent with the OEB approval. Hydro One has budgeted C\$1.8 billion of annual capital expenditure for both 2012 and 2013, which we expect it will spend. About 60% of the company's total annual capital expenditure is for its transmission business and the balance is for the distribution business. Although we expect FFO to increase with increasing rate base and cost recovery, we forecast that the utility will still need to increase its total borrowing to support its large negative operating cash flow of about C\$500 million per year. As a result, we do not expect to see any meaningful improvement in our key financial measures during our two-year outlook horizon. We forecast that Hydro One's AFFO-to-debt will remain similar to its past three years' levels of about 12%, leaving no cushion at the rating. Still supporting the company's financial risk profile are strong access to capital markets, adequate liquidity, the stability and predictability of its cash flows, and low merger and acquisition risk.

Liquidity

The short-term rating on Hydro One is 'A-1'. We believe the company has adequate liquidity to cover its needs in the near term, even in the event of unforeseen earnings declines. Standard & Poor's assessment incorporates the following expectations and assumptions:

- Hydro One's liquidity sources, including liquid short-term investments, FFO, and credit facility availability, will likely
 exceed its uses 1.2x or more in the next six months.
- Liquidity sources include a forecast of about C\$1.2 billion of annual FFO, access to C\$1.25 billion of the company's committed revolving credit facility with a syndicate of banks, and C\$161 million liquid short-term investments as of March 31, 2012. The C\$1.25 billion credit facility was fully available as of March 31, and will expire in June 2017. Hydro One remains well within its banking covenant of 75% total debt-to-total capital.
- Liquidity uses include C\$600 million of maturing debt in Nov. 2012, and about C\$1.8 billion of total annual capital
 expenditures. We did not include the dividend in our calculation because we believe that if the company were under
 temporary financial duress, it would have the flexibility to temporarily curb dividends to the shareholder.

Hydro One has what we consider good relationships with its banks and good standing in the debt market. We understand that the utility also holds a C\$250 million note issued by the province that matures in 2014, which it could liquidate if needed. The company's debt maturities are well spread, in our view, with annual scheduled repayment in the next six years averaging about C\$600 million.

Outlook

The negative outlook reflects the outlook on Ontario. Based on our criteria for government-related entities, given a high likelihood of extraordinary support, a SACP of 'a' for Hydro One and our 'AA-' rating on the province, a one- or two-notch downgrade on the province would affect the ratings on Hydro One, but likely not more than one notch given the company's underlying credit strength. We still expect continued predictable regulatory support despite its

large capital expenditure program and negative free operating cash flows. In the event of lower-than-expected cash flows and earnings, we expect the utility to maintain its leverage within the deemed capital structure of 60% reported debt-to-capital, AFFO-to-debt of about 12%, and AFFO interest coverage of about 3x, by curtailing its capital spending and additional debt financing. In our view, there is no cushion for Hydro One to deteriorate from our expectations on its key credit measures to maintain the ratings.

Any sustained deterioration of financial measures beyond our expectations, a material adverse regulatory ruling, or market restructuring (such as the assumption of the obligation to supply, not just deliver, electricity) could lead us to lower the existing 'a' SACP and consequently the ratings, regardless of any changes to the province. An improvement in the company's SACP is unlikely without the assurance of a much stronger balance sheet, and stronger cash flow-interest and debt coverage ratios (such as higher than 30% AFFO-to debt).

Business Description

Hydro One owns and operates a low-risk, regulated transmission system that represents about 57% of its total assets as of Dec. 31, 2011. The utility owns and operates substantially all of Ontario's electricity transmission system, which has contributed to it becoming one of the largest transmission companies in North America.

The company also owns and operates a low-risk, regulated distribution system that represents about 40% of its total assets as of Dec. 31. It is one of the country's largest LDCs. Apart from the system operated under Hydro One Brampton, its regulated LDC subsidiary serving customers in the City of Brampton, Ont. (AAA/Stable/--), the system covers mainly rural areas and remote communities in the province. It has a low customer density, covering 75% of Ontario but delivering about 30% of consumed electricity. The marketing of surplus fiber optic capacity through subsidiary Hydro One Telecom is not material to our credit analysis, given the operation's small size (consisting of about 3% of total assets).

Rating Methodology

We base our 'A+' rating on Hydro One on the company's SACP and our view that there is a "high" likelihood that the province would provide timely and sufficient extraordinary support to Hydro One in the event of financial distress. We assess Hydro One's stand-alone credit quality at 'a'.

In accordance with our criteria for government-related entities (GREs), we base our view of a "high" likelihood of extraordinary government support on the following assessment:

• Within the context of our GRE methodology and scale for assessing the importance of a GRE's role to its government owner, we view Hydro One's role as "important" to the province. The utility operates as a profit-seeking enterprise and its credit standing is important to the government because it provides an essential infrastructure service, particularly in the distribution of electricity to remote communities in Ontario. In addition, part of its activities relate to its public policy role for the current government. Through its Green Energy Act, the province is relying on Hydro One to facilitate a smart grid, and the quick connection of small renewable generation assets to the grid. Furthermore, although we do not believe that default or credit stress would lead to a disruption of Hydro

- One's physical operations, it would affect the credibility of the entire electricity sector in Ontario, which we believe would have an overall negative economic impact.
- Within the context of our GRE methodology and scale for assessing strength and durability, we view the link between Hydro One and the province as "very strong." The government is a strong and stable shareholder, and it has a policy and track record of providing support to the utility. Government policy has a strong influence on the company's strategic and business plans. Financial support is available to the company from the province through the Ontario Electricity Finance Corp., an established provincial agency with a legislated mandate "to provide financial assistance to the successor corporations of Ontario Hydro," of which Hydro One is one. Ontario's track record is consistent with our view. In the past, the province has offered the utility access to government treasury resources when unforeseen changes in government policy exposed the company's distribution operations to liquidity pressures. We expect that liquidity support would be available again under similar circumstances. Furthermore, the province appoints Hydro One's board of directors, and the government reviews the company's business plan and dividend policy before implementation. Management updates government staff on the company's monthly financial and operational performance.

After the government had considered selling Crown assets, which include Hydro One, since December 2009, the province's finance minister indicated in July 2010 that there would be no short-term consideration of doing so. While we maintain our view that the company's privatization could weaken its link with the province and the likelihood of extraordinary support in times of need, we don't consider such an event imminent. Should the idea of privatization resurface, we would treat this as an event risk and reevaluate the likelihood of extraordinary support at that time.

Excellent Business Risk Profile

The stable regulatory regime supports credit quality

The OEB provides regulatory oversight of Hydro One's operations. Prudent costs incurred are generally recovered through tariffs, but rate base adjustments can lag capital requirements up to three years unless the company returns to the regulator with a resource consuming, full cost-of-service application each year. We understand that the company's strategy is to file a full cost-of-service application more frequent than a usual four-year cycle in view of rapid fixed assets growth, which mitigate the potential time lag between its capital expenditure spending and cost recovery through rate-base adjustments. To date, the OEB has been supportive to this approach. The utility filed its transmission cost-of-service rate application recently for 2013 and 2014 and its distribution rate application (under the incentive regulated mechanism) for 2013.

The OEB sets rates by estimating Hydro One's revenue requirement, given forecast consumption. The company submits separate transmission and distribution applications to the OEB, which determines revenue requirements on a forward test-year basis. The regulated revenue requirement includes the cost of capital based on a deemed capital structure of 60% debt and a modest return on equity (ROE). The allowed return on equity is based on a formula linked to long-term Government of Canada (GOC; AAA/Stable/A-1+) bonds, long-term utility bond spreads, plus a modest risk premium.

There is a long history of regulated entities in Ontario being allowed to recoup unforeseen, previously incurred costs (regulatory assets) and having to refund the customer (regulatory liabilities) after-the-fact through rates. Cash recovery (or repayment) is subject to a prudency review and regulatory approval. Depending on the magnitude, the OEB may

spread the recovery across several years to avoid rate shock. To date, mandated refunds to customers have not caused undue financial duress for most utilities. For Hydro One, total unrecovered regulatory assets and liabilities on the balance sheet as of Dec. 31, 2011, were C\$325 million (net of regulatory future income tax asset) and C\$660 million, respectively, representing about 2% of total assets and 5.5% of total liabilities, respectively. From a credit perspective, we do not view these as a concern.

Temperate regulatory relationship, but spending budget could be under tighter scrutiny

Large differences between rate applications and final regulatory decisions could cause a rating concern as it might indicate increased regulatory risk. The OEB acknowledges the company's higher cost of operations due to low density franchise and has generally accepted its forward cost estimates without significant haircuts (see table 1). With much lower customer density than that of its municipal peers, the system is by nature more expensive on a capital- and operating-cost per customer basis.

Although we do not expect allowing recovery of prudent operating and capital spending to change, we expect that the OEB would, in its approval of prudent spending, be mindful of overall electricity costs to consumers in the current weak economy, stagnant load growth, as well as the province's priority to green energy, smart grid, and conservation and demand management (CDM). Nevertheless, there have been no material differences between the company's requested revenue requirement and the OEB approved amount.

Table 1

Hydro One Inc	.–Requeste	d vs. Approved Revenue Rec	uirement	
(Mil. C\$)	Year*	Requested revenue requirement	Approved revenue requirement	Approved revenue requirement
Distribution	2010	1,150	1,146	0.3% lower than requested
	2011	1,264	1,218	3.6% lower than requested
Transmission	2011	1,446	1,346	6.9% lower than requested
	. 2012	1,547	1,418	8.3% lower than requested

^{*2012} U.S. generally accepted accounting principles used for rate-setting purposes.

Asset-intensive nature of monopoly business reduces competitive risk

Although some competitive pressures exist, Hydro One's existing transmission system is largely shielded from direct competition due to its natural monopoly position. However, the company does not hold a legal monopoly on its service territory. There is no restriction on other transmission businesses' building and operating transmission networks in Ontario. However, the capital cost that would be involved in large-scale duplication of the network reduces the risk of bypass. Should bypass strand an individual asset, it is likely that tariffs would be rebalanced across remaining customers with minimal financial impact, given the territory's size.

Low-risk operations

Hydro One's regulated retail obligation is also a relatively low-risk operation. The LDC is not engaged in commodity price or volume risk management and does not engage in contractual commitments to ensure adequate supply. Energy costs are a pass-through to consumers with no markup. Any variance is recouped or rebated through the OEB-regulated retail price in the following fiscal quarter.

The operational performance of Hydro One's transmission assets remains good; the system has achieved top quartile

transmission reliability compared with that of other large Canadian peers (as reported to the Canadian Electricity Association). The electricity market rules and transmission license governing Hydro One's transmission operations required the transmitter to comply with reliability standards established by the North American Reliability Corp. and Northeast Power Coordinating Council Inc. Those standards include penalties for noncompliance. At the time of publication, Hydro One complied with the standards and had never paid any penalties.

The company's distribution reliability, although consistently weaker than that of other rated municipal peers largely because of its expansive rural service territory, does not pose a material credit risk. The regulator tracks performance metrics but has not yet imposed generic industry standards or penalties for substandard service.

Well-diversified economy in the company's service territory

Hydro One owns and operates substantially all of Ontario's electricity transmission system, accounting for about 96% of the province's transmission capacity by revenue. Its distribution system is the largest in Ontario and spans about 75% of the province, serving the more rural areas and remote communities of Ontario except for the company's Brampton network business.

The province has a large and well-diversified economy, and Hydro One delivers an essential service. The government estimates that real GDP slowed to 1.8% in 2011 from a 3% gain in 2010. According to the government's estimates, real GDP growth should advance a further 1.7% in 2012. The recession's impact was felt chiefly in the construction and manufacturing sectors (vehicle assembly and part production). Nevertheless, Ontario has a large and well-diversified economy with depth and scale in many sectors, and the provincial economy has a number of key strengths, including a large, well-educated workforce; and proximity to important northeastern U.S. markets. While recognizing that uncertainty about the tenuous recovery in Europe and the U.S. is a risk to the economic outlook, our province analyst believes that the government's forecast real GDP growth of 1.7% for 2012 is achievable.

The company estimates about 1% of load growth associated with economy growth in Ontario economy. However, Hydro One expects the overall load to decline 1.5% mainly due to the impact of CDM and embedded generation. This does not cause us a significant concern on the company's future financial performances as long as there is no large discrepancy between its estimated and actual load growth.

Customer profile supports stable revenues

We believe the diversity of Hydro One's customer base supports the overall stability of its revenues and severely limits exposure to any particular customer or customer class. In the transmission business, municipally owned investment-grade LDCs and the utility's own distribution business collect transmission revenues and forward them to Hydro One through the IESO. The company's distribution operation also collects distribution revenues from a relatively stable customer base that is about 58% residential, about 28% commercial, 7% large industrial, and 7% embedded LDCs (on a distribution revenues basis in 2011).

Renewal of an aging labor force remains a challenge

An aging workforce remains an issue that could affect Hydro One's operations. It expects about 21% of its workforce to be eligible for retirement by 2013. The company is making an effort to address the issue by employing a larger number of apprentices, investing in co-op power engineering programs with universities, and outsourcing some capital programs. During this period of workforce renewal, we expect staff levels to be higher than normal as new employees

are trained, and to enable the execution of the large capital program. The utility's cost-of-service determination includes the related labor costs. The company had about 5,781 permanent employees at end of 2011, up 6.5% from 2009. The majority of its employees are represented by either the Power Workers' Union (PWU) or the Society of Energy Professionals. The collective agreement with Society and PWU will expire March 31, 2013.

Significant Financial Risk Profile

Consistent financial policies

Hydro One's financial policies have historically been consistent. While total leverage increased in the past three years to support the company's large capital program, Hydro One intends to maintain its capital structure within the regulatory deemed structure (reported debt to capital of 60%). Debt maturities are well-spread, in our view, with annual scheduled repayment in the next six years averaging about C\$600 million. Derivative instruments manage interest rate exposure nonspeculatively. The utility is not exposed to foreign currency risk other than through the purchase of some materials. The company discloses its target to maintain an 'A' long-term rating in its annual report.

The board of directors declares common dividends after considering management's recommendation based on its operating results. Also the shareholder agreement requires the company to consult with its owner, the province, regarding dividend payments. It is my understanding that the company could reduce dividend payments to help satisfy its cash requirement and to maintain its capital structure within the regulatory deemed capital structure of 60% debt layer.

Management advocates an enterprise-wide approach to risk management directed at balancing regulatory, strategic, operational and financial risk exposure, and the returns allowed within the Ontario regulatory framework

Accounting

Hydro One prepared consolidated financial statements in accordance with Canadian generally accepted accounting principles (GAAP) until Dec.31, 2011. Effective Jan 1, 2012, the company adopted U.S. GAAP. Similar to Canadian GAAP, U.S. GAAP allows utilities to defer costs or revenues that they expect the regulator to allow them to recover to the balance sheet. Assets and liabilities are recouped from or rebated to customers in periods, typically varying from one-to-four years. To date, regulatory disallowances for assets and liabilities that Hydro One and other Ontario-based utilities have declared have been minor. The change in accounting practice itself should not affect our credit analysis in absence of changes in the company's economic substance.

Material adjustment Standard & Poor's made to the balance sheet (see table 2) includes postretirement benefit obligations (about 15% of total adjusted debt). Other adjustments are not material. Hydro One treats its C\$323 million 5.5% cumulative preferred shares as equity. The province holds the shares, which are entitled to an annual cumulative dividend of 5.5% (or C\$18 million). To date, the preferred dividends have not been deferred. The shares are redeemable at the province's option; however, Hydro One, at its own discretion, can pay all or part of the redemption price by issuing additional common shares to the province. We do not expect them to do so in the near term. The shares carry voting rights under limited circumstances and rank in priority above the common shares upon liquidation. The company can issue an unlimited number of preferred and common shares.

Hydro One has C\$133 million of goodwill on its balance sheet that arose when it acquired LDCs for totals exceeding their fair value. The OEB does not recognize goodwill in the regulated rate base used to determine electricity tariffs. The amount is not material to our analysis but indicates the risk to the balance sheet and Hydro One's returns that acquisitions could pose.

Table 2

Reconciliatio	m Of H	ydro One Inc	Reported	l Amoun	its With St	andard 8	Poor's Ad	justed Ame	ounts (Mil.	C\$)
				1	iscal year e	nded Dec.	31, 2011			
Hydro One Inc. reported amounts	Debt	Shareholders' equity	Revenues	EBITDA	Operating income	Interest expense	Cash flow from operations	Cash flow from operations	Dividends paid	Capital expenditures
Reported	8,038.0	6,454.0	5,471.0	1,751.0	1,135.0	359.0	1,360.0	1,360.0	168.0	1,447.0
Standard & Po	or's adju	stments								
Operating leases	43.7	N/A	N/A	2.3	2.3	2.3	4.2	4.2	N/A	9.9
Postretirement benefit obligations	1,424.2	(981.5)	N/A	140.0	140.0	64.0	14.4	14.4	N/A	N/A
Capitalized interest	N/A	N/A	N/A	N/A	N/A	58.0	(58.0)	(58.0)	N/A	(58.0)
Non-operating income (expense)	N/A	N/A	N/A	N/A	15.0	N/A	N/A	N/A	N/A	N/A
Reverse changes in working-capital	N/A	N/A	N/A	N/A	N/A	N/A	N/A	(196.0)	N/A	N/A
Debt-accrued interest not included in reported debt	85.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total adjustments	1,553.0	(981.5)	0.0	142.3	157.3	124.3	(39.4)	(235.4)	0.0	(48.1)
Standard & Poor's adjusted amounts	Debt	Equity	Revenues	EBITDA	EBIT	Interest expense	Cash flow from operations	Funds from operations	Dividends paid	Capital expenditures
Adjusted	9,591.0	5,472.5	5,471.0	1,893.3	1,292.3	483.3	1,320.6	1,124.6	168.0	1,398.9

N/A-Not applicable.

Profitability is constrained by the regulatory compact but is predictable

Largely dictating Hydro One's profitability is the regulatory compact that generally allows the company to earn a modest return. The OEB announced in December 2009 a change in cost of capital computation formula, originally put in place since 1998. The new formula is now linked to both utility bond spreads and the long-term GOC bond rate; the often inverse relationship between the two rates could reduce volatility of the future ROE adjustments. The revised formula resulted in favorable ROE adjustments on Hydro One's 2011-2012 transmission rates and 2010-2011 distribution rates (see table 3). The company estimated that a 1% decrease in the forecast long-term GOC bond yield or utility bond spread used in setting rates could reduce net income in transmission about C\$18 million and that in distribution about C\$10 million.

Weather-induced changes in energy delivered subject Hydro One's cash flows to modest fluctuations that we factor into our rating opinion. The transmission tariff is levied on monthly peak load. The distribution tariff is levied on a mix of fixed- and variable-charges for each of 12 customer classes (formerly 80) the OEB approved in late 2008.

Table 3

Fiscal year ended Dec. 31	Ratesetting year	Approved transmission rate base (used to determine revenue requirement)	Approved distribution rate base (used to determine revenue requirement)	OEB-deemed capital structure (used to set rates)	OEB-allowed ROE in rates (%)§
2004	May 1, 2004	C\$5.7 billion	Rate base was not adjusted	60% debt; 4% preferred equity; 36% common equity	9.88
2005	May 1, 2005	C\$5.7 billion	Rate base was not adjusted	60% debt; 4% preferred equity; 36% common equity	9.88
2006	May 1, 2006	Rate base was not adjusted	C\$3.7 billion	60% debt; 40% equity	9.00 (distribution); 9.88 (transmission)
2007*	May 1, 2007	C\$ 6.3 billion	Rate base was not adjusted	56% long-term debt; 4% short-term debt; 40% equity	9.00 (distribution); 8.35 (transmission)
2008	May 1, 2008	Rate base was not adjusted	C\$4.3 billion	56% long-term debt4% short-term debt 40% equity	8.57 (distribution); 8.35 (transmission)
2009	May 1, 2009	C\$7.0 billion	Rate base was not adjusted	56% long-term debt; 4% short-term debt; 40% equity	8.35 (distribution); 8.01 (transmission)
2010	May 1, 2010	C\$7.6 billion	C\$4.8 billion	56% long-term debt; 4% short-term debt; 40% equity	9.85 (distribution); 8.39 (transmission)
2011	Jan. 1, 2011	C\$7.9 billion	C\$5.1 billion	56% long-term debt; 4% short-term debt; 40% equity	9.66 (distribution); 9.66 (transmission)
2012	Jan. 1, 2012	C\$8.8 billion	Rate base was not adjusted	56% long-term debt; 4% short-term debt; 40% equity	N.A. (distribution); 10.41 (transmission)

^{*}The OEB's second generation incentive rate mechanism resulted in increased distribution rates for Hydro One without a full cost of service application. §After 2005, allowed ROEs were determined based on a formula linked to long-term Government of Canada rates. ROE--Return on equity. N.A.--Not available.

Manageable debt profile and financial flexibility

Although the company has about C\$600 million maturing in 2012 and 2013, we believe Hydro One's debt profile is manageable, in view of its good access to debt capital market and regulated cash flow. The company's financing strategy limits debt maturities in any single year from exceeding C\$600 million (about 8% of current debt load). Furthermore, about 50% of Hydro One's C\$8 billion reported debt outstanding as of Dec. 31, 2011, had a maturity date of more than 10 years and the company targets a weighted-average term of 12-18 years for its debt portfolio.

As a fully government-owned company, Hydro One has effectively no access to the equity market, although we do not consider this a rating concern. The company could derive additional financial flexibility from its ability to reduce dividends as demonstrated in 2009 and 2010, when it reduced dividend payments C\$137 million and C\$160 million, respectively (see table 4). Furthermore, about 50% of its total capital expenditures in 2013 represent the sustainment

requirements of its aging infrastructure. Under extraordinary conditions, the government shareholder is also a potential source of financing and backup liquidity. Although access to new equity in the form of cash injections from the shareholder is unlikely, partial or full reduction of dividend payments is a credible option for Hydro One.

Table 4

Hydro One IncDividend Pa	ayments	History	7		
(Mil. C\$)	2011	2010	2009	2008	2007
Common dividend	150	10	170	307	332
Preferred dividend	18	18	18	18	18
Common dividend payout ratio (%)	24.1	1.7	37.6	64	87.1

Pension shortfall is likely to rise

We believe Hydro One's pension fund shortfall is manageable. The OEB recognizes pension contribution costs as a prudent component of the cost-of-service and so they are largely recovered through rates. The company estimates that it would need to make a pension contribution of C\$154 million in 2013 (subject to an actuarial valuation effective Dec. 31, 2012). While we expect pension obligations to increase as the utility's workforce ages, the size of pension deficits would also depend on future discount rates and asset value.

Hydro One uses derivatives to manage interest-rate exposure

Management uses derivative financial instruments and interest rate swap contracts primarily to manage exposure to interest rate fluctuations. Hydro One manages related credit risk by dealing primarily with highly-rated counterparties. Employing master agreements that allow for net settlements reduces exposure to large collateral calls. Using derivatives, the company generally maintains less than 20% of debt (including debt maturing within the year) at floating rates. Hydro One carries no debt-related foreign exchange exposure, with all debt in Canadian dollars.

Table 5

Industry Sector: Electric Utility	Hydro One Inc.*§	Statnett SF§	AltaLink L.P.§	Toronto Hydro Corp.*
Rating as of June 27, 2012	A+/Negative/A-1		A-/Stable/-	A/Stable/-
Trading at 01 state 21, 2012	11//1/08/07/11		st three fiscal ye	
Currency (mil.)	C\$	NOK	C\$	C\$
Revenues	5,113.0	5,202.0	314.0	2,627.5
EBITDA	1,703.7	2,220.7	210.3	323.6
Net income from continuing operations	567.3	906.0	69.8	68.3
Funds from operations (FFO)	1,042.6	1,717.0	148.1	241.4
Capital expenditures	1,475.9	1,946.7	436.6	345.3
Free operating cash flow	(354.9)	(346.7)	(297.6)	(83.6)
Dividends paid	128.0	315.3	27.3	27.7
Discretionary cash flow	(482.9)	(662.0)	(324.9)	(111.3)
Cash and short-term investments	133.3	0.0	12.2	231.9
Debt	8,844.1	11,667.6	1,130.5	1,546.3
Preferred stock	323.0	0.0	0.0	0.0
Equity	5,223.8	6,823.6	833.1	1,020.7

Table 5

Debt and equity	14,067.9	18,491.2	1,963.6	2,567.0
Adjusted ratios				
FFO interest coverage (x)	3.0	5.4	3.4	3.5
FFO/debt (%)	11.8	14.7	13.1	15.6
Free operating cash flow/debt (%)	(4.0)	(3.0)	(26.3)	(5.4)
Discretionary cash flow/debt (%)	(5.5)	(5.7)	(28.7)	(7.2)
Net cash flow/capex (%)	62.0	72.0	27.7	61.9
Debt/EBITDA (x)	5.2	5.3	5.4	4.8
Total debt/debt plus equity (%)	62.9	63.1	57.6	60.2
Return on common equity (%)	9.1	12.7	8.4	6.4
Common dividend payout ratio (unadjusted; %)	20.0	16.4	39.1	40.6

^{*}Distribution company. §Tranmission company.

Table 6

Hydro One IncFinancial Summary	7							
Industry Sector: Electric Utility								
	Fiscal year ended Dec. 31							
(Mil. C\$)	2011	2010	2009	2008	2007			
Rating history	A+/Stable/A-1	A+/Stable/A-1	A+/Stable/A-1	A+/Stable/A-1	A/Positive/A-1			
Revenues	5,471.0	5,124.0	4,744.0	4,597.0	4,655.0			
EBITDA	1,893.3	1,720.3	1,497.5	1,486.7	1,505.8			
Net income from continuing operations	641.0	591.0	470.0	498.0	399.0			
Funds from operations (FFO)	1,124.6	1,087.0	916.2	1,006.7	884.6			
Capital expenditures	1,398.9	1,516.0	1,512.7	1,284.5	1,071.9			
Free operating cash flow	(78.3)	(352.0)	(634.6)	(149.7)	(52.3)			
Dividends paid	168.0	28.0	188.0	259.0	325.0			
Discretionary cash flow	(246.3)	(380.0)	(822.6)	(408.7)	(377.3)			
Cash and short-term investments	228.0	172.0	0.0	16.0	0.0			
Debt	9,591.0	8,917.8	8,023.6	6,936.9	6,367.5			
Preferred stock	323.0	323.0	323.0	323.0	323.0			
Equity	5,472.5	5,351.7	4,847.2	4,766.2	4,530.8			
Debt and equity	15,063.4	14,269.5	12,870.7	11,703.1	10,898.3			
Adjusted ratios								
EBITDA interest coverage (x)	3.9	3.5	3.3	4.4	4.6			
FFO interest coverage (x)	3.2	3.0	2.8	4.0	3.7			
FFO/debt (%)	11.7	12.2	11.4	14.5	13.9			
Discretionary cash flow/debt (%)	(2.6)	(4.3)	(10.3)	(5.9)	(5.9)			
Debt/debt and equity (%)	63.7	62.5	62.3	59.3	58.4			
Return on common equity (%)	9.6	9.7	8.0	9.5	7.9			
Common dividend payout ratio (unadjusted; %)	24.1	1.7	37.6	64.0	87.1			

Related Criteria And Research

- Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Sept. 28, 2011
- Rating Government-Related Entities: Methodology And Assumptions, Dec. 9, 2010
- Criteria Methodology: Business Risk/Financial Risk Matrix Expanded, May 27, 2009
- Key Credit Factors: Business And Financial Risks In The Investor-Owned Utilities Industry, Nov. 26, 2008
- 2008 Corporate Criteria: Analytical Methodology, April 15, 2008

Ratings Detail (As Of June 27, 2012)	
Hydro One Inc.	
Corporate Credit Rating	A+/Negative/A-1
Commercial Paper	
Local Currency	A-1
Canadian CP Rating Scale	A-1(MID)
Senior Unsecured	A+
Corporate Credit Ratings History	
25-Apr-2012 Foreign Currency	A+/Negative/A-1
03-Jun-2008	A+/Stable/A-1
26-Mar-2007	A/Positive/A-1
25-Apr-2012 Local Currency	A+/Negative/A-1
03-Jun-2008	A+/Stable/A-1
26-Mar-2007	A/Positive/A-1
Business Risk Profile	Excellent
Financial Risk Profile	Significant
Related Entities	
Ontario Power Generation Inc.	
Issuer Credit Rating	A-/Stable/—
Ontario (Province of)	
Issuer Credit Rating	AA-/Negative/A-1+
Commercial Paper	
Foreign Currency	A-1+
Senior Unsecured	AA-
UMH Energy Partnership	
Senior Secured	A/Stable A/Stable

^{*}Unless otherwise noted, all ratings in this report are global scale ratings. Standard & Poor's credit ratings on the global scale are comparable across countries. Standard & Poor's credit ratings on a national scale are relative to obligors or obligations within that specific country.

Copyright © 2012 by Standard & Poor's Financial Services LLC (S&P), a subsidiary of The McGraw-Hill Companies, Inc.All rights reserved.

No content (including ratings, credit-related analyses and data, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P. The Content shall not be used for any unlawful or unauthorized purposes. S&P, its affiliates, and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P's opinions and analyses do not address the suitability of any security. S&P does not act as a fiduciary or an investment advisor. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

The McGraw-HIII Companies

PART A CAPABILITY OF THE APPLICANT

EXHIBIT 5 FINANCIAL CAPABILITY

Appendix 5B Brookfield Infrastructure Credit Rating



Global Credit Portal® RatingsDirect®

May 4, 2012

Research Update:

Brookfield Infrastructure Partners L.P. Assigned 'BBB+' Rating On Strong Business Risk Profile; Outlook Stable

Primary Credit Analyst:

Nicole Martin, Toronto (1) 416-507-2560; nicole_martin@standardandpoors.com

Secondary Contact:

Stephen R Goltz, Toronto (1) 416-507-2592; stephen_goltz@standardandpoors.com

Table Of Contents

Overview

Rating Action

Rationale

Outlook

Related Criteria And Research

Ratings List

Research Update:

Brookfield Infrastructure Partners L.P. Assigned 'BBB+' Rating On Strong Business Risk Profile; Outlook Stable

Overview

- We are assigning our 'BBB+' long-term corporate credit rating to Brookfield Infrastructure Partners L.P.
- The rating reflects our view of the partnership's strong business risk profile.
- The stable outlook reflects our view that the portfolio of companies provides a strong stream of cash flow to BIP.

Rating Action

On May 4, 2012, Standard & Poor's Ratings Services assigned its 'BBB+' long-term corporate credit rating to Bermuda-based Brookfield Infrastructure Partners L.P. (BIP). The outlook is stable.

Rationale

The rating on BIP reflects Standard & Poor's view of the partnership's strong business risk profile. BIP's portfolio consists of a diverse group of businesses with very stable cash flows. The companies' diversity is manifest on several levels. The first is geographic, with companies in North and South America, Australia, and Europe. Moreover, these cash flows are subject to a variety of revenue frameworks with a majority of the cash flow supported by regulations or a strong contractual framework that provide monopolistic or near-monopolistic competitive positions. Secondly, the counterparties with respect to many of these contracts are companies or governments that we consider investment-grade. Finally, the services from companies that make up a large percentage of EBITDA enjoy high barriers to entry, either as a result of a regulatory or contractual framework or because of economies of scale. Moreover, a significant portion of EBITDA represents an essential service for the operating company's customers, but do not constitute a significant expense, further strengthening the stability of cash flow. Two examples of this are the Dalrymple Bay Coal Terminal and Brookfield Rail.

We also base the rating on what we view as BIP's significant financial risk profile. Although we believe financial measures at the consolidated level are weak, the significant asset level cash flow provides strong financial flexibility. This is particularly true in light of the limited amount of debt at the BIP level, which management estimates will remain at 5%-10% of the partnership's proportionate share of consolidated debt. The financial measures

reflect BIP's practice of using nonrecourse debt in its operating companies. Although this debt is nonrecourse to the partnership, it increases the variability of cash flow distributable to BIP because this cash flow is only available after the operating needs and debt servicing requirements at the operating company level are satisfied. Moreover, most of the BIP-level debt is subject to covenants, which prevent the distribution of cash if certain thresholds are breached. Although there is sufficient cushion between the current covenant level and the threshold level, deterioration in economic conditions in one of the partnership's key markets could lead to a covenant breach, which in turn would reduce the cash flow available to BIP. An example of this is a slowdown in the global steel market particularly in Asia. This would affect the partnership directly in that Dalrymple Bay Coal Terminal is responsible for processing 22% of world metallurgical seaborne coal annually. Furthermore, the majority of the expected growth at Brookfield Rail will be from iron ore shipments bound for Chinese steel mills. The presence of cash-flow lock-up covenants and the potential volatility in cash flow is a risk that constrains the rating. In addition, most of the company-level debt is subject to bullet maturities, which increase the potential volatility of remittable cash flow to BIP. Should a portfolio company be unable to refinance a maturity, creditors would likely exercise their security, which would likely lead to a suspension in cash flow distribution to BIP.

BIP is a Bermuda-based partnership focusing on infrastructure assets. Brookfield Asset Management Inc. (A-/Negative/A-2) owns approximately 30% of the partnership's units, with the remainder held by the public. The businesses that underlie BIP can be grouped into three broad operating platforms: utilities, transport and energy, and timber.

The partnership's operating strategy is to own and operate a globally diversified portfolio of infrastructure assets with revenues that are primarily regulated or contracted on a long-term basis and benefit from GDP growth or inflation. BIP is committed to actively managing the assets to increase efficiency and optimize profitability. In that regard, while the partnership does not own 100% of all of the assets, it does control the majority of them, which is a key consideration in its strategy.

The utilities platform represents approximately 52% of EBITDA, while the transport and energy platform represents about 40%. We expect that by 2014 these figures will reverse, with the utilities platform representing approximately 42% and the transport and energy platform representing approximately 50%. The shift is largely due to a significant expansion at Brookfield Rail. The company is pursuing a number of customer-driven initiatives to upgrade the rail system to service iron ore mining companies in southwest Australia. Supporting this expansion are take-or-pay contracts with investment grade quality counterparties or that have other credit enhancements.

On a partially deconsolidated basis, we expect the base case level of remittable cash to be approximately US\$350 million in 2012, increasing to approximately US\$500 million in 2014. Under a stressed scenario, for example a

weaker than expected Australian dollar or delays in cash flow generation at Brookfield Rail, we expect the level of remittable cash could fall to US\$350 million-US\$375 million in 2014.

An important aspect of our analysis is the level of remittable cash flow available to BIP to service its corporate-level obligations. Notwithstanding the forecast amount of cash available to the partnership, and the relatively small amount of debt forecast at the BIP level, we recognize the potential volatility of this cash flow because of the lock-up covenants that exist at the asset level. Should a stressed economic condition consistent with a 'BBB' category manifest itself, the asset companies' ability to remit cash could be curtailed, reducing the partnership's ability to service its obligations. This exposure to cash-flow lock-up covenants and the potential volatility in cash flow to BIP that they create is and will continue to be a rating constraint.

Management has indicated that it has a strong commitment to keeping financing a significant portion of growth through equity issuance and asset level financing. In that regard, management has indicated that it is committed to maintaining the amount of debt at BIP to 5% of its proportionate share of consolidated debt. Moreover, a movement toward 10% would be in the context of further growth while maintaining a similar business risk profile, including cash flow and equity issuance.

Liquidity

We expect that in the next 12 months, projected sources of liquidity, including a US\$700 million availability under its committed revolving credit facilities (maturing September 2013), and its annual cash flow generation that we project to be about US\$450 million will cover projected uses of approximately US\$300 million more than 3x. BIP does not have any debt maturing in 2012 .This does not include the proportionate availability under subsidiary credit facilities of approximately US\$640 million.

Notwithstanding the more than adequate liquidity outlined above, our belief that BIP has a high standing in the capital markets and that it demonstrates generally very prudent financial risk management, we consider the partnership to have adequate liquidity as per our criteria. BIP might use the committed revolving facility at least temporarily for things such as bridge financing for acquisitions or refinancing. Given that the maturities at the asset company level are predominately bullet, the partnership could draw on its facilities to avoid potential temporary disruptions in the markets or a default should the asset company not be able to refinance maturing debt. Moreover, given the committed revolver's September 2013 maturity and the 12-month window in our liquidity criteria for us to consider these facilities a source of liquidity, such facility will not be considered a source after Sept. 30, 2012, unless it is renegotiated before then.

Outlook

The stable outlook reflects our view that the portfolio of companies provides a strong stream of cash flow to BIP based on geographic diversity, revenue framework diversity and competitive position. We base this view on the partnership's continued ability to attract external capital and adherence to its policy of using mainly nonrecourse company-level debt. However, the presence of lock-up covenants and a high level of leverage at the asset level introduce potential volatility to the remittable cash flow. Because of this, an upgrade is unlikely during our two-year outlook horizon. Standard & Poor's could consider lowering the rating if the level of debt at the partnership represents more than 10% of its proportionate share of consolidated debt. We could also consider lowering the rating if remittable cash flow deteriorates or the volatility of remittable cash flow to BIP from the asset level companies increases on a sustained basis.

Related Criteria And Research

- Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Sept. 28, 2011
- Criteria Methodology: Business Risk/Financial Risk Matrix Expanded, May 27, 2009
- Rating Methodology for Investment Holding and Operating Holding Companies,
 Feb. 5, 2003

Ratings List

Rating Assigned

Brookfield Infrastructure Partners L.P.

Corporate credit rating BBB+/Stable/--

Complete ratings information is available to subscribers of RatingsDirect on the Global Credit Portal at www.globalcreditportal.com. All ratings affected by this rating action can be found on Standard & Poor's public Web site at www.standardandpoors.com. Use the Ratings search box located in the left column.

Copyright © 2012 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED, OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses, and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw, or suspend such acknowledgement at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

The **McGraw·Hill** Companies

PART A CAPABILITY OF THE APPLICANT

EXHIBIT 5 FINANCIAL CAPABILITY

Appendix 5C GLPTLP Credit Rating

Private Rating Report

Report Date: October 28, 2011 Previous Report: September 14, 2010



Insight beyond the rating

Great Lakes Power Transmission LP

Analysts Jackie He, CFA

+1 416 597 7372 jhe@dbrs.com

Bruce Ells

+1 416 597 7335 bells@dbrs.com

The Company

Great Lakes Power
Transmission LP (GLPT)
is a single-purpose
subsidiary of Brookfield
Infrastructure Partners
(BIP). The company was
established in 2008 to
purchase the
transmission assets of
Great Lakes Power
Limited (GLPL) and
assume \$120 million of
GLPL's senior secured
bonds associated with
the assets.

Private Rating

 Debt
 Private Rating
 Rating Action
 Trend

 Senior Bonds
 A
 Confirmed
 Stable

Rating Update

DBRS has confirmed the private rating on the \$120 million Series 1 Senior Bonds (the Bonds) of Great Lakes Power Transmission LP (GLPT or the Company) at "A" with a Stable trend. The rating confirmation reflects the strength of GLPT's regulated transmission assets and operations in northern Ontario and the cost-of-service-based rate framework which provides relatively stable and predictable cash flow.

For the 12-month period ended June 30, 2011, revenues and EBITDA were approximately \$33 million and \$24 million, respectively. Substantial reinforcement and enhancement programs in recent years increased the rate base and extended asset life. Revenues and EBITDA are expected to remain reasonably stable in the medium term. Rate base is expected to increase in 2012 and 2013, reflecting the capex on and completion of the third line project. After this project, capex is expected to drop below the level of depreciation. As a result, rate base will decline gradually. The Company's credit metrics are viewed as strong, given the low level of business risk; DBRS expects GLPT to manage its distributions in order to maintain its regulatory-approved capital structure.

Due to the regulated nature of GLPT's business, the rating would be affected by potential changes in regulation. Unfavourable developments in laws or regulations relevant to GLPT or negative results in future rate cases could have a material impact on the Company. DBRS believes this risk is low, however, given the minimal change in transmission-related regulations in Ontario since the breakup of generation, transmission and distribution functions of the government-owned utilities. The refinancing risk is sufficiently mitigated by the long-life and low-risk nature of GLPT's transmission assets and operations.

Rating Considerations

Strengths

- (1) Stable earnings from regulated rates
- (2) Reliable and long-life assets with good operating history and recently completed system reinforcement and upgrades
- (3) Six-month debt service reserve

Challenges

- (1) Regulatory risk
- (2) Approved ROEs sensitive to interest rates
- (3) Refinancing risk with only partial amortization in later years and a balloon payment at maturity
- (4) Some volume risk related to peak demand

Summary Financial Information

		LTM ended June 30			
_	2007*	2008	2009	2010	2011
Revenues	35.6	35.1	31.9	33.4	33.7
EBITDA	29.2	27.7	23.9	23.7	24.7
Operating cash flow	17.0	19.1	16.1	15.8	16.9
Cash flow/total debt	15%	16%	13%	13%	14%
Cash flow/capex	0.95x	1.41x	1.43x	2.15x	1.27x
EBITDA interest coverage	3.82x	3.56x	3.02x	2.99x	3.12x
Debt/EBITDA	3.97x	4.34x	5.02x	5.06x	4.85x
Debt service coverage	2.60x	2.84x	2.42x	2.39x	2.53x
Total debt in capital structure	60.2%	54.8%	55.2%	55.0%	53.6%

 $^{{\}it *Based on the statements of the transmission division of GLPL}.$

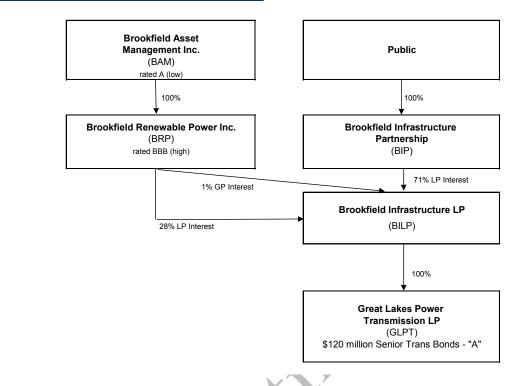
Note: table may not add up due to rounding effects.



Report Date:

October 28, 2011

Simplified Organizational Chart



GLPT's Bonds have the following key covenants and security:

- Six-month debt service reserve in an account under the trustee's name for the benefit of the bondholders.
- Distribution test: Trailing and forward-looking 12-month EBITDA-to-debt service ratio no lower than 1.5 times.
- Debt incurrence test: Trailing 12-month EBITDA-to-pro forma interest no lower than 3.0 times; no rating change to the existing rating; a minimum rating of BBB; new bonds to have the same maturity date and amortize no sooner than the existing bonds.

DBRS notes that the Bonds do not have a capex reserve requirement after the intensive capex program that was completed in the past several years. However, capex requirements going forward are considered low and manageable.



Report Date:October 28, 2011

Rating Considerations Details

Strengths

(1) Regulated transmission in Ontario generally has low business risk, with relatively predictable revenues and cash flow. GLPT's transmission operation is regulated by the Ontario Energy Board (OEB) and under the cost-of-service rate-making methodology. Rates are set to recover prudently incurred costs, including O&M, depreciation, taxes, cost of debt and a return on equity.

According to the recent rate decision in January 2011, GLPT's transmission assets have: (a) an approved rate base of about \$208 million in 2011 and \$218 million for 2012. Some of the proposed 2011 increase in rate base was deferred to 2012. The total increase of \$22.5 million reflects the cost recovery of the capex on the Third Line redevelopment project; (b) a regulated capital structure of 60/40 debt-to-equity; (c) an approved return on equity (ROE) at 9.66% and cost of long-term debt at 6.87%; and (d) a total revenue requirement of \$35 million for 2011. The revenue requirement is received on a monthly basis from the Independent Electricity System Operator (IESO), a creation of the Province of Ontario (the Province), that receives its powers through provincial regulation and legislation. GLPT's revenue requirement is added to that of the other transmission owners in Ontario (with Hydro One Inc. having the dominant position). GLPT's revenue requirements account for approximately 2.5% of the provincial total.

Major capital expenditures for lines longer than two kilometres would require the OEB's pre-approval through a Leave to Construct, which grants the approval to proceed with capital projects, with an expected capital cost forecast. If actual costs exceed expected amounts, OEB approval is required to include the overages in rate base, with prudency usually being the key determinant in this process. Routine capital expenditures are approved through the rate application process.

- (2) GLPT and its predecessor have been providing transmission service in its territory since 1916. The assets have been upgraded, replaced or reinforced in cycles similar to what the Company carried out in recent years. Although revenues are not explicitly tied to performance, GLPT has been achieving good operating performance, which helps the Company maintain good standing with the regulators.
- (3) The Bonds have a debt service reserve equal to six months of interest. This liquidity protection is considered adequate, given the stable and predictable nature of GLPT's business and manageable capex going forward.

Challenges

(1) Regulatory uncertainties are the main risk in GLPT's business. This risk factor is intertwined with other key risk factors, such as an unexpected increase in capital program costs. To the extent that the OEB deems capital cost overruns to be imprudent, GLPT would not be able to recover that portion of costs in rate base. This risk is relatively muted for the next five to ten years as the Company has completed a round of intensive capital improvements. Capital expenditures going forward will be mainly for routine maintenance and reinforcement. Annual costs are expected to be a manageable level of approximately \$5 million to \$10 million in the near to medium term. The sustaining or maintenance type of capital programs normally has limited scope or risk of construction work, if any, and more certainty in regulatory approval of full cost recovery. In addition, the Company has generally had a positive relationship with the regulators and has not encountered any significant difficulty in obtaining approval for its rate cases, either through pre-arranged negotiated settlements or through other regulatory processes. GLPT significantly increased its rate base from 2003 to 2007, with no major regulatory issues regarding capital cost recovery.

Although any unfavourable change in the rate framework and process and the general regulatory environment for electric transmission in Ontario could trigger uncertainty in GLPT's business, no significant, adverse changes are expected.



Report Date:October 28, 2011

- (2) In December 2009, the OEB changed its methodology on the calculation of a utility company's allowed ROE. The formula was reset to address the relatively low ROE levels in the past few years and to reduce its sensitivity to changes in the Government of Canada long-term bond yield. In February 2010, the OEB issued a letter on the Cost of Capital Parameter Update for 2010 Cost of Service Applications and set a ROE of 9.85% in reflection of financial market conditions. ROE calculations will still be partially based on the Government of Canada bond yield, albeit to a lesser extent.
- (3) The Bonds will be amortized per a 25-year mortgage-style schedule (or \$2 million equal annual payments) after 2013 and will have a balloon payment (79% of original amount) due at maturity in 2023. The refinancing risk is mitigated by the long-life, regulated and stable nature of GLPT's assets and operations. The Bonds outstanding at maturity are expected to be less than 60% of GLPT's then-current rate base and around 4.0 times projected EBITDA, which are viewed as financeable metrics, given the steady, low-risk cash flow stream of GLPT's regulated transmission business.
- (4) Revenues are affected by the peak transmission demand in Ontario, which is part of the reason behind the 9% year-over-year decline in 2009. This volume risk is somewhat mitigated, however, as the volume forecast is updated and rates are recalculated annually to reflect the more current demand level.

Financial Profile

					<u>LTM</u>
(CAD million)	Fo	r years ended De	ecember 31		June 30
	2007*	2008	2009	<u>2010</u>	<u>2011</u>
Transmission revenues	35.6	35.1	31.9	33.4	33.7
Operating costs	6.4	7.4	8.0	9.7	8.9
EBITDA	29.2	27.7	23.9	23.7	24.7
Depreciation	6.1	6.5	7.0	7.4	7.5
EBIT	23.1	21.1	16.9	16.3	17.3
Gross interest on senior debt	7.6	7.8	7.9	7.9	7.9
Other interest expense and/or amtz. of financing costs	(0.2)	0.0	(0.1)	0.0	(0.1)
Earnings before tax	15.7	13.3	9.1	8.4	9.4
Current income tax	4.8	0.8	-	-	-
Future income tax	(2.2)	0.1	-	-	-
Net income (before extras)	13.1	12.5	9.1	8.4	9.4
Estimated operating cash flow	17.0	19.1	16.1	15.8	16.9
Interest on senior debt	7.6	7.8	7.9	7.9	7.9
Cash available for debt service and capex	24.7	26.9	24.0	23.7	24.8
Maintenance capital expenditures	4.8	4.8	4.8	4.8	4.8
Enhancement capital expenditure	13.2	8.7	6.4	2.5	8.5
Total capital expenditure	18.0	13.5	11.2	7.3	13.3
Free cash flow	(1.0)	5.6	4.8	8.4	3.5
YE principal outstanding	116	120	120	120	120
EBITDA interest coverage	3.82 x	3.56 x	3.02 x	2.99 x	3.12 x
EBITDA interest Coverage (after maintenance capex)	3.19 x	2.94 x	2.41 x	2.39 x	2.52 x
Debt service coverage ratio (before maintenance capex)	3.23 x	3.46 x	3.03 x	2.99 x	3.13 x
Debt service coverage ratio (after maintenance capex)	2.60 x	2.84 x	2.42 x	2.39 x	2.53 x
Cash flow/debt	15%	16%	13%	13%	14%
Debt/capital	60%	55%	55%	55%	54%
Est. Rate Base	197	197	200	209	208
* Based on the statements of the transmission division of GLPL.	-,,				

Summary

Note: Table may not add up due to rounding.

- Revenues and EBITDA have grown in line with inflation over the past couple of years, as the approved revenue requirements reflected the cost inflation.
- Operating expenses were higher due to a new operating structure, under which GLPT has operated independently with its own staff and personnel since 2009.



Report Date: October 28, 2011

- In recent years, capital expenditures, although slightly higher than the 20-year average, have been manageable and primarily maintenance related, as the capital programs completed in 2005 have set up a very solid foundation for operations in the next ten to twenty years.
- Key credit metrics remain strong, given the low level of business risk, with EBITDA-to-interest of 3.1x, cash flow-to-debt of 14% and debt-to-capital of 54%. These are consistent with the current "A" rating.

Outlook

- As a result of the increase in rate base as well as cost inflation, revenue requirements for 2012 have been approved at \$36 million, subject to adjustment when the deemed short-term interest rate and ROE are determined by the OEB. A new rate case will be submitted in late 2012 for 2013 and 2014.
- The debt ratio in the capital structure has been approved to 60%, as proposed by GLPT. This is consistent with the level approved for all other transmission companies in the Province.
- Revenues will be consistent with the rate base, staying above \$35 million.
- The Bonds will begin to partially amortize in 2013 (25-year mortgage-style), reflecting the rate base and revenue profiles. DBRS expects GLPT to manage distribution levels in order to maintain the capital structure within regulatory approved levels.
- Liquidity is viewed as adequate, with stable regulated cash flows and limited capital expenditures. The \$4 million debt service reserve provides further protection against unexpected cash flow shortfalls.

Description of Operations

- GLPT's assets are located along the eastern shore of Lake Superior, north of Sault Ste. Marie, Ontario.
- The assets consist of 14 transmission stations, 725 kilometres of high- and medium-voltage transmission lines, and related infrastructure, covering an area of 12,000 square kilometres in the Algoma region of Ontario.
- The asset network is interconnected with five industrial customers and two local distribution companies as well as to the rest of the Ontario power grid at Wawa and Mississagi, Ontario, east of Sault Ste. Marie.
- Based on instructions received from the IESO, GLPT switches and controls its transmission equipment remotely through a supervisory control and data acquisition (SCADA) centre located in the city of Sault Ste. Marie.
- Transmission in Ontario is regulated by the OEB, and rates are designed to recover allowed costs, including debt financing, and earn a specified rate of return on equity.
- Transmission assets earn a guaranteed perpetual payment stream regardless of utilization.
- Maintenance capital expenditures, on a levelized basis, are expected to be less than \$10 million annually.





Report Date:

October 28, 2011

Great Lakes Power Transmission

Summary Balance Sheet							
(CAD millions)	Dec	. 31	Jun. 30		Dec	2. 31	Jun. 30
Assets	2009R**	2010	2011	Liabilities & Equity	2009R**	<u>2010</u>	2011
Cash + equivalents	0.4	0.1	0.4	Accounts payable & accruals	1.6	2.9	2.2
Int. & accounts rec.	3.2	3.2	3.2	Due to related parties	0.3	0.2	0.2
Due from related parties	0.2	2.4	1.0	Others	1.3	1.5	1.5
Prepaid expenses & others	0.6	0.6	0.6	Current liabilities	3.3	4.6	4.0
Current Assets	4.3	6.4	5.1	Senior secured bonds	117.0	117.2	117.3
Due from related parties	-	-	-	Other liabilities	4.5	6.3	6.0
Regulatory asset	2.3	4.6	6.5	Future income tax liability	-	-	-
Net fixed assets	215.4	215.1	219.5	_Capital account	97.2	98.1	103.9
Total	222.0	226.2	231.1	Total	222.0	226.2	231.1

Note: table may not add up due to rounding effects.



Report Date: October 28, 2011

Private Rating						
Debt Senior Bonds	Rating A		ating Action		Trend Stable	
Rating History						
Senior Bonds		Current A	2010 A	2009 A	2009 A	2008 A

Note:

All figures are in Canadian dollars unless otherwise noted.

Copyright © 2011, DBRS Limited, DBRS, Inc. and DBRS Ratings Limited (collectively, DBRS). All rights reserved. The information upon which DBRS ratings and reports are based is obtained by DBRS from sources DBRS believes to be accurate and reliable. DBRS does not audit the information it receives in connection with the rating process, and it does not and cannot independently verify that information in every instance. The extent of any factual investigation or independent verification depends on facts and circumstances. DBRS ratings, reports and any other information provided by DBRS are provided "as is" and without representation or warranty of any kind. DBRS hereby disclaims any representation or warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability, fitness for any particular purpose or non-infringement of any of such information. In no event shall DBRS or its directors, officers, employees, independent contractors, agents and representatives (collectively, DBRS Representatives) be liable (1) for any inaccuracy, delay, loss of data, interruption in service, error or omission of for any damages resulting therefrom, or (2) for any direct, indirect, incidental, special, compensatory or consequential damages arising from any use of ratings and rating reports or arising from any error (negligent or otherwise) or other circumstance or contingency within or outside the control of DBRS or any DBRS Representative, in connection with or related to obtaining, collecting, compiling, analyzing, interpreting, communicating, publishing or delivering any such information. Ratings and other opinions issued by DBRS are, and must be construed solely as, statements of opinion and not statements of fact as to credit worthiness or recommendations to purchase, sell or hold any securities. A report providing a DBRS rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. DBRS receives compensation for its rating activities from issuers, insurers, guarantors and/or underwriters of debt securities for assigning ratings and from subscribers to its website. DBRS is not responsible for the content or operation of third party websites accessed through hypertext or other computer links and DBRS shall have no liability to any person or entity for the use of such third party websites. This publication may not be reproduced, retransmitted or distributed in any form without the prior written consent of DBRS. ALL DBRS RATINGS ARE SUBJECT TO DISCLAIMERS AND CERTAIN LIMITATIONS. PLEASE READ THESE DISCLAIMERS AND LIMITATIONS AT http://www.dbrs.com/about/disclaimer. ADDITIONAL INFORMATION REGARDING DBRS RATINGS, INCLUDING DEFINITIONS, POLICIES AND METHODOLOGIES, ARE AVAILABLE ON http://www.dbrs.com.