

October 14, 2014

**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: Great Lakes Power Transmission LP - Application for 2015 & 2016  
Transmission Rates - Applicant Responses to Interrogatories from Board  
Staff, SEC, VECC and Energy Probe (EB-2014-0238)**

We are counsel to Great Lakes Power Transmission LP, applicant in the above-noted proceeding. Please find enclosed the applicant's responses to the interrogatories from Board Staff, School Energy Coalition (SEC), the Vulnerable Energy Consumers' Coalition (VECC) and Energy Probe Research Foundation (Energy Probe). The responses have also been filed through RESS and sent to the Board Secretary and each of the intervenors by email.

Yours truly,



Tyson Dyck

Tel 416.865.8136  
Fax 416.865.7380  
tdyck@torys.com

**Enclosure**

**cc:** Mr. R. Battista, *Board Staff*  
Intervenors  
Mr. D. Fecteau, *GLPTLP*  
Mr. C. Keizer, *Torys LLP*

## **ONTARIO ENERGY BOARD**

**IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15 (Sched. B)**

**AND IN THE MATTER OF an application by Great Lakes Power Transmission Inc. on behalf of Great Lakes Power Transmission LP for an Order or Orders pursuant to section 78 of the *Ontario Energy Board Act, 1998* for 2015 and 2016 transmission rates and related matters.**

**EB-2014-0238**

**Great Lakes Power Transmission LP**

**Interrogatory Responses**

**October 14, 2014**

## **EXHIBIT 9 - INTERROGATORY RESPONSES**

Exhibit 9, Tab 1, Schedule 1

Exhibit List



## **EXHIBIT LIST**

### **EXHIBIT TAB SCHEDULE APPENDIX CONTENTS**

#### **9 - INTERROGATORY RESPONSES**

9	1	1	Exhibit List
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		1- Staff-1(a)	Regional Planning Process Initial Kick-off Meeting: Invite, Minutes, and Post-Meeting Stakeholder Letter
		4-Staff-21(f)	Funding Valuation Report
		4-Staff-21(j)	Audited Financial Statements of Pension Plan
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	3	1	Response to SEC Interrogatories
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Exhibit 9, Tab 2, Schedule 1

Responses to Board Staff Interrogatories

**Board Staff Interrogatories  
Great Lakes Power Transmission LP (“GLPT”)  
2015-2016 Cost of Service Revenue Requirement  
EB-2014-0238**

**1-Staff-1**

**Reference:** E1-T2-S1 p.2 &  
Filing Requirements for Electricity Transmission Applications Chapter 2 p.11  
section 2.4.2.1

**Question:**

GLPT indicates that it will initiate the Regional Planning Process for the East Lake Superior region on July 23, 2014.

- a) Please provide a copy of communication sent to all key stakeholders
- b) Did GLPT receive correspondence from the OPA identifying the status of the regional planning process? If so please provide it.
- c) In which future rate year does GLPT expect it will incur capital expenditures stemming from the Regional Infrastructure Plan?

**Response:**

- a) Attached are copies of:
  - Initial kick-off meeting invite (Appendix 1-Staff-1(a));
  - minutes of kick-off meeting (Appendix 1-Staff-1(a)); and
  - letter sent out after the meeting to request stakeholder information to aid in the needs screen phase of the Regional Planning Process (Appendix 1-Staff-1(a)).

GLPT is also making information available on its website at  
[http://www.glp.ca/content/regulatory/regional\\_planning\\_new-40236.html](http://www.glp.ca/content/regulatory/regional_planning_new-40236.html)

- b) The OPA has assisted GLPT with regards to understanding the overall process through regular conversations. The conversations included the status of activities and lessons learned by the OPA in Group 1, and guidance related to the execution of the process for Group 2 (East-Lake Superior region is included in Group 2). GLPT did not receive any formal correspondence from the OPA.
- c) GLPT has a target date of December 16, 2014 to have a completed Needs Screening Report. At that time GLPT will have a better understanding of the need for capital expenditures as well as timing, including whether or not a regional plan is required. At this time GLPT is unable to determine the timing of any capital expenditures that may stem from the Regional

Infrastructure Plan, and therefore GLPT's proposed 2015-2016 rate base additions do not include any provision for this type of capital expenditure.

**2-Staff-2**

**Reference:** E2-T1-S1 p.1

**Question:**

GLPT states that “[It] will review the need to complete a new working capital study prior to filing its next rate application.”

Please provide a brief description of the factors GLPT will consider when it decides whether or not a new working capital study should be completed.

**Response:**

GLPT will consider factors such as:

- i. Potential changes in GLPT’s actual working capital requirements that affect its cash flows (i.e., have payment terms with vendors changed, have there been changes to the revenue receipt process, does GLPT engage in more prepaid or accrued expense arrangements which might affect expense leads);
- ii. Changes in legislation such as retail sales taxes (i.e., HST); and
- iii. Anticipated cost and ratepayer benefit of a working capital study – GLPT will seek to ensure the value to the ratepayer outweighs the cost of the study.

## 2-Staff-3

**Reference:** E2-T1-S1

### Question:

Board staff has prepared the table below which presents GLPT's Board approved and actual capital expenditures for the years 2012, 2013, 2014 and the proposed expenditures for the 2015 and 2016 test years. The information was extracted from the fixed asset continuity tables.

CAPITAL EXPENDITURES									
		EB-2012-0300			EB-2014-0238				
		2012 Bridge (FCST)	2013 Board Approved (IFRS)	2014 Board Approved	2012 Actual	2013 Actual	2014 Bridge	2015 Test Year	2016 Test Year
No.	Description								
1705	Land							\$ 380,000	\$ 580,000
1715	Station Equipment	\$ 25,926,428	\$ 1,969,996	\$ 514,200	\$ 22,326,216	\$ 1,218,805	\$ 618,262	\$ 1,827,800	\$ 5,455,404
1720	Towers and Fixtures								
1725	Poles and Fixtures	\$ 4,845,394	\$ 1,710,387	\$ 3,183,457	\$ 5,070,368	\$ 1,938,329	\$ 3,238,450	\$ 5,630,000	\$ 2,807,200
1730	Overhead Conductors and Devices	\$ 1,500,000				\$ 30,213			
1740	Underground Condutors and Devices								
1745	Roads and Trails								
1908	Buildings and Fixtures		\$ 170,000	\$ 172,857	\$ 26,824	\$ 15,542			
1910	Leasehold Improvements	\$ 255,000			\$ 300,698	\$ 36,097	\$ 46,300	\$ 180,000	\$ 250,000
1915	Office Furniture and Equipment				\$ 13,812	\$ 6,715	\$ 3,000		
1920	Computer Equipment - Hardware	\$ 151,000	\$ 215,375	\$ 223,660	\$ 200,942	\$ 215,890	\$ 223,022	\$ 258,500	\$ 276,000
1930	Tranportation Equipment	\$ 62,000	\$ 240,000	\$ 200,000	\$ 56,472	\$ 179,287	\$ 160,000	\$ 250,000	\$ 250,000
1940	Tools, Shop and Garage Equipment				\$ 15,079	\$ 26,299	\$ 19,547		
1955	Communication Equipment	\$ 216,412	\$ 180,900	\$ 50,600	\$ 4,346,855	\$ 889,894	\$ 84,316	\$ 270,000	\$ 150,000
1960	Miscellaneous Equipment				\$ 143,234				
	Intangibles								
1706	Land Rights								
1925	Computer software	\$ 471,759			\$ 716,292		\$ 479	\$ 663,697	
1990	Other Tangible Property								
	TOTAL	\$ 33,427,993	\$ 4,486,658	\$ 4,344,774	\$ 33,216,792	\$ 4,557,071	\$ 4,393,376	\$ 9,459,997	\$ 9,768,604

Table 2-Staff-3 A

				CAPITAL EXPENDITURES					
		EB-2012-0300			EB-2014-0238				
		2012 Bridge (FCST)	2013 Board Approved (IFRS)	2014 Board Approved	2012 Actual	2013 Actual	2014 Bridge	2015 Test Year	2016 Test Year
No.	Description								
1705	Land							\$ 380,000	\$ 580,000
1715	Station Equipment	\$ 25,926,428	\$ 1,969,996	\$ 514,200	\$ 22,326,216	\$ 1,218,805	\$ 618,262	\$ 1,827,800	\$ 5,455,404
1720	Towers and Fixtures								
1725	Poles and Fixtures	\$ 4,845,394	\$ 1,710,387	\$ 3,183,457	\$ 5,070,368	\$ 1,838,329	\$ 3,238,450	\$ 5,630,000	\$ 2,807,200
1730	Overhead Conductors and Devices	\$ 1,500,000				\$ 30,213			
1740	Underground Conductors and Devices								
1745	Roads and Trails								
1908	Buildings and Fixtures		\$ 170,000	\$ 172,857	\$ 26,824	\$ 15,542			
1910	Leasehold Improvements	\$ 255,000			\$ 300,698	\$ 36,097	\$ 46,300	\$ 180,000	\$ 250,000
1915	Office Furniture and Equipment				\$ 13,812	\$ 6,715	\$ 3,000		
1920	Computer Equipment - Hardware	\$ 151,000	\$ 215,375	\$ 223,660	\$ 200,942	\$ 215,890	\$ 223,022	\$ 258,500	\$ 276,000
1930	Transportation Equipment	\$ 62,000	\$ 240,000	\$ 200,000	\$ 56,472	\$ 179,287	\$ 160,000	\$ 250,000	\$ 250,000
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1960	Miscellaneous Equipment				\$ 143,234				
	Intangibles								
1705	Land Rights								
1925	Computer software	\$ 471,759			\$ 716,292		\$ 479	\$ 663,697	
1930	Other Tangible Property								
	TOTAL	\$ 33,427,993	\$ 4,486,658	\$ 4,344,774	\$ 33,216,792	\$ 4,457,071	\$ 4,393,376	\$ 9,459,997	\$ 9,768,684

## 2-Staff-4

Reference: E2-T1-S1

### Question:

Board staff has prepared the table below which presents GLPT's Board approved and actual capital rate base for the years 2012, 2013, 2014 and the proposed rate base for the 2015 and 2016 test years.

RATE BASE								
	EB-2012-0300			EB-2014-0238				
	2012 Bridge (FCST)	2013 Board Approved (IFRS)	2014 Board Approved	2012 Actual	2013 Actual	2014 Bridge	2015 Test Year	2016 Test Year
Opening Net Fixed Assets	\$ 206,337.00	\$ 228,764.10	\$ 224,098.60	\$ 204,886.90	\$ 228,704.60	\$ 223,471.70	\$ 218,406.80	\$ 218,165.60
Closing Net Fixed Assets	\$ 230,164.00	\$ 224,065.90	\$ 219,213.40	\$ 228,704.60	\$ 223,471.60	\$ 218,406.80	\$ 218,165.60	\$ 218,162.90
Average Net Fixed Assets	\$ 218,250.50	\$ 226,415.00	\$ 221,656.00	\$ 216,795.75	\$ 226,088.10	\$ 220,939.25	\$ 218,286.20	\$ 218,164.25
Working Capital Allowance	\$ 566.80	\$ 439.60	\$ 459.40	\$ 513.80	\$ 439.60	\$ 459.40	\$ 474.00	\$ 489.80
Rate Base	\$ 218,817.30	\$ 226,854.60	\$ 222,115.40	\$ 217,309.55	\$ 226,527.70	\$ 221,398.65	\$ 218,760.20	\$ 218,654.05

Please confirm that numbers in the table are correct. If they are not correct please highlight the cell and insert the correct number.

### Response:

The figures presented by Board staff are correct with the exception of a minor error in the 2013 Actual Closing Net Fixed Assets, Average Net Fixed Assets and Rate Base which appears to be a typographical error. GLPT has prepared the table below with the revised figures matching GLPT's pre-filed evidence highlighted in blue.

Table 2-Staff-4 A

RATE BASE								
	EB-2012-0300			EB-2014-0238				
	2012 Bridge (FCST)	2013 Board Approved (IFRS)	2014 Board Approved	2012 Actual	2013 Actual	2014 Bridge	2015 Test Year	2016 Test Year
Opening Net Fixed Assets	\$ 206,337.00	\$ 228,764.10	\$ 224,098.60	\$ 204,886.90	\$ 228,704.60	\$ 223,471.70	\$ 218,406.80	\$ 218,165.60
Closing Net Fixed Assets	\$ 230,164.00	\$ 224,065.90	\$ 219,213.40	\$ 228,704.60	\$ 223,471.70	\$ 218,406.80	\$ 218,165.60	\$ 218,162.90
Average Net Fixed Assets	\$ 218,250.50	\$ 226,415.00	\$ 221,656.00	\$ 216,795.75	\$ 226,088.15	\$ 220,939.25	\$ 218,286.20	\$ 218,164.25
Working Capital Allowance	\$ 566.80	\$ 439.60	\$ 459.40	\$ 513.80	\$ 439.60	\$ 459.40	\$ 474.00	\$ 489.80
Rate Base	\$ 218,817.30	\$ 226,854.60	\$ 222,115.40	\$ 217,309.55	\$ 226,527.75	\$ 221,398.65	\$ 218,760.20	\$ 218,654.05



## 2-Staff-5

**Reference:** E2-T1-S1 pp.4-15

### **Question:**

GLPT in regard to its “Wood Structure Replacement” capital program indicated that it:

- Intends to continue with the existing “Wood Structure Replacement” capital program which GLPT initiated in 2012, and received Board approval in EB-2012-0300.
  - Seeks approval for capital expenditures in 2015 of \$5,630,000 and in 2016 of \$2,807,200.
  - In 2009 engaged Polecare International Inc. (“Polecare”) to perform condition assessments of the majority of the wood pole structures within GLPT’s transmission system.
  - Intends to continue with the recommendations of the Polecare report and complete a comprehensive wood structure replacement program that will extend beyond 2015 and 2016 – a nine year program to be completed in 2020.
- a) If the data is available, please provide a table summarizing the total number of wood poles on GLPT’s transmission system by type, the corresponding age in ranges of “5 years”, and the portions that according to the Polecare report are in need of replacement.
- b) If available, please provide GLPT’s plan for pole replacement covering the years 2017 – 2020, preferably in tabular form indicated the number of poles by type, and the total annual estimated cost for that period.

### **Response:**

- a) GLPT has provided *Table 2-Staff-5 A* below to summarize all of GLPT’s poles as well as the poles identified for replacement by age. The poles identified for replacement that are less than 25 years of age have been identified due to extensive woodpecker or carpenter ant damage on one or more poles on the structures.

Polecare had identified 1,285 poles for replacement by 2020. GLPT has prioritized the replacements by potential impact on employee and public safety, status of degradation and potential impact on reliability and has developed its wood structure replacement program on that basis. Any of the poles that are not replaced by 2020 will continue to be monitored and inspected at least annually through GLPT’s regular maintenance cycles.

*Table 2-Staff-5 A – Wood Poles by Age as of 2014*

<b>Approximate Age at Jan 1, 2015</b>	<b>Total System</b>	<b>Wood poles due for replacement before 2020 as recommended by Pole Care Study</b>
6-10	2,254	25
11-15	185	32
16-20	844	257
21-25	1,026	371
26-30	609	229
31-35	19	11
36-40	26	3
41-45	171	120
46-50	228	182
51-55	45	45
56-60	12	10
<b>Total</b>	<b>5,419</b>	<b>1,285</b>

- b) GLPT's plan for 2017 - 2020 is to replace 288 wood poles on the P21G circuit with fibre-reinforced polymer (FRP) structures with steel cross-arms at an annual estimated cost of approximately \$3M - \$4M per year.

GLPT is in the planning phase of the 2017-2020 portion of the wood structure replacement program. While it has identified the poles it intends to replace during this period, it has not specifically identified the exact timing of replacement for each pole. However, GLPT has prepared *Table 2-Staff-5 B* to demonstrate the approximate age of each of the 288 poles. Additional poles may need to be replaced on the P21G circuit if there is any unexpected damage (i.e., woodpecker holes, weathering, etc.) or further deterioration of any of the poles.

*Table 2-Staff-5 B – Wood Poles Scheduled for Replacement 2017-2020*

<b>Age of Wood Pole</b>	<b># of Poles for Replacement on P21G</b>
6-10	12
11-15	19
16-20	27
26-30	21
31-35	16
36-40	1
41-45	158
46-50	34
<b>Total</b>	<b>288</b>

**2-Staff-6**

**Reference:** E2-T1-S1 pp.4-15

**Question:**

The table below summarizes the number of poles by type that GLPT intends to replace under the Wood Structure Replacement capital program in 2015 and 2016 as well as total costs.

Year	Number of tangent structures	Number of dead end and/or angle structures	Reference page at E2-T1-S1	Total Cost
2015	63	28	Page 7	\$5,630,000
2016	26	8	Page 15	\$2,807,200

Please explain why while the number of tangent structures and the number of dead-end and/or angle structures decrease by about 60% and 71% between 2015 and 2016, the total associated costs decrease by only 50%.

**Response:**

GLPT notes that the table above defines the number of *structures* to be replaced vs. the number of *poles* to be replaced. Depending on the type, structures can have between 1 and 4 poles on each structure. The number of poles to be replaced in 2015 and 2016 are 163 and 76, respectively. Therefore, the total number of poles being replaced decreases by approximately 53% while the cost decreases by approximately 50%.

The variance between the 53% decrease in poles and the 50% decrease in costs between 2015 and 2016 is primarily due to contractor/sub-contractor mobilization, fuel and material delivery, engineering design and support, and project management costs which are all higher on a per-pole basis for the 2016 program as a result of the decrease in the volume of poles being replaced and the more remote location of the 2016 program.

**2-Staff-7**

**Reference:** E2-T1-S1 pp. 8-11

**Question:**

GLPT indicates that for the “Station Service” part of the “Highway 101 TS 44 kV Upgrades - \$1,029,000” project in 2015:

- the main transformer that supplies AC power for the station-service load is owned by Algoma Power Inc., which is metered and GLPT is billed for the usage of power;
- the addition of a 44kV Station Service Voltage Transformer (“SSVT”) will result in some cost-savings for GLPT, and
- provides redundancy of supply, via a transfer switch to be used in the case of equipment failure or loss of supply on the SSVT.

Please provide the estimated installed cost of the new transformer and the expected annual maintenance cost of that new transformer as well as the annual GLPT saving under the option of continued use of the main transformer owned by Algoma Power Inc. that supplies AC power for the station service.

**Response:**

The estimated installed cost of the new transformer is \$90,000. GLPT is not anticipating an increase in annual maintenance costs related to the new transformer, as any incremental maintenance activities will be absorbed within the existing maintenance program.

GLPT is anticipating that the installation of the new transformer would reduce its electricity consumption cost by approximately \$900 per year.

While the cost savings are not significant, GLPT believes having redundant station service supply is good utility practice as it provides improved reliability in the event of a transformer failure.

**2-Staff-8**

**Reference:** E2-T1-S1 pp.12-14

**Question:**

GLPT is planning to spend \$663,700 in 2015 to upgrade its Enterprise Resource Planning System. GLPT indicated that it is planning the implementation of a new work management system and the upgrade of the existing financial system, to a more efficient and user-friendly Graphical User Interface (“GUI”) system. GLPT intends to transition to the GUI system in parallel with implementing the new work management system to ensure the systems are integrated efficiently and properly.

- a) Did GLPT prepare a business case to support the \$663,700 investment to upgrade the Enterprise Resource Planning System? If so, please provide a copy.
- b) Have any of the efficiencies to be realized from this investment been reflected in the proposed revenue requirement for 2015 and 2016. If so, please indicate where and how these efficiencies were reflected (sample answer: Decrease of \$35,000 in OM&A due to the elimination of 0.5 FTE in Finance and Administration Group)
- c) Please describe how the new management system and the proposed new GUI system will make use of the existing GIS transmission circuit information.

**Response:**

- a) As stated in Exhibit 2, Tab 1, Schedule 1, the need for the project relies on the fact that the existing system was installed in the early 1990’s and has had no significant technological upgrades since that time. The system is based on obsolete technology. The asset hierarchy is inadequate to fully model transmission assets, and the work management system is not fully integrated with the financial system. Further to this, reporting functions are relatively limited and cumbersome.

The business analysis related to the upgrade and improved integration came down to the assessment of three basic alternatives:

- Option 1 – Upgrade both the work management and financial modules with a new integrated ERP system,
- Option 2 – Upgrade only the financial module providing improved integration with the work management module, or
- Option 3 – Upgrade only the work management module, migrating to a system that is offered by the provider of GLPT’s current financial module and significantly improving integration between the modules.

The cost and operational challenges associated with migrating both modules would be higher than the cost and operational challenges associated with migrating only one of the two

modules. While the user interface of the financial module is dated, it is meeting the needs of the business and can be improved with an upgrade to the interface. Further, the current work management module will require significant enhancements to perform as desired for the business. Therefore, GLPT determined the best solution is Option 3. No formal business case was prepared.

- b) No cost savings have been recognized in the proposed revenue requirement for 2015 and 2016. Upon completion of the implementation in 2015, GLPT will continue to use existing staff to ensure a smooth transition of work flow and procedures. GLPT anticipates the implementation will create efficiencies; however short-term efficiencies are expected to increase productivity and quality of operational reporting and will not result in immediate cost savings.

GLPT believes there will be longer term efficiencies such as:

- Improved reporting, particularly related to capital project management, will enable the company to be more effective and efficient with its capital expenditures, thus reducing overall project management costs.
  - A more robust and integrated ERP system will reduce GLPT's dependence on its corporate IT staff, allowing the group to focus on business and process improvements rather than applying resources to maintaining the ERP system.
  - GLPT will seek efficiencies in its payroll processing and may consider alternatives to processing in-house.
- c) GLPT is exploring potential integration between its work management system and its GIS system; however at this time GLPT is not anticipating the 2015 implementation will integrate with the GIS system. The GIS system will continue to be maintained by GLPT and will continue to support operational activities, particularly in the lines and forestry functions.

**2-Staff-9**

**Reference:** E2-T2-S1 pp.1-6

**Question:**

GLPT describes its management of existing infrastructure as follows:

- for lines GLPT also makes use of recently acquired LiDAR data that provides detailed information on transmission lines, structures and vegetation as well as a GIS system that supports the collection and maintenance of information regarding the transmission circuits (pp.1-3)
  - for stations information from various tests (including visual inspections, functional tests, infrared inspections, oil sampling and dissolved gas analysis) are documented and reviewed (pp.3-4)
  - under “Asset Condition Assessment” in addition GLPT annually carries out asset condition assessments using internal staff, and periodically, GLPT retains external consultants to undertake additional asset condition assessments (p4)
  - Under “Optimizing Asset Replacement” that to optimize GLPT’s asset replacement strategy, the maintenance and condition assessment program documentation is reviewed and assessed, including the combination of the inspection and maintenance reports, as well as third party analyses and SCADA information. (pp4-5)
- a) Please describe the asset condition assessment approach used by GLPT. In that description please indicate whether quantitative scoring and relative weights are used based on multi-factored parameters or just qualitative assessment e.g., High, Medium, and Low in describing a given asset such as a circuit breaker.
- b) Does GLPT develop a health index (HI) for some or all its transmission asset groups? If yes for some or all its asset groups, does GLPT keep records for each asset on its GIS system? If not developed yet, please indicate whether GLPT is planning to adopt such an approach.
- c) In reference to end of life mentioned in the evidence, does that refer to the end of life of assets used in the depreciation schedules used to calculate depreciation amounts used the revenue requirement calculations?
- d) If the answer to c) above is affirmative, please indicate whether GLPT modifies the asset lives to reflect the asset condition assessment for any given asset. If yes please elaborate and describe the approach using an illustrative example.
- e) Does GLPT assess the probability of failure of assets? If yes, please describe the assumptions used, and provide the probability functions developed for any of the asset groups.
- f) If the answer to e) is affirmative, please provide a description of how the asset condition assessment or the HI modifies the probability of failure for asset groups.

**Response:**

- a) The condition assessment program that GLPT uses is based on a systematic approach to evaluating equipment, collecting data and identifying changes in performance or the

condition of the physical asset. This allows GLPT to implement preventative and corrective actions when equipment problems arise or simply to monitor and trend the condition of an asset for utilization in the capital planning process. Both qualitative and quantitative condition assessments are used, varying with equipment type.

*Qualitative assessment example:* Bi-annual substation maintenance of GLPT's transmission stations includes a Circuit Breaker inspection which consists of fourteen evaluation elements each with qualitative condition descriptions which aid in determining the qualitative condition of each component as well as the overall condition of the transmission circuit breaker.

*Quantitative assessment example:* The maintenance of a Circuit Breaker will consist of prescribed tests which will result in many measured and recorded values. A quantitative condition assessment guide for Circuit Breakers provides the expected measured values and ranges which will aid in determining a quantitative condition rating.

GLPT assigns a rating for both qualitative and quantitative assessments, where the condition rating criteria is consistent for both types of assessments:

- 3 = No action required,
- 2 = Monitor,
- 1 = Corrective action within 1 year, and
- 0 = Immediate action required.

This condition assessment approach is complemented with defined maintenance and inspection cycles.

- b) GLPT does not develop health indexes for asset groups. However, GLPT records a condition rating for all of its critical transmission system assets. All condition assessment information lives with the maintenance records which are available electronically but are not accessible through the GIS system.
- c) GLPT's asset useful life used in its depreciation schedules represents its best estimate for the average useful life of assets of a certain type. However, when GLPT refers to asset useful life or anticipated end of life in the context of its asset management program, it is referring to the actual physical end of life regardless of the life remaining for accounting purposes.
- d) At the time of adoption of IFRS as of January 1, 2013, GLPT reviewed the useful life of all of its asset components and revised the remaining accounting life to match expected operational life with the assistance of operational staff and the Kinectrics report on depreciation prepared for the Ontario Energy Board. Further, as required by IFRS, GLPT reviews the useful lives of its assets and its asset categories annually to verify the useful lives for accounting purposes are reflective of the expected useful lives of the assets in the field. Specifically, if GLPT determines after three years that a fleet asset with an original useful life of five years will in fact last seven years, it would extend the useful life of the asset to



depreciate the remaining net book value over the remaining four years of expected asset useful life.

- e) At this time GLPT does not use a model to determine probability of asset failure. Based on the modest size of GLPT's transmission network, GLPT has not identified a need to develop this type of method. GLPT is able to complete more comprehensive condition assessments that may not be possible with a larger system which would instead have to rely more heavily on asset failure probability analysis. Utilization of condition assessments coupled with routine inspection and real time diagnostics have proven successful in preventing asset failure and maintaining a high level of reliability, and have proven to be cost effective. GLPT will stay committed to continuous improvements within its Asset Management Program.
- f) Not applicable.

**2-Staff-10**

**Reference:** E2-T1-S1 pp.23 – 25 &  
Appendix B “One Line Engineering Study – Mackay Grounding Transformer”,  
November, 2013.

**Question:**

In the Executive Summary of the One Line Engineering Study – Mackay Grounding Transformer, the author outlined some causes for the catastrophic failure of the Grounding Transformer (GT-4):

The investigations revealed some root causes that led the grounding transformer to failure. The detailed analysis and computer simulations showed that the grounding transformer insulation failed due to the combined effect of the following factors:

1. Transient overvoltages within the 34.5kV system due to switching of the reactor R1.
  2. External surges on the 230kV or 115kV system propagating into the tertiary of the main transformer T2 by transformation or capacitive coupling.
  3. The tnak (*sic*) and the core ground were not grounded.
  4. High GPR & touch voltages at Mackay TS.
- a) What was the age of the Grounding Transformer at the time of failure, and what year it came into service?
  - b) What is the estimated cost of the damage from the catastrophic failure incurred including the cost of the Grounding Transformer and damages to other station system elements and equipment?
  - c) Does GLPT insure its transmission assets against damage or loss? If yes, did GLPT claim for damages arising out of the noted transformer failure? If yes, how much did GLPT receive?

**Response:**

- a) The grounding transformer was installed in 2005 and was approximately 8 years old at the time of failure.
- b) The cost to replace the grounding transformer was approximately \$105,000. No other damage was sustained on other station system elements and equipment.
- c) Yes, GLPT does insure its transmission assets. No claim was made related to the failed transformer as GLPT’s property insurance deductible is higher than the replacement cost of the asset.

**2-Staff-11**

**Reference:** E2-T1-S1 p29

**Question:**

GLPT put a new transformer (Northern Ave. Transformer Station) into service in 2013 at a cost of \$242,600. The old transformer failed because of the incursion of a raccoon. Replacement rather than repair was the most economic option.

- a) To what extent was the then existing transformer “raccoon protected”?
- b) How frequently does a raccoon cause a failure?
- c) How many Transformer Stations protected for raccoon entry?

**Response:**

- a) GLPT’s Northern Ave. Transformer Substation is protected from animal entry through the use of high fences buried below grade with barb wire toppers, limited horizontal climbing surfaces and sealed control buildings.
- b) Frequency of raccoon-caused failure of equipment is rare. GLPT’s management is not aware of any other instances where a raccoon has caused a failure.
- c) All GLPT Transformer Stations are protected from animal entry through the use of high fences buried below grade with barb wire toppers, limited horizontal climbing surfaces and sealed control buildings.

**2-Staff-12**

**Reference:** E2-T2-S1 &  
Filing Requirements for Electricity Transmission Applications Chapter 2 p.11  
section 2.4.2.1

**Question:**

GLPT indicates that its approach to asset management involves the managing of existing infrastructure and optimising the replacement of assets. GLPT further describes the programs and/or activities undertaken in this regard.

- a) Is this GLPT's evidence on its Asset Management Plan (per the Transmission Filing Requirements Chapter 2 p.11 section 2.4.2.1)?
- b) If not, please provide a copy of GLPT's Asset Management Plan.

**Response:**

- a) Confirmed – this is GLPT's evidence on its Asset Management Plan.
- b) Not applicable.

### 3-Staff-13

**Reference:** E3-T1-S2 p4

**Question:**

The comparison of actual versus forecast (UTR) charge determinant amounts (MW) shows consistent over-forecasting i.e. actuals are less than the forecasted levels used to establish the UTR.

Please briefly describe the methodology used by the IESO to calculate the amounts it remits to GLPT for the transmission services actually rendered by GLPT. Please include the scenario where GLPT's charge determinant actuals are less than forecast, while the actuals of the other transmitters are the same as the forecasts used to derive the UTR for a particular year.

**Response:**

*IESO Methodology:*

GLPT's understanding is the IESO collects transmission revenues from market participants (i.e., LDCs and load customers) across Ontario for each of the transmission rate pools based on the currently approved UTR. The total revenue collected is then allocated to each of the transmitters based on that transmitter's Revenue Allocator (also forming a part of the UTR).

GLPT has provided the table below to demonstrate its understanding of the methodology used by the IESO to calculate its annual revenue (assuming no volume forecast variance).

*Table 3-Staff-13 A – IESO Annual Revenue Calculation*

<b>No Forecast Variance</b>		<b>Transformation</b>			<b>Total</b>
	<b>Calculation</b>	<b>Network</b>	<b>Line Connection</b>	<b>Connection</b>	
Total KW Charge Determinants	[A]	238,895,068	231,488,583	198,166,364	
UTR	[B]	3.83	0.82	1.98	
Revenue Generated	[C] = [A] * [B]	\$914,346,793	\$189,698,079	\$393,227,291	\$1,497,272,163
GLPT Allocation Factor	[D]	0.02710	0.02710	0.02710	
GLPT Revenues	[E] = [C] * [D]	24,778,798	5,140,818	10,656,460	40,576,076
GLPT Revenue Requirement	[F]	24,775,019	5,140,034	10,654,834	40,569,887
Revenue Sufficiency / (Deficiency)*	[G] = [E] - [F]	\$3,779	\$784	\$1,626	\$6,189

\*The variance in the table above is a result of rounding of UTR rates and allocation factor.

*GLPT Forecast Variance Scenario:*

As demonstrated in the table below, in the event GLPT's charge determinant actuals are 25% less than forecast and the actual loads for all other transmitters are the same as the load forecast used to derive the UTR for 2015, GLPT's revenue would be approximately \$111,000 lower than its proposed revenue requirement.

*Table 3-Staff-13 B – GLPT Forecast Variance*

<b>25% GLPT Forecast Variance</b>		<b>Transformation</b>			<b>Total</b>
	<b>Calculation</b>	<b>Network</b>	<b>Line Connection</b>	<b>Connection</b>	
Total KW Forecast	[A]	238,895,068	231,488,583	198,166,364	
Less: 25% of GLPT's forecast	[B]	(872,309)	(681,406)	(156,563)	
Total KW Charge Determinants	[C] = [A] - [B]	238,022,759	230,807,177	198,009,801	
UTR	[D]	3.83	0.82	1.98	
Revenue Generated	[E] = [C] * [D]	\$911,627,167	\$189,261,885	\$392,059,406	\$1,492,948,458
GLPT Allocation Factor	[F]	0.02710	0.02710	0.02710	
GLPT Revenues	[G] = [E] * [F]	24,705,096	5,128,997	10,624,810	40,458,903
GLPT Revenue Requirement	[H]	24,775,019	5,140,034	10,654,834	40,569,887
Revenue Sufficiency / (Deficiency)	[I] = [G] - [H]	(\$69,923)	(\$11,037)	(\$30,024)	(\$110,984)

The tables in GLPT's response to this interrogatory have been prepared using information from GLPT's proposed 2015 Uniform Transmission Rates which can be found at *Table 8-1-1 B* of the pre-filed evidence.

**3-Staff-14**

**Reference:** E3-T1-S3 p2

**Question:**

GLPT indicates that it is changing the way it records Net Revenue from Electric Property- Fibre Optic Attachment.

“The annual revenue that GLPT will receive for this pole rental in the test years is estimated to be \$32,500 for each of 2015 and 2016. This same arrangement existed when GLPT applied for its 2013 and 2014 13 revenue requirement in EB-2012-0300. However, in EB-2012-0300, GLPT accounted for the net benefit of this arrangement as Net Rent from Electric Property. However, to simplify the accounting for this arrangement, GLPT is accounting for the gross revenue as Net Rent from Electric Property, with any offsetting operating costs being accounted for directly in OM&A.”

Under this new treatment how will GLPT accurately track/record the associated OM&A costs?

**Response:**

GLPT will ensure that all revenues received from pole rentals are accounted for as Net Rent from Electric Property, and any resulting operating costs that are billed to GLPT are recorded within the appropriate OM&A account. By moving away from netting the fibre optic revenue and associated licence costs, GLPT is in fact simplifying the accounting for the costs and revenues.

#### 4-Staff-15

**Reference:** E4-T2-S1 pp.12-15

**Question:**

GLPT is proposing to increase its OM&A in 2015 by \$360,000 [(i) - \$205,000 for a 3rd party consultant to complete review of existing and upcoming standards & develop a comprehensive compliance program (ii) \$30,000 for annual system control operator training costs (for 4 operators not certified need to be by July 2016) for NERC certification (iii) \$125,000 for a compliance analyst].

- a) By when will the third party review/ compliance program development be completed by the consultant?
- b) Why would GLPT hire the compliance analyst before a) is completed?
- c) Will the training for the 4 operators be completed in 2015?

**Response:**

- a) GLPT intends to engage the third party for development of the program in the early part of 2015. GLPT anticipates that the program will be completed before the end of 2015.
- b) As described in GLPT's response to 4-Energy Probe-15 part (d), the development of the compliance program will be a one-time activity to be completed by both the consultant and the Compliance Analyst. The output of this activity will provide GLPT with a transition plan and sustainable compliance program for CIP version 5, as well as a sustainable compliance program related to an entirely new set of standards as a result of GLPT assets being defined as BES elements. This compliance program will then be maintained and executed over the long-term by GLPT's Compliance Analyst.

In developing the program, the Compliance Analyst will work with the consultant which will assist the Compliance Analyst with:

- i. Understanding the compliance requirements of GLPT;
- ii. Understanding the various components of the program; and
- iii. Understanding roles and responsibilities in executing the program.

GLPT believes it is more effective and efficient to hire the Compliance Analyst before the third party is hired to pull the program together, so that the third party developing the program can be properly instructed and the Compliance Analyst can take advantage of the learning opportunities that will be presented during the development of the program.

- c) GLPT's current plan is to have all 4 operators NERC certified no later than October 2015. However, as described in GLPT's response to 4-Energy Probe-18, once certification is achieved, a significant amount of continuing education is required to maintain the NERC



certification. Therefore, GLPT will continue to incur the incremental NERC training costs for continuing education in future years, subsequent to certification.

#### **4-Staff-16**

**Reference:** E4-T2-S1 p4 and pp. 15-17

**Question:**

For succession planning purposes GLPT is proposing to overlap three operator positions, one starting in 2015 and the other two in 2016 at a cost of \$150,000 each. GLPT indicates that the transition period is 12-18 months and the savings from the retirements will start after 2016.

- a) In that the “retirements” will only start after 2016, it appears that the transition period for the operator starting in 2015 is 24 months. Please explain why a 18 month transition period is not reflected.
- b) Are all of the 3 retirements expected to occur on January 1, 2017? If not, what are the estimated dates?

**Response:**

- a) One of the three operators nearing retirement will be eligible to retire at the end of 2015. Therefore, GLPT has included the cost of the replacement operator for the full year in 2015 (and continuing in 2016), but has not incorporated any cost reduction related to the retirement, as it cannot yet be confirmed whether the retirement will take place.
- b) GLPT is currently estimating that two retirements will occur in early 2017, and one retirement will occur in mid- to late-2017.

**4-Staff-17**

**Reference:** E4-T2-S1 p10 &  
E4-T2-S2 p4 table 4-2-2-A

**Question:**

At p.10 GLPT indicates that in 2013 there was a decrease in the allocation of internal labour to capital projects which resulted in upward pressure on OM&A of about \$500,000. Per table 4, there is no significant change in “compensation capitalized” between 2013 Application and 2013 actual i.e \$604.6K vs \$623.4K.

Please explain why 2013 actual compensation capitalized did not show a decrease.

**Response:**

The comparison GLPT was drawing when it was referring to a change in labour capitalization was between 2012 actual and 2013 actual, not between 2013 application and 2013 actual, as noted in the interrogatory question.

As demonstrated in Table 4-2-2 A, actual compensation capitalized was \$1,102.1K in 2012, compared to \$634.8K in 2013.

**4-Staff-18**

**Reference:** E4-T2-S2 p1 lines 12-18

**Question:**

“ A decrease in overtime worked” is identified as a driver for the slight decrease in FTEs in 2013. Please clarify whether “overtime hours” are included in the calculation of Full Time Equivalents (FTEs).

**Response:**

GLPT includes overtime hours in its calculation of Full Time Equivalent employees. As an example, 2,080 hours of overtime worked by various non-salary employees would constitute one additional FTE.

As described in GLPT’s response to 4-SEC-10, one of the areas of efficiency that GLPT is focusing on is management of overtime, and therefore this has been reflected in GLPT’s compensation figures.

**4-Staff-19**

**Reference:** E4-T2-S2 Appendix B

**Question:**

Please confirm that the unsigned Collective Agreement provided in Appendix B evidence does not differ from the signed version.

**Response:**

Confirmed.

#### 4-Staff-20

**Reference:** E4-T2-S2 p4 table 4-2-2-A

**Question:**

Table 4-2-2-A, titled Employee Compensation, includes the costs for Current and Accrued Benefits for the categories of Union, Management & Executive and Non-union for the years 2012 to 2016. Actuals for 2012 total \$1.7983M and the 2016 Test Year totals \$2.11155M. Please provide a table that breaks down the Current and Accrued Benefits Costs for the period 2012 to 2016 in the following categories for each of Union, Management & Executive and Non-union. Also identify which categories were affected when generation employees were transferred to GLPT.

- Current benefits paid
- Defined Benefit pension costs
- Defined Contribution pension costs
- Non-pension post-retirement benefit (OPEB - Other Pension and Employee Benefits) current service costs
- Non-pension post-retirement benefit (OPEB) past service costs

**Response:**

*Table 4-Staff-20 A – Breakdown of Benefit Expenses*

All figures shown in \$000's	2012 Actual	2013 Actual	2014 Forecast	2015 Test Year	2016 Test Year
<b>Current Benefits</b>					
Union	\$303.6	\$299.0	\$336.7	\$363.8	\$404.6
Management & Executive	\$149.6	\$144.5	\$132.5	\$144.8	\$146.0
Non-Union	\$162.0	\$155.9	\$199.1	\$218.1	\$220.0
<b>Total</b>	<b>\$615.2</b>	<b>\$599.4</b>	<b>\$668.3</b>	<b>\$726.7</b>	<b>\$770.6</b>
<b>Defined Benefit Pension Costs</b>					
Union	\$424.4	\$476.6	\$546.8	\$525.8	\$580.3
Management & Executive	\$70.6	\$65.0	\$21.1	\$22.7	\$23.2
Non-Union	\$43.1	\$49.9	\$41.5	\$39.4	\$40.2
<b>Total</b>	<b>\$538.1</b>	<b>\$591.5</b>	<b>\$609.4</b>	<b>\$587.9</b>	<b>\$643.7</b>
<b>Defined Contribution Pension Costs</b>					
Union	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Mgmt & Exec	\$55.8	\$54.4	\$67.7	\$79.5	\$81.1
Non-Union	\$52.2	\$51.8	\$70.1	\$80.1	\$81.7
<b>Total</b>	<b>\$108.0</b>	<b>\$106.2</b>	<b>\$137.7</b>	<b>\$159.6</b>	<b>\$162.8</b>
<b>OPEB - Current Service Costs</b>					
Union	\$250.7	\$246.3	\$323.5	\$383.2	\$422.9
Management & Executive	\$155.4	\$130.0	\$52.6	\$37.2	\$37.9
Non-Union	\$131.0	\$102.9	\$67.2	\$60.5	\$61.7
<b>Total</b>	<b>\$537.1</b>	<b>\$479.2</b>	<b>\$443.3</b>	<b>\$480.9</b>	<b>\$522.6</b>
<b>Total Current &amp; Accrued Benefits</b>					
Union	\$978.7	\$1,021.9	\$1,207.1	\$1,272.7	\$1,407.9
Management & Executive	\$431.3	\$393.9	\$273.7	\$284.3	\$288.2
Non-Union	\$388.3	\$360.5	\$377.9	\$398.2	\$403.7
<b>Total</b>	<b>\$1,798.3</b>	<b>\$1,776.3</b>	<b>\$1,858.8</b>	<b>\$1,955.1</b>	<b>\$2,099.7</b>

\*No OPEB or DB Pension past service costs are recognized in current period expenses.

GLPT notes that the costs shown in the table above related to Defined Benefit Pension and OPEB are the actual costs incurred or forecast to be incurred for each year. For 2012-2014 these figures will differ slightly from the expense amounts illustrated in GLPT's response to 4-Staff-22 and 4-Staff-23, which are reflective of the amounts included in revenue requirement and not the actual expenses. However, there is no variance related to the 2015 and 2016 test years, as the amounts included in the above forecast are equal to the amounts GLPT is seeking to include in revenue requirement for each of the test years.

GLPT also notes that as a result of a keying error in the presentation of *Table 4-2-2 A* of the pre-filed evidence, GLPT's 2016 Non-Union benefit costs were over-stated by approximately \$11,800 in the table. However, GLPT's forecasted OM&A and capital additions were calculated correctly for the purposes of revenue requirement, and therefore the keying error does not change the OM&A recovery or rate base additions GLPT is seeking in this application.

The former generation employees affected the table only to the extent that those employees are now earning current service benefits as employees of GLPT.

#### 4-Staff-21

**Reference:** E4-T2-S2 Appendix C

**Question:**

MERCER (Canada) Limited (“MERCER”) prepared a report titled *Report on the Actuarial Valuation for Funding Purposes as at December 31, 2012 Retirement Plan of Great Lakes Power Transmission LP* (“Report”) at the request of GLPT.

- a) Please confirm whether Limited Partners are considered distinct legal persons. If they are not considered distinct legal persons, please fully explain how GLPT can have a retirement plan that complies with Financial Services Commission of Ontario’s (“FSCO”) and with the Canada Revenue Agency’s (“CRA”) rules.
- b) MERCER at p.2 notes that “The information contained in this report was prepared for the internal use of the Great Lakes Power Transmission LP and for filing with the Financial Services Commission of Ontario and with the Canada Revenue Agency, in connection with our actuarial valuation of the Plan. This report will be filed with the Financial Services Commission of Ontario and with the Canada Revenue Agency. This report is not intended or suitable for any other purpose.” *[Emphasis added]*
  - i. Will GLPT file this exact Report with CRA and FSCO or will the information be used in preparing another actuarial report that will be filed with CRA and FSCO?
  - ii. If the answer to (i) is no, please file the actual pension valuation that will be filed with FSCO and CRA.
  - iii. If the actual valuation to be filed is for GLPL and not for GLPT, please file all the supporting documents used to allocate the assets, liabilities, current service costs, etc. between GLPL and GLPT LP.
- c) The Report states at p. 3 that GLPT instructed MERCER to use a margin for adverse deviations of 0.45% in calculating the going concern discount rate. The calculated discount rate, which includes 0.45% for adverse deviations, is 5.75% (see p.27)
  - i. Please confirm that without a provision of “adverse deviations” the discount rate would be 6.2%.
  - ii. All else equal, does a lower discount rate increase the pension liability? If so, please explain why GLPT chose to create a higher liability by reducing the discount rate? Does this decision result in higher costs for ratepayers?
- d) The Report at p. 7 indicates that the current service cost during the year following the valuation date includes \$100,000 for “Expense Allowance”.
  - i. Please explain the purpose of the “Expenses Allowance” of \$100,000?
  - ii. Why did it increase from the \$60,000 used in the previous valuation?



- iii. The discount rate calculation presented at p.27 of the Report shows a 0.5% reduction for “Investment Expense”. Is this the same as the “Expense Allowance”? Are any of the Expense Allowance Costs also included in the calculation of the net discount rate?
  - iv. Please explain why an Expense Allowance of \$100,000 is reasonable when this comprises about 23% of the total service cost.
  - v. It appears that the Expense Allowance was not deducted from the plan assets? If so, please explain why the Expense Allowance was not deducted from the plan assets as part of the cost of the plan, rather than increasing current service costs.
  - vi. Was the Expense Allowance allocated to GLPT by GLPL? If the answer is yes, what was the basis of the allocation? Is the allocation covered by any intercompany service purchase agreement?
- e) The Report at p. 7 shows that for 2013 the employer’s estimated current service cost is \$304,800 and the estimated employees’ contribution is \$133,800.
- i. Does this equate to an employer: employee contribution ratio of 3:1? If not, please provide the correct ratio.
  - ii. Has GLPT considered moving to a contribution ratio of 1:1? If not, please explain why a 1:1 contribution ratio would not be fairer for ratepayers?
  - iii. Do any of the employee contributions pay for the Expense Allowance or is it fully paid for by the employer?
- f) One of the columns in the Current Service Cost table at the bottom of p.7 is headed “2013”. Does this mean that there is an evaluation for 2013. If so, please file it.
- g) At p. 23 of the Report, it is indicated that during 2012 there was a transfer of \$1,903,902 into the fund from the Generation Pension Plan.
- i. Why was this transfer made?
  - ii. How many generation staff were transferred to GLPT?
  - iii. What past service costs for pensions are associated with these generation staff? Please describe the nature of the past service costs and the dollar amounts.
  - iv. Does the transfer of \$1,903,902 fully cover all current and past service costs of the generation employees transferred to GLPT? If not, what additional past service costs have been recognized by GLPT but not paid for by GLPL Generation?
- h) In the audited financial statements, the post-retirement benefit liability was \$3,748,000 as at January 1, 2012, \$5,503,000 at the end of December 2012, and \$5,708,000 at December 31, 2013.
- i. What liability for non-pension benefit plans of the generation business has been transferred to the GLPT liability for non-pension benefit plans?
  - ii. Did the generation business transfer cash to cover 100% of the past service costs for non-pension benefits for the former generation employees? If not, please explain fully why GLPT is not harmed by such treatment?

- iii. Please explain why GLPT ratepayers should be responsible for any past service liabilities for pensions and post-retirement benefits associated with employees transferred from the generation business.
- i) At p. 39 of the Report, MERCER states:  
Effective July 1, 2009 employees of the "Distribution" and "Transmission" businesses of Great Lakes Power Limited (the "Company") were transferred to separate companies affiliated with the Company, Great Lakes Power Distribution Inc. ("GLPD") and Great Lakes Power Transmission LP ("GLPT"). These employees were members of the Plan prior to July 1, 2009. New pension plans were established for the current and future employees of GLPD and GLPT. An application is being submitted to the Financial Services Commission of Ontario for the transfer of assets and liabilities from the Plan to the new pension plans with respect to the transferred employees' benefits accrued prior to July 1, 2009 in the Plan as well as benefits in the Plan for inactive members formerly employed by the "Distribution and Transmission" businesses of the Company."
  - i. Have the plan assets actually been transferred to a separate pension plan for the employees of GLPT?
  - ii. Has the pension plan been registered with FSCO? If not, please explain why.
- j) In the Employer Certification section, at p. 44 of the Report, an official of GLPT signed and certified that "The asset information summarised in Appendix B is reflective of the Plan's assets. *[Emphasis added]*.  
Actuaries normally use the actual asset dollar values presented in a statement provided by the trustee of the pension plan.
  - i. Please provide the statement of plan assets from the trustee of GLPT's pension plan.
  - ii. If this statement of assets is not available or does not exist, please file the documents that support the asset dollar values and asset mix that MERCER relied on to prepare the valuation.

**Response:**

- a) Great Lakes Power Transmission LP is the employer and the administration of the registered pension plan mentioned in this section is inherent in that capacity. Both FSCO and CRA have registered the pension plan. Section 8(1) of the Pension Benefits Act (Ontario) indicates that an employer (Great Lakes Power Transmission LP), acting through the General Partner, (Great Lakes Power Transmission Inc.), can be the administrator of a pension plan. From a CRA perspective, the partnership is the taxpayer that receives a business number (BN), not each partner.
- b)
  - i. This report was filed with FSCO and CRA in September 2013.
  - ii. Not applicable.
  - iii. Not applicable – the report is related to GLPT only.

- c)
- i. Confirmed
  - ii. All else equal, the use of a lower discount rate due to the inclusion of a margin increases both the pension liability on a going-concern basis and the total current service cost.

GLPT notes that FSCO expects the actuary preparing a report on the plan for filing under the Pension Benefits Act will include appropriate margins for adverse deviations when choosing prudent economic and other actuarial assumptions (FSCO Actuarial Guidance Note-001-Actuarial Assumptions for Filed Actuarial Valuation Reports). In selecting the actuarial assumptions and determining the appropriate margins to apply, the actuary should discuss with the plan administrator the plan's past and expected future experience and identify both the range of reasonable assumptions and their suitability, in the context of meeting the plan's funding objectives. The level of such margin selected by the plan sponsor should be pursuant to the Canadian Institute of Actuaries' Standards of Practice (Pension Plans - Part 3230 Going Concern Valuation).

Mercer conducted a survey on the level of margin for adverse deviations elected by registered plans sponsored by Mercer's clients for going concern valuations as at December 31, 2012. The average margin used by plan sponsors for plans registered in Ontario, expressed as a deduction to the discount rate, was 0.54%. GLPT notes that it elected a lower margin than the average margin shown in the survey, thus producing a lower liability than would have been used if the survey average was used.

- d)
- i. The Expense Allowance covers the expected administrative expenses that will be paid from the plan assets during the year.
  - ii. The Expense Allowance as of December 31, 2012 is based on the average amount of non-investment expenses paid from the plan assets over the last 3 years (per page 27 of the December 31, 2012 valuation report). At the time of preparing the previous valuation (December 31, 2011), 3 full years of experience was not available, and the \$60,000 was the actuary's best estimate at the time.
  - iii. The "Investment Expense" is different from the "Expense Allowance" as follows:
    - The Investment Expense represents the fees paid from the plan assets to the investment managers and is determined based on each manager's fee level and the percentage of assets each manager holds according to the investment policy. It is determined as a percentage of assets and it is used to reduce the discount rate to make this assumption net of investment expenses.

- The Expense Allowance represents the estimated non-investment fees that will be paid from the plan assets during the year. It is a dollar amount which is added to the employer service cost to cover administrative expenses.

There are no “Expense Allowance” costs included in the discount rate calculation.

- iv. The Expense Allowance represents the total non-investment costs of the plan (for administrative tasks), which include fees payable to the custodian, actuary, auditor and other consultants. Administrative tasks include paying benefits to members, member calculations (before benefit can commence), production of valuation reports, regulatory filings, pension plan documentation (amendments, plan texts, member booklets), investment monitoring, governance of the plan, and more. These tasks are in regards to all plan members (i.e. they are not performed just for the benefit of active members). While the total service cost is a measure based on the level of benefits accrued over one year by active members only. The two elements (Expense Allowance and Total Service Cost) are not comparable.

\$100,000 represents the average of the actual amounts of non-investment fees paid during the last 3 years preceding the valuation date. This assumption is based on current experience.

- v. A reconciliation of the plan assets for 2012 is presented on page 23 of the December 31, 2012 valuation report. The reconciliation shows that \$150,781 was deducted as actual Administrative Expenses incurred (compared to the \$100,000 estimate). GLPT contributed in 2012 an Expense Allowance of \$60,000 which partly covered the actual \$150,781 paid from plan assets.
- vi. No, the Expense Allowance was not allocated to GLPT by GLPL.

e)

- i. GLPT calculates the ratio to be 2.28:1 (304,800 employer portion / 133,400 member portion). This can also be expressed as a percentage where the plan members contribute approximately 30% of the plan’s current service cost (\$133,400 / \$438,200). As demonstrated in GLPT’s response to 2-Energy Probe-10 part (d), this contribution ratio is close to the median contribution ratio for both Private and Public sector entities.
- ii. The employee contributions are governed by the collective agreement between GLPT and its unionized workforce (Power Workers Union). While the ratepayer would benefit from an increase in the employee portion of contributions, GLPT does not have the authority to change the employee contributions without negotiating it into the collective agreement.

As demonstrated in GLPT's response to 2-Energy Probe-10 part (d), this contribution ratio is close to the median contribution ratio for both Private and Public sector entities.

Further, GLPT notes that the compensation package that it offers to its employees includes wages, incentive pay, current benefits and post-retirement/pension benefits. GLPT believes it provides a fair package of compensation to its employees and while it would benefit the ratepayer to reduce one or more of these areas of compensation, it would harm its ability to attract and retain talent within the organization and may violate the terms of the collective bargaining agreement.

- iii. The expense allowance is fully paid by the employer, GLPT.
- f) The column "2013" shows the current service cost and expense allowance required in 2013, based on the December 31, 2012 valuation results.

Yes, a funding valuation as at December 31, 2013 was completed and filed with FSCO and CRA in September 2014. The report determines the required contribution for calendar years 2014, 2015 and 2016, and is attached as Appendix 4-Staff-21(f) to this response.

- g)
- i. Three employees were transferred from the GLPL plan into the GLPT plan. The transfer of assets of \$1,903,902 represents the value of the benefits of the three members accrued in the GLPL plan (which would have included value added to the former transmission division of GLPL) at the time of the transfer.
  - ii. Three employees were transferred.
  - iii. The past service costs for the members who transferred from GLPL to GLPT were transferred to the GLPT plan. Because the pension benefits provided under both plans are the same, the past services recognized under the GLPT plan are equal to the past services the members had accrued under the GLPL plan. The past service cost amount transferred to the GLPT plan is the greater of the going-concern liability and solvency liability at the time of the transfer, which was \$1,903,902. Therefore, the past service costs related to the three transferred members that had accrued with GLPL was paid by GLPL via the asset transfer, not paid by GLPT.
  - iv. Yes, the amount transferred from GLPL to GLPT covers the past service costs of the employees. The current service costs incurred by those employees after the transfer into the GLPT plan are borne by GLPT.
- h)
- i. The non-pension benefit liability as at December 31, 2012 includes three members who transferred from GLPL to GLPT between July 1, 2009 and December 31, 2012. The liability for these 3 members as at December 31, 2012 is \$290,000.

- ii. No cash was transferred from GLPL to GLPT to fund the future liability. The ratepayer is not harmed because the ratepayer is only paying for the current service cost of each plan member, which is earned only while each of the employees are members of the GLPT plan. The ratepayer is not funding any past service cost for plan members.
- iii. With regard to the pension plan, when an employee transfers from GLPL to GLPT, an asset amount equal to the past service liability (the greater between the going-concern and the solvency liabilities) is transferred from the GLPL plan assets to the GLPT plan assets.

As it relates to the post-retirement benefits plan, GLPT's expense allowance is only related to the current period cost of current plan members.

Therefore, the ratepayer is not responsible for any past service liabilities for pensions or post-retirement benefits for employees transferring from GLPL.

i)

- i. Yes, the plan assets were transferred to a GLPT pension plan in 2011.
- ii. Yes, the plan is registered with FSCO.

j)

- i. Mercer relied on the audited financial statements of the GLPT pension plan to prepare the valuation report. The audited financial statements are prepared on an accrual basis (rather than a cash basis), which recognizes contributions, benefit payments and expenses that accrued during the calendar year but were received or paid after December 31.
- ii. GLPT has attached as Appendix 4-Staff-21(j) the audited financial statements of the pension plan as at December 31, 2012 which were relied upon by Mercer.

#### 4-Staff-22

**Reference:** E4-T2-S2 pp.3-4 (Non-pension Benefit Plans, also known as “OPEBs”)

**Question:**

- a) Please file the actuarial valuations used for GLPT’s (or its predecessor company) year-end accounting for the financial years 2010, 2011, 2012 and 2013 for non-pension benefit plans (OPEBs).  
If GLPT does not have actuarial valuations for year-end accounting, please provide the documents that support the liabilities in the financial statements and explain how the numbers were derived.
- b) Please provide the actuarial valuations that support the forecast non-pension benefit costs for 2014, 2015 and 2016.
- c) If GLPT does not have actuarial valuations for the years 2014-2016, please explain how the cost forecasts were developed. Please provide the working papers and calculations that GLPT relied on in making this application.
- d) How many employees in each group of union, management and non-union are eligible for non-pension benefits?
- e) How many retirees are eligible for non-pension benefits?
- f) Does GLPT LP recover non-pension benefit costs in rates based on accounting accrual forecasts?
- g) Please complete the following table from the date that GLPT first began recovering non-pension benefits from ratepayers using the accounting accrual forecast method.

<b>Non-pension Benefit Plan</b>	<b>200X</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Amounts included in rates							
OM&A							
Capital expenditures							
Sub-total							
Paid amounts							
Net excess amount included in rates greater than amounts actually paid							

- h) If the Board allows recovery of non-pension post-retirement benefit costs on a cash basis for the test period instead of the accounting accrual basis, what are the implications for GLPT? Please explain fully.
- i) For accounting purposes the non-pension post-retirement benefit liability is not offset by an asset since there is no fund similar to the pension fund. However, for regulatory purposes, GLPT LP and its predecessor have been recovering money from ratepayers related to this liability. The difference between the amounts recovered in rates and the amounts paid represents a regulatory asset that offsets the liability. Any amount paid by or owing by the

generation business to GLPT LP for past service costs would form part of this regulatory asset. Even though GLPT under IFRS wrote off regulatory assets and liabilities, for rate-making purposes they may still exist if they affect the derivation of rates.

- i. Who is responsible for the non-pension benefit deficit of \$5,708,000 at December 31, 2013?
- ii. Depending on the answer to (a) how will GLPT discharge its responsibilities for this liability?
- iii. Does GLPT expect the ratepayers to pay for the cost consequences of this liability?
- iv. Does GLPT agree that there is a missing regulatory asset for rate-making purposes that offsets the non-pension benefit liability? Please explain fully.

**Response:**

- a) GLPT has attached the valuation used for accounting purposes for 2013 prepared by Mercer under IFRS (consistent with GLPT's accounting).

For the years 2010, 2011 and 2012 GLPT has attached the summary financial information prepared by Mercer under CGAAP which was used to derive the non-pension benefit liability in the year-end financial statements for each year. For 2010-2012 a full CGAAP valuation report was not prepared, as the full valuation reports prepared by Mercer at the time contained IFRS information. In any case, the attachments provided support for the account balances and disclosures contained in GLPT's audited financial statements for each of 2010, 2011 and 2012.

These attachments can all be found at Appendix 4-Staff-22(a).

- b) GLPT does not have actuarial valuations to support its 2014, 2015 or 2016 non-pension benefit expenses.
- c) As noted above - GLPT does not have actuarial valuations to support its 2014, 2015 or 2016 pension expenses. Rather, GLPT used estimates provided by its actuary (Mercer) for 2014 and adjusted the expected expense for known operational changes including the provision of an inflationary increase of 1.995% and adjustments related to projected changes in plan participants. The expense estimate provided by Mercer is included within the valuation used for accounting purposes for 2013, which is included in Appendix 4-Staff-22(a) attached to part (a) above.



- d) As at December 31, 2014, GLPT is projecting the active members in the non-pension post-employment benefit plan broken out by category will be as follows:
- i. Union employees – 25
  - ii. Management employees – 2
  - iii. Non-union employees – 4
- e) GLPT estimates that there will be 25 retirees/surviving spouses eligible for non-pension post-employment benefits at December 31, 2014.
- f) Yes, GLPT recovers non-pension post-employment benefit costs based on accrual accounting which is reflective of the current service cost of each employee for the time served in each year.
- g) GLPT has prepared the following table starting from 2010, which was GLPT's first full year of stand-alone operations where employees were fully dedicated to GLPT. The table below demonstrates the amounts included in rates (i.e., on an accrual basis), and compares those amounts to the cash amounts paid or forecast to be paid for each year.

*Table 4-Staff-22 A*

Non-Pension Benefit Plan	2010	2011	2012	2013	2014	2015	2016
Amounts included in rates							
OM&A	\$311,761	\$317,180	\$325,109	\$442,470	\$451,974	\$438,094	\$476,650
Capital expenditures	74,082	42,434	43,495	47,530	47,997	42,800	46,566
Sub-total	385,843	359,614	368,604	490,000	499,972	480,894	523,216
Paid Amounts	199,208	123,844	131,136	140,423	150,000	153,000	156,060
Net Excess amount included in rates greater/(lesser) than amounts actually paid into pension fund	\$186,635	\$235,770	\$237,468	\$349,577	\$349,972	\$327,894	\$367,156

- h) If GLPT were to recover non-pension benefit costs on a cash basis rather than an accrual basis, it would reduce its annual recovery by \$327,894 and \$367,156 in 2015 and 2016, respectively.

With that said, GLPT does not believe it would be appropriate to change the recovery method from the accrual method to the cash method. This would be contrary to the general fairness principle of correlation between those receiving a benefit and those paying for such, in that ratepayers who would receive the benefits of work done by GLPT's employees today would not be paying for the current service cost of those employees today. Rather, after employees within the plan retire, the ratepayers at that point in time would be bearing the cost of those retirees while no longer receiving any benefit of the services they had provided.

In addition to this, there would be timing issues regarding the life of the non-pension post-retirement benefit plan that are similar to the timing issue described in GLPT's response to 4-Staff-23 below.

If the OEB is to turn its mind to the issue of cash vs. accrual pension/OPEB cost recovery, then a generic proceeding involving other Ontario regulated utilities would be more appropriate to ensure consistent application of this complex issue that would affect all regulated utilities. Further, if there is a generic proceeding, the Board should consider both post-employment benefit costs and defined benefit pension costs at the same time.

- i)
  - i. GLPT is responsible for the non-pension post-retirement benefit liability of \$5,708,000, and will settle the liability through future cash payments made towards the provision of benefits for retirees. As noted in part (ii) below, the ratepayer is not responsible for this liability and there is no impact to the ratepayer.
  - ii. Simply stated, GLPT will discharge the liability through cash payments made towards the provision of benefits for retirees. Assuming the accrual accounting basis continues, these cash payments will not affect current service cost of active members today, and thus will have no impact on the ratepayer.
  - iii. By using the accrual method for accounting for post-retirement benefits, GLPT ensures that the ratepayer is only contributing towards the current period cost of each member of the plan. In other words, current ratepayers are paying only for benefits earned by employees today, and are not responsible to fund cash payments required to settle the liability in the future. It is the responsibility of GLPT to fund the future liability with no ratepayer contributions funding the extinguishment of that liability.
  - iv. GLPT does not agree that there is a missing regulatory asset, as the ratepayers are not responsible for the \$5,708,000 liability.

**4-Staff-23**

**Reference:** E4-T2-S2 pp.3-4 (Defined Benefit (DB) Retirement / Pension Plan)

**Question:**

- a) Please provide the actuarial valuations that support the amounts used in determining the forecast pension costs for 2014, 2015 and 2016.
- b) How many employees in each group of union, management and non-union are eligible for defined benefit pensions?
- c) Please complete the following table from the date that GLPT first began recovering pension costs from ratepayers using the accounting accrual forecast method.

<b>DB Pension Costs</b>	<b>200X</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Amounts included in rates							
OM&A							
Capital expenditures							
Sub-total							
Paid amounts							
Net excess amount included in rates greater than amounts actually paid into pension fund							

- d) If the Board allows recovery of defined benefit pension costs on a cash basis for the test period instead of the accounting accrual basis, what are the implications for GLPT? Please explain fully.

**Response:**

- a) GLPT does not have actuarial valuations to support its 2014, 2015 or 2016 pension expenses. Rather, GLPT used estimates provided by its actuary (Mercer) for 2014 and adjusted the expected expense for known operational changes including the provision of an inflationary increase of 1.995% and adjustments related to projected changes in eligible participants (i.e., new hires).

b) As at December 31, 2014, GLPT is projecting the active members in the DB plan broken out by category will be as follows:

- i. Union employees – 25
- ii. Management employees – 1
- iii. Non-union employees – 2

c) GLPT has prepared the following table starting from 2010, which was GLPT's first full year of stand-alone operations where employees were fully dedicated to GLPT. The table below demonstrates the amounts included in rates (i.e., on an accrual basis), and compares those amounts to the cash amounts paid or forecast to be paid for each year.

*Table 4-Staff-23 A*

DB Pension Costs	2010	2011	2012	2013	2014	2015	2016
Amounts included in rates							
OM&A	\$185,359	\$260,432	\$266,942	\$474,978	\$485,181	\$535,599	\$587,195
Capital expenditures	44,046	34,842	35,713	51,022	51,524	52,325	57,366
Sub-total	229,405	295,274	302,656	526,000	536,704	587,924	644,561
Paid Amounts	556,003	1,536,782	1,015,092	680,650	901,715	913,149	934,611
Net Excess amount included in rates greater/(lesser) than amounts actually paid into pension fund	(\$326,598)	(\$1,241,508)	(\$712,436)	(\$154,650)	(\$365,011)	(\$325,225)	(\$290,050)

d) If GLPT were to recover defined benefit pension costs on a cash basis rather than an accrual basis, it would require an additional \$325,225 and \$290,050 in cost recovery in 2015 and 2016, respectively.

With that said, GLPT does not believe it would be appropriate to change the recovery method from the accrual method to the cash method. This would have impacts on inter-generational equity where ratepayers who are receiving the benefits of work done by GLPT's employees today would not be paying for the current service cost of those employees today.

Further to that, making a change in the middle of a pension plan's life would require a very complicated and detailed analysis of the impacts related to the plan's historical funding, whether it's over- or under-funded, and what the future funding requirements are. While a pension plan's cash contributions and expenses will be approximately equal over the life of a plan, there is not a year-over-year matching of the two and therefore it is likely that there would be timing issues to resolve prior to making a change in GLPT's recovery method.

This timing issue is clearly demonstrated by the fact that GLPT's cash contributions were significantly higher than its expense for the periods of 2010-2014, where additional contributions of \$2.8 million were funded by GLPT's shareholder. To make a conversion now, without addressing the \$2.8 million funding shortfall, would preclude GLPT from ever recovering those pension plan costs which were borne by the shareholder.

If the OEB is to turn its mind to the issue of cash vs. accrual pension/OPEB cost recovery, then a generic proceeding involving other Ontario regulated utilities would be more appropriate to ensure consistent application of this complex issue that would affect all regulated utilities. Further, if there is a generic proceeding, the Board should consider both post-employment benefit costs and defined benefit pension costs at the same time.

**4-Staff-24**

**Reference:** E4-T2-S2 pp.3-4 (Defined Contribution Pension Plan)

**Question:**

- a) How many employees in each group of union, management and non-union are eligible to participate in the defined contribution plan?
- b) Does GLPT recover defined contribution pension costs in rates based on the cash basis? Or in other words, the amount paid into the defined contribution plan is the amount recovered from ratepayers.

**Response:**

- a) In GLPT's 2014 forecast information, there are 22 employees who are eligible to participate in the DC pension plan. Of those employees, 8 are in the management group, and 14 are in the non-union group. No employees in the union participate in the defined contribution plan.
- b) GLPT recovers defined contribution pension costs based on accrual accounting.

While there are timing variances that occur at each period end and reverse in the following period, through the course of a year the accrual basis and cash basis yield very similar results. Further, over the life of a pension plan, the total cash paid into the plan will be equal to the total expense incurred.

#### 4-Staff-25

**Reference:** E4-T2-S3 – Corporate Cost Allocation

**Question:**

Please provide the Corporate Costs amounts allocated to GLPT's OM&A for the following years:

- 2012 Board Approved:
- 2012 Actual:
- 2013 Board Approved:
- 2013 Actual:
- 2014 Board Approved:
- 2014 Forecast:
- 2015 Test Year:
- 2016 Test Year:

**Response:**

2012 Board Approved	\$200,000
2012 Actual	\$200,000
2013 Board Approved	\$469,700 sought in application
2013 Actual	\$400,000
2014 Board Approved	\$484,300 sought in application
2014 Forecast	\$400,000
2015 Test Year	\$411,500
2016 Test Year	\$419,700

As it relates to 2013 and 2014 Board Approved amounts (i.e., those included in EB-2012-0300), the proceeding was settled through a Board-approved settlement agreement where GLPT's OM&A budget was curtailed and neither the parties nor the Board turned their mind specifically to corporate costs. As a result, GLPT does not have a specific Board Approved amount to refer to.

## 5-Staff-26

**Reference:** E5-T1-S1 pp.2-3 tables 5-1-1 A&B

### **Question:**

GLPT indicates that as at December 31, 2013 it holds \$119 M in long term debt in the form of a third party Series 1 bond ("Bond") with interest payable at a rate of 6.6% and an effective rate of interest of 6.874%, with the debt amortizing to a 25 year mortgage style schedule. The long term capital component of 2015 and 2016 rate base is shown as \$122,505,700 and \$122,446,300 respectively.

- a) Is it correct that the "Deed of Trust" and "Indenture" for the Bond is between Great Lakes Power Limited ("GLPL") and CIBC Mellon Trust Company.
- b) Do the Bond's terms and conditions include the option for early redemption, in whole or in part? If so, please briefly describe the redemption price calculation.
- c) What will be the principal balance outstanding of the Bond as of January 1, 2015, January 1, 2016 and December 31, 2016?
- d) If GLPT or GLPL on its behalf, were to issue debt, in December 2014 for a 10 year term, to fund the difference between the balance indicated in c) and \$120M, what would the interest rate be?

### **Response:**

- a) The original Deed of Trust and supplemental indenture was between GLPL and CIBC Mellon Trust Company. However the indenture documents were assigned from GLPL to GLPT through an Assignment, Assumption and Release agreement, which was filed with the OEB in response to School Energy Coalition Interrogatory #19 in proceeding EB-2009-0408.
- b) The bond does allow for early redemption in whole or in part. In GLPT's response to School Energy Coalition's Supplemental Interrogatory #16(c), in EB-2009-0408, GLPT described the Redemption price as follows:

The redemption price is the greater of (i) the outstanding principal amount thereof to be redeemed, and (ii) the Canada Yield Price of the principal amount thereof to be redeemed, together with accrued and unpaid interest up to but excluding the date fixed for redemption.

The Canada Yield Price is the price for any bonds to be redeemed that provides a yield from the redemption date to maturity of those bonds equal to the Government of Canada Yield (defined in s.1.3(3)) plus a spread that is dependent on the circumstance under which the bonds are being redeemed. If bonds are redeemed pursuant to s. 2.5, the spread is equal to 0.40% until June 16, 2021, and 0.25% thereafter. If bonds are redeemed pursuant to s. 2.8, the spread is equal to 1.75%.



Essentially, the Canada Yield Price is intended to compensate bondholders for losing the interest income that they would have received in respect of the bonds being redeemed over the interest income that they would be able to earn if they reinvested the prepayment proceeds in Government of Canada Bonds plus a spread. As the Government of Canada Yield (the market yield on Government of Canada Bonds) declines, it reduces the interest income available to bondholders in the open market if bonds are redeemed and the redemption fee charged to GLPT increases in order to equalize the lower earnings available on the open market with the 6.60% that would have been received under the bonds up to their maturity.

- c) January 1, 2015: \$116,983,767  
January 1, 2016: \$114,803,403  
December 31, 2016: \$112,476,761
- d) As indicated in GLPT's response to part (a) of this interrogatory, the indenture documents related to the Deed of Trust have been assigned to GLPT and there is no longer a relationship with GLPL.

Given the terms and conditions of the Deed of Trust, the challenges in providing security to a new lender and the small principal amount in question (i.e., ~\$3M at Dec 31, 2014), it would not only be difficult to find a lender, but the transaction itself would not be financially viable when all costs are considered.

In the event GLPT is in a position where it requires additional funding, it will reduce the cash distributions to its parent company and fund the required activities with internally generated funds, thus eliminating the need for additional financing.

**6-Staff-27**

**Reference:** E6-T1-S2

**Question:**

The Board in its EB-2012-0300 decision the Board approved a new sub-account of Account 1574 for GLPT to record deficiency/ sufficiency variances. There doesn't seem to be any evidence in the current application regarding this sub-account.

- a) Please explain why this sub-account is not addressed in the evidence.
- b) Please provide a continuity analysis of the balance, if any, starting with the year the sub-account was approved by the Board.

**Response:**

- a) As described in the Accounting Order appended to the Board's decision in EB-2012-0300 (Appendix B), the Board explained the purpose of the account as follows:

To record revenue requirement deficiency or sufficiency incurred for the period commencing January 1, 2013 to the date that the revised 2013 UTR (reflecting GLPT's proposed new revenue requirement) are implemented, together with carrying costs, such carrying costs being based upon the applicable Board prescribed rate.

The 2013 UTR reflecting GLPT's proposed new revenue requirement was implemented on January 1, 2013, and as a result there was not a requirement to use this account. Therefore, GLPT did not address the account in the evidence, as there were no transactions recorded in the account.

- b) As described in response to part (a) above, there was not a requirement to use the account, and therefore GLPT did not record any activity in the sub-account.

## 6-Staff-28

**Reference:** E6-T1-S2

### Question:

GLPT is seeking the disposition of \$2,354,305, including carrying charges, which is recorded in deferral account 1508/sub-account Comstock Claim.

- Please provide a detailed breakdown of all costs recorded in the sub-account, such as legal fees, engineering consultants, carrying charges.
- Please provide a schedule of legal fees and the legal invoices to support the charges identified in part (a) above.
- Does GLPT have commercial insurance coverage for such claims, such as Comstock's. If not, please explain why.

### Response:

- Details of the costs recorded in the sub-account 1508-Comstock Claim are provided in *Table 6-Staff-28 A* below. A review of the costs revealed an error from 2007 in which a legal accrual was made but not reversed within the same account, resulting in the double counting of a single amount. The original cost of the error (\$26,400) was removed and an adjustment was made to reverse the carrying charges to date and forecasted for 2014 (\$6,029). As a result of the adjustment, GLPT is seeking a revised disposition of \$2,321,876, including carrying charges for 1508/sub-account Comstock Claim.

*Table 6-Staff-28 A*

<b>Description</b>	<b>Amount</b>
Legal Costs	\$1,998,095
Carrying Charges	291,128
Consultants	32,653
	<b>\$2,321,876</b>

*Table 6-Staff-28 B* below displays the removal of the error from the original disposition amount.

*Table 6-Staff-28 B*

<b>Original Disposition Amount</b>	<b>\$2,354,305</b>
<b>Less:</b>	
Error accrual reversed to wrong account	(26,400)
Reverse carrying charges	(6,029)
<b>Revised Disposition Amount</b>	<b>\$2,321,876</b>

- b) GLPT has provided details regarding the amount and date of each invoice paid and charged to the Comstock deferral account. GLPT has not provided copies of individual invoices, as it has previously been determined by the Supreme Court of Canada that this information is presumptively privileged and confidential communication between lawyers and their clients.

<b>Invoice Date</b>	<b>Amount</b>
12/21/2005	\$ 15,409
01/30/2006	5,013
03/22/2006	1,150
03/31/2006	2,588
06/28/2006	2,591
06/29/2006	1,194
07/25/2006	5,433
08/01/2006	6,927
08/21/2006	9,445
09/06/2006	13,198
09/26/2006	38,485
09/27/2006	6,842
09/27/2006	2,234
10/03/2006	1,020
10/23/2006	31,155
10/23/2006	8,451
11/21/2006	53,476
11/21/2006	577
02/23/2007	42,088
02/23/2007	30,717
03/22/2007	3,714
03/22/2007	36,324
04/26/2007	3,049
04/27/2007	35,320
05/25/2007	20,916
05/25/2007	8,185
06/19/2007	11,753
07/24/2007	1,313
07/24/2007	3,026
08/22/2007	3,805
08/22/2007	7,689
09/14/2007	8,264
09/14/2007	1,775
09/28/2007	12,000
10/24/2007	(198)
12/10/2007	9,650
12/10/2007	7,347
12/10/2007	18,202
12/24/2007	1,432
01/16/2008	9,533
01/23/2008	3,137
02/06/2008	67,033
02/22/2008	4,600
03/03/2008	7,449
03/05/2008	72,307
04/17/2008	11,261

04/17/2008	10,126
04/17/2008	1,968
05/01/2008	1,544
05/01/2008	29,273
06/13/2008	263
06/13/2008	1,559
08/13/2008	44,742
08/18/2008	13,699
10/07/2008	37,823
11/05/2008	14,832
12/17/2008	13,410
01/21/2009	25,057
01/21/2009	6,012
01/28/2009	40,524
02/05/2009	27,695
02/25/2009	8,719
03/04/2009	5,663
04/08/2009	6,886
05/27/2009	20,205
07/08/2009	20,841
07/20/2009	28,850
08/12/2009	14,977
09/10/2009	29,532
10/07/2009	40,050
11/12/2009	41,041
12/09/2009	105,268
01/14/2010	66,942
02/17/2010	28,239
03/10/2010	1,091
04/15/2010	25,897
05/13/2010	1,368
06/09/2010	2,125
08/04/2010	1,697
09/09/2010	3,395
10/06/2010	1,710
11/09/2010	1,465
12/08/2010	37,993
01/19/2011	21,945
02/09/2011	3,250
02/16/2011	1,658
03/23/2011	1,323
05/04/2011	25,710
06/01/2011	105
07/12/2011	11,380
08/09/2011	890
10/25/2011	2,335
11/23/2011	5,213
12/14/2011	484
12/22/2011	27,739
02/13/2012	18,089
03/19/2012	8,773
04/26/2012	32,684
05/02/2012	38,521
05/23/2012	15,099

07/10/2012	15,379
08/21/2012	19,147
09/25/2012	67,808
09/25/2012	6,237
12/04/2012	20,064
12/11/2012	4,429
01/21/2013	138,192
03/15/2013	1,128
05/05/2013	8,826
07/25/2013	42,867
12/31/2013	49,464
	<hr/>
	<b>\$1,998,095</b>
	<hr/>

- c) GLPT's discussions with its insurance provider have not indicated that there would be insurance coverage for this claim.

## 6-Staff-29

**Reference:** E6-T1-S2 p. 10-12

### Question:

GLPT is seeking to recover \$451,345 recorded in the East-West Tie-Line GLPT sub-account under account 1508. This account was established in the last proceeding to track any difference between the reduction made to core OM&A to reflect the forecasted allocation of GLPT resources to the East-West Tie Line project, i.e. EWT-LP, and the actual level of costs allocated to EWT-LP. GLPT indicates that up to the date on which the Board designated Next Bridge Infrastructure, August 7, 2013, GLPT had allocated \$275,036 to EWT-LP.

- a) Please provide the detailed calculations which under-pinned/supported the forecasted reduction to 2013 and 2014 OM&A as applied for in the last proceeding.
- b) Please provide the cost components and calculations which comprise the \$275,036 in actual costs allocated to EWT-LP.

### Response:

- a) GLPT's 2013 reduction of \$550,000 was calculated assuming its Vice President / General Manager, Vice President, Regulatory and Legal, and its Director of Administration allocated approximately one third of their time, while its Vice President, Project Development allocated 100% of available time to EWT Line activities. In addition, GLPT anticipated that there would be other normal costs associated with employment of approximately \$100,000 that were to be allocated to EWT LP.

GLPT's 2014 reduction of \$340,000 was calculated assuming its Vice President, Project Development allocated 100% of available time to EWT Line activities, including 100% of the base salary, variable compensation and benefit costs of this position. In addition, GLPT anticipated that there would be other normal costs associated with employment of approximately \$105,000 that were to be allocated to EWT LP.

Specifically, the amount was calculated as follows:

*Table 6-Staff-29 A – 2013-2014 Costs for EWT LP*

<b>Cost Category</b>	<b>2013 Cost</b>	<b>2014 Cost</b>
Salaries (incl. variable pay)	\$350,000	\$190,000
Benefits	\$100,000	\$45,000
Other Costs	\$100,000	\$105,000
<b>Total</b>	<b>\$550,000</b>	<b>\$340,000</b>

- b) There were two significant milestones in the proceeding that GLPT would like to point out. The first milestone was the filing of final reply arguments related to the designation application, which occurred on May 30, 2013. The second milestone was the Board's Decision and Order on Phase 2 of the designation proceeding, which occurred on August 8, 2013.

The \$275,036 in actual costs charged to EWT LP in 2013 is comprised of:

- 5 months of time related to GLPT's Vice President / General Manager, Vice-President, Regulatory and Legal, and its Director of Administration. This was reflective of their involvement up to the filing of the final reply argument on May 30, 2013; and
- 7 months of time related to GLPT's Vice President, Project Development, plus expenses directly associated with the EWT initiative. This was reflective of the VP's involvement up to the date of the OEB's decision in the proceeding.

The specific costs are as follows:

*Table 6-Staff-29 B*

Senior Management Salaries & Benefits January – May	\$111,000
VP, Project Development Salaries, Benefits & Expenses January – July	164,036
<b>Total</b>	<b>\$275,036</b>



**6-Staff-30**

**Reference:** E6-T1-S1 p1

**Question:**

GLPT is proposing the continuation in 2015 and 2016 of the “IFRS Gains and Losses sub-account” under the D/V account 1508.

- a) Please confirm that the account is not intended to record amounts resulting from the adoption of IFRS in 2013, such as would be captured in Account 1575- IFRS-CGAAP Transitional PP&E amounts.
- b) Please provide the rationale for the “IFRS” reference in the description of the sub-account?
- c) In that GLPT adopted IFRS in 2013, why is it necessary to continue with the “IFRS” reference in the sub-account description?
- d) Is it GLPT’s expectation that this sub-account should be in-place indefinitely, as long as there are situations where the book value of an asset to be retired is not zero?

**Response:**

- a) Confirmed.
- b) The account was initiated at the time of adoption of IFRS as a result of the changing requirements to accounting for asset disposals. The “IFRS” reference was used at the time to highlight the relationship with adopting the new accounting standards.
- c) It is not necessary to continue with the “IFRS” reference in the description. GLPT has continued to use the same naming convention but is not opposed to renaming the sub-account to “Gains and Losses on Asset Disposition”, or something similar. However, GLPT will continue to use the account as originally intended when the account was approved by the Board, where gains and losses on premature asset retirements (that are not already provided for in revenue requirement) are recorded in the account for future disposition.
- d) Confirmed, GLPT’s expectation is that the sub-account should be in place indefinitely as originally intended, as long as there are situations where the book value of an asset to be retired is not zero.

**6-Staff-31**

**Reference:** E6-T1-S2 p. 8 table 6-1-2B (Details on Gains & Losses from premature asset component retirements) &  
E2-1-2 p5 (2013 Fixed Asset Continuity Schedule)

**Question:**

GLPT is proposing to recover a balance of \$634,138 recorded in D/V account 1508 sub account IFRS Gains and Losses (resulting from premature asset component retirements). In table 6-1-2b an amount of \$268,619 is shown as the loss on the sale of Northern Ave T2 Transformer in 2013.

Please indicate where this amount is reflected in the 2013 Fixed Asset Continuity Schedule.

**Response:**

GLPT notes that the \$268,619 referenced by Board staff is the Loss on Disposal after accounting for the \$3,800 in proceeds that were received on disposition. The actual net book value of the asset that was removed from GLPT's rate base was \$272,419.

In any case, the retirement of the Northern Avenue T2 Transformer in 2013 is reflected in the 1715-Station Equipment disposal values on the 2013 Fixed Asset Continuity Schedule. The Net Book Value of 1715-Station Equipment disposed in 2013 was \$280,421 (\$296,636 gross value less \$16,215 in accumulated depreciation). The loss related to the Northern Ave T2 Transformer forms the majority of this value.

To support this reconciliation, GLPT would like to point out that the 2013 "Net Book Value" presented in *Table 6-1-2 B* (\$471,220) ties to the sum of the disposal columns in the 2013 Fixed Continuity Schedule (\$549,291 gross value less \$78,071 in accumulated depreciation).

**6-Staff-32**

**Reference:** E6-T1-S3 re: account 1575 IFRS-CGAAP Transitional PP&E amounts

**Question:**

GLPT notes that it adopted IFRS in 2013; and that the 2013 revenue requirement approved in the last proceeding (which also incorporates the amounts for the disposition of deferral and variance account balances) included a debit balance of \$297,495 for IFRS-CGAAP Transitional PP&E amounts respecting 2012.

GLPT indicates that using actuals for 2012, as compared to what was forecasted in the last proceeding, results in a credit balance of \$136,450 as compared to a debit balance of \$297,495. GLPT proposes to return \$433,945 to ratepayers, being the sum of over-recovery of \$297,495 and the \$136,450 credit balance.

GLPT provided the table below to summarize the results of the calculation using 2012 actuals. ( It is assumed that in the table below bracketed numbers comprising the \$136,452 are debits i.e to be recovered from ratepayers).

*Table 6-1-3 A – Reconciliation of December 31, 2012 PP&E*

2012 CGAAP Closing NBV	\$228,568,197
<i>Variances:</i>	
Construction Interest	544,155
Depreciation	(407,676)
Asset Disposals	(27)
Total Variances	136,452
2012 IFRS Closing NBV	<u>\$228,704,649</u>

- a) Please confirm that the table below (from the EB-2012-0330 application, E1-T1-S1 p.1) sets out the components of the \$297,495 debit.

*Table 9-1-5 A – Calculation of IFRS-CGAAP PP&E Variances*

Driver	Reference	2012 CGAAP Amount	2012 IFRS Amount	Variance for Account 1575
Depreciation Expense	4-2-6	\$8,439,429	\$8,730,470	\$291,041
Account 1505 Retirement	9-1-2	863,368	869,822	6,454
Total Variance				<u>\$297,495</u>

- b) Please prepare Table 9-1-5A using 2012 Actuals.  
c) Please prepare the calculation of IFRS-CGAAP Variances using the template below.

	2012	
	EB-2012-0300 (Forecasted)	EB-2014-0238 (Actual)
<b>PP&amp;E Values under CGAAP</b>		
Opening net PP&E		
*Additions		
*Depreciation (amounts should be negative)		
<b>Closing net PP&amp;E (1)</b>		
<b>PP&amp;E Values under IFRS</b>		
Opening net PP&E		
*Additions		
*Depreciation (amounts should be negative)		
<b>Closing net PP&amp;E (2)</b>		
<b>Difference in Closing net PP&amp;E (1) minus (2)</b>		
*Note: Net additions are additions net of disposals; Net depreciation is additions to depreciation net of disposals.		

**Response:**

- a) Confirmed  
b) Please see table below.

Table 6-Staff-32 A

EB-2014-0238 (Actual)

Driver	Reference	2012 CGAAP Amount	2012 IFRS Amount	Variance for Account 1575
Depreciation Expense	4-3-1	\$8,127,974	\$8,535,650	\$407,676
Account 1505 Retirement	6-1-3	863,369	863,396	27
Interest Capitalization	6-1-3	713,494	1,257,649	(544,155)
Total Variance				<b>(\$136,452)</b>

c) Please see table below.

Table 6-Staff-32 B

	2012	
	EB-2012-0300 (Forecasted)	EB-2014-0238 (Actual)
<b>PP&amp;E Values under CGAAP</b>		
Opening net PP&E	\$ 206,336,994	\$ 204,886,905
*Additions	31,519,440	30,666,236
*Depreciation (amounts should be negative)	(7,394,243)	(6,984,944)
<b>Closing net PP&amp;E (1)</b>	<b>230,462,191</b>	<b>228,568,197</b>
<b>PP&amp;E Values under IFRS</b>		
Opening net PP&E	206,336,996	204,886,907
*Additions	32,500,508	32,294,101
*Depreciation (amounts should be negative)	(8,672,808)	(8,476,359)
<b>Closing net PP&amp;E (2)</b>	<b>230,164,696</b>	<b>228,704,649</b>
<b>Difference in Closing Net PP&amp;E (1) minus (2)</b>	<b>\$ 297,495</b>	<b>\$ (136,452)</b>

\*Note: Net Additions are additions net of disposals: Net depreciation is additions to depreciation net of disposals.

**6-Staff-33**

**Reference:** E6-T2-S1

**Question:**

GLPT is requesting the establishment of a new deferral account, an OM&A sub-account and a Capital sub-account within account 1508, to record incremental costs related to new customer connections to GLPT's system. GLPT states that through the initial stages of the regional planning process it has received information indicating that there may be one or more new customer connections that are likely to trigger upgrades to GLPT's transmission facilities and that GLPT does not have a capital budget available or built into revenue requirement for new connections, given the rarity of this type of activity for GLPT.

- a) What further information can GLPT provide to support the establishment of this new deferral account, for example estimated additional load, capital expenditure and operating expenses, the in-service date and the timing impact of the Regional Infrastructure Planning and Integrated Regional Resource Planning?
- b) What regulatory "comfort" does GLPT expect that this new deferral account will provide regarding any amounts that are recorded in the account?
- c) In the event that the Board does not approve the new deferral account, will GLPT decline to connect the customer(s)?

**Response:**

- a) At this time GLPT has relatively limited information regarding the potential new connection. Depending on the requirements and the chosen course of action, capital costs could range from \$9 million to \$15 million, and incremental operating costs are unknown at this point in time. The in-service year is expected to be 2017. GLPT is in the process of entering a feasibility agreement with an LDC regarding the potential new connection. GLPT believes that in the event the new connection comes to fruition, it will not have a significant impact on the Regional Infrastructure Planning process.
- b) GLPT believes that it would be most efficient from a regulatory perspective to use a deferral account to record (for future recovery) incremental customer connection costs that are material, prudently incurred and outside of management's control. GLPT does not believe it would be appropriate for it to include a specific allowance for this type of activity in its base revenue requirement. GLPT believes that a scenario where GLPT is outlaying capital or operating expenses related to new customer connections is the exception, not the norm, and therefore if the costs were included in base revenue requirement, the ratepayer would be contributing to a cost that GLPT will not always be incurring. In light of this, GLPT believes it is in the best interest of both GLPT and the ratepayer for the Board to allow GLPT to record incremental costs related to new customer connections in a deferral account for future disbursement.

- c) In the event the Board does not approve the new deferral account, GLPT will continue to work through the customer connection process and meet all obligations as outlined in the Transmission System Code. In GLPT's opinion, it would be unfair for GLPT to bear incremental costs with no potential avenue for recovery of those costs, and as a result GLPT would seek to include an additional \$100,000 in base OM&A as a provision for these costs.

Exhibit 9, Tab 2, Schedule 1

Appendices to Responses to Board Staff Interrogatories



# Great Lakes Power Transmission

Great Lakes Power Transmission LP  
2 Sackville Road, Suite B  
Sault Ste. Marie, ON P6B 6J6

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Fax. 705.759.7706  
www.glp.ca

EB-2014-0238  
Exhibit 9  
Tab 2  
Schedule 1  
Appendix 1- Staff-1(a)  
Page 1 of 10

July 22, 2014

PUC Distribution Inc.  
500 Second Line East  
PO Box 9000  
Sault Ste. Marie, ON P6A 6P2

**RE: East Lake Superior Region  
Start of Regional Planning Letter**

Dear Mr. Claudio Stefano:

This letter is a follow-up to the letter dated March 28, 2014 titled 'East Lake Superior (ELS) Region Regional Planning Initiating Letter'. As the lead Transmitter in the Region, Great Lakes Power Transmission LP (GLPT) is initiating the kick-off meeting (conference call) and would like to schedule this within the next two weeks July 21, 2014 to August 1, 2014.

**Would you please indicate your availability for a meeting (conference call) next week (July 28/14 to Aug 1/14) and list any additional staff that will be participating in the meeting (conference call). A response to Jim Tait would be appreciated by Thursday, July 24, 2014.** The expectation is this kick-off meeting would be planned for three hours and will occur at the GLPT offices with call in for remote participants who will not be attending in person.

The meeting will cover the following topics and an Agenda will be sent out once the date and time have been established. **If you have any additional items to include in the Agenda or comments please forward them to Jim Tait.**

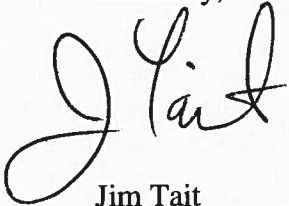
- Introduction of Meeting Participants
- Review of the Regional Planning process including participant roles
- Review of the OPA and IESO experience with the process to date
- Review of the GLPT data submitted regarding load growth in the ELS Region
- Discussion about sub-regional areas within the ELS Region
- Discussion of next steps and actions

This letter is being sent to the IESO, OPA, Algoma Power Inc. and PUC Distribution Inc. requesting their participation in this kick-off meeting (conference call).

Information discussed or exchanged in this Regional Planning process is consider confidential as per the Transmission System Code Section 4.7 'Confidentiality' for Transmitters and in the Transmission System Code Appendix 1 Section 21.0 'Exchange and Confidentiality of Information' for load customers.

Please contact me directly if you have any questions about the kick-off meeting (conference call) or proposed agenda items.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Tait". The signature is fluid and cursive, with the first name "Jim" and last name "Tait" clearly distinguishable.

Jim Tait  
Technical Supervisor, Engineering  
Great Lakes Power Transmission LP

Phone: (705) 941-5652

Email: [JTait@glp.ca](mailto:JTait@glp.ca)

**BY EMAIL**

cc: Rob Harten

**Great Lakes Power Transmission LP (GLPT)  
Regional Planning Kick-Off Meeting  
*Meeting Minutes***

Date: Thursday July 31, 2014  
Time: 9:00am – 12:00 pm  
Location: GLPT Hydro 2 Sackville Rd. Suite B  
Sault Ste. Marie, ON P6B 6J6  
Conf. Rm St Mary's  
Call In #: +1 (647)497-9351  
Conference ID: 957-923-805  
Moderator: Jim Tait

**Attendees:**

**GLPT:** Jim Tait, Bob Hammerstedt, Bob Coghlan, Kim Irvine  
**Hydro One:** Ajay Garg  
**OPA:** Bob Chow, Peter Huang  
**IESO:** Mauro Facca, Phillip Woo  
**Chapleau PUC:** Alan Morin  
**API:** Greg Beharriell  
**PUC:** Rob Harten, Darren Seabrook

1. 9:00 AM – Introduction to Meeting

**GLPT**

Jim Tait welcomed all attendees to the meeting both in person and conferencing in; then gave a brief outline for the meeting and allowed everyone the opportunity to introduce themselves. Purpose for this meeting is to kick off the Regional planning process for the East Lake Superior region of which all invited are part of this geographical region. Jim asked permission to record meeting, which was approved by the group.

**Main goals of meeting:**

- Assemble team
- Understand regional planning
- Roles
- Identify scope and timeline
- Take away action items for individuals and as a group
  - a. East Lake Superior Region
    - A geographic section of land that borders Eastern coast of Lake Superior area, Wawa, Chapleau and East of the Sault.
  - b. Timing of the kick-off of this regional planning exercise
    - **Jim Tait** mentioned that waiting until midyear to start this kick off meeting gave the opportunity to learn from experiences gained by OPA, IESO and Hydro One through Group 1 activities. This also provided some timing efficiencies so that Group 1 and Group 2 did not overlap and create resource conflicts with some of the stakeholders which are involved in both groups.

2. 9:05 AM – Introduction of Meeting Participants

**Each Company/Person**

- **Greg Beharriell** API Technical services, lead on regional planning
- **Jim Tait** GLPT - Technical Supervisor, Asst Management, Lead Rep for Regional planning process
- **Bob Hammerstedt** GLPT - Engineering Dept.
- **Kim Irvine** GLPT - Admin Asst, Minutes
- **Darren Seabrook** PUC - Dist. Engineering
- **Peter Huang** OPA – Planner, Transmission Integration
- **Bob Coghlan** GLPT - project manager
- **Phillip Woo** IESO – Senior Engineer/Technical Officer
- **Mauro Facca** IESO - Section Head, Grid Assessments
- **Rob Harten** PUC Manager engineering
- **Alan Morin** Chapleau PUC
- **Ajay Garg** Hydro One – Manager, Regional Planning Co-ordination
- **Bob Chow** OPA – Director, Transmission Integration

3. 9:15 AM – Review of Appendix 1 – Description of Regional Planning Process

**GLPT**

Overall process was set up for all utilities in this region to get together to discuss wire solutions in a timely fashion to meet the needs of the loads in our area.

To allow open dialogue between all stakeholders concerning;

1. Capacity Issues – Future Growth
2. Security and Reliability Issues
3. End of Life of Major System Components (ie Stations)

a. Planning Triggers (initial RIP)

**Bob Chow** (OPA) – Agrees with Jim Tait's overview. Regional planning was created to formalize a process and look at new developments that are coming into consideration over the last few years. It is a requirement now, board is expecting this. Can't be done in one year, expectation will be to cover every part of Ontario over a few years span. Complexity levels will and should vary between Regions. He cautions that the report is written to the most complex situations, so to not get too worried about the details. It doesn't have to be a consuming or complex task. Examine need of area and issues where relevant. Could be conservations or fixing old facility plan, may not be a wire plan.

**Ajay Garg** – Echoes Bob's statement. Group 2 and 3 is expected to be easier than Group 1

**Jim Tait** – For the initial regional planning process the trigger is the board's requirement, the process is meant to be sustainable, reviewed every 5 years or when an unexpected event triggers the process (connection of a large load, regional reliability issue, etc..).

**Bob Chow** – Agrees that the intention is that every 5 years the process will be reviewed. This should hopefully be a simpler process in the future.

b. Needs Screening / Regional Planning Approach Decision

**Bob Chow** – Needs screen is meant as a triage step. Decipher if there is a need at all and if there are problems, does it need regional planning? or could they be worked out in the normal

process. Not where the planning is done but where the basic triage is done. Issues that would be concerning would be capacity problems, security problems, reliability issues and end of life of major facilities such as stations, lines and transformers.

**Ajay Garg** – It is important to understand that from trigger point to published report, we are given 60 days to publish.

**Bob Chow** – A number of need screens have been completed by Hydro One but there is no one particular model for every region. It is a decision to be made if regional planning is even needed at all.

**Jim Tait** – I have had a chance to review need screening reports that have been published recently. Bottom line, during the data gathering phase all stakeholder should bring all relevant needs to the table, the process will aid in determining whether or not they should be considered as part of a regional plan.

**Bob Chow** – Knowing that process is being looked at is a comfort for the Board

**Ajay Garg** – In some cases we were able to do more thorough needs screening phase because we started a similar process way before the regional planning process and the TSC amendments were approved giving us a lot of extra time. This would not always be the case.

**Bob Chow** – Refers everyone to the Venn Diagram To show how parallel planning is being done. In the north it's very hard to separate the two. Any need that comes up in our region, we will need to assess if it should be handled local, regional or at bulk level (such as the East West Tie)

- **Jim Tait** agrees that any need that is propose will need to be identified or categorize within 1 of the 3 levels in order to be handled correctly throughout the process.

East West Tie is a good example from our perspective of a situation that is not our region but that will have an impact.

#### 4. 9:45 AM – Discussion on Regional Planning (Regions) vs. Transmission Planning

- **Bob Chow** referred to parallel planning being done. In the north it's very hard to separate the two. Any need that we see in our region will need to see if they are handled, local, regional or bulk level.

#### 5. 10:15 AM – Review of the OPA and IESO experience with the process to date **OPA/IESO**

- **Phillip Woo** - has noticed a positive collaborative effort taking place. Everyone is kept aware of process and has input heard with transmitter there to facilitate.
- **Ajay**- Agrees this is a team effort and everybody needs to come to a consensus. Team works well through these challenges.
- **Peter** - Planning is not all about wires, increasingly becoming more important on a non wire side. Useful platform to share information across the whole sector. We are gaining a lot by working with everyone involved in the local area.
- **Jim T** – We are in the data gathering/needs screening portion of this process. Each stakeholder will do needs assessment from their local areas perspective, provide this information back to GLPT, GLPT will then formalize this data into a report and call everyone back to the table to review, adjustments will be made until the needs screen report is considered acceptable to the entire group.

- **Ajay** – mentioned that **OPA** would provide information to each participant what data is affected to whom within 60 days from trigger. This is how Hydro One has done it in the past.
- **Clarification** – 60 days for data gathering and 60 days to perform the needs screen assessment = 120 days total for initial phase of Regional Planning.
- **Unknown** - Process step will be led by GLPT. Information led by lead transmitter. All hard work is done by lead transmitter than group reviews what has been arrived at. Group will provide data to Jim and Jim will do appropriate assembling of that data. Jim's conclusion will be brought to group for approval and report will be made after that.
- **Hydro One** – had kick off meeting and followed up meeting for draft of report then final meeting to talk about final report results.

6. ~~11:00 AM – Review of the GLPT data regarding load growth in the ELS Region~~ Not Discuss **GLPT**

**Jim** - I will come up with timeline and the data requests, then schedule meetings to do a preliminary review and then review the final product.

**Bob Coghlan** – When does 60 days start?

**Ajay** - first meeting triggers 60 days for data collection, but that does not mean you need to take the full 60 days. Once data is complete then you have more time to do your assessments.

**Jim** – states because our company is not resource rich we will probably need the 60 days to get this out the door.

**Jim** – Today we are going to trigger data gathering.

**Greg Beharriell** asked if there are guidelines for LDC's for load forecasting consistency across the province?

**Ajay**- not so much need for consistency but we can provide past templates that have been used as reference.

**Bob Chow** - Don't do too much work on the screening part. Real study comes in planning section. We need to try and catch, and focus in on the big items.

**Phillip** – IESO will need the full 60 days to get the data in to Jim

\*Rest of the group is alright with the 60 day timeframe.

**Ajay**- will send the templates to Jim so Jim can send them out at the first letter request.

- a. Discussion on input/data collection (Future Growth, Security & Reliability, End of Life)
  - i. 2013 Regional Load Data – IESO
  - ii. Load forecast – LDC's
  - iii. CDM and DG information – OPA
  - iv. Reliability and/or operating issues – LDC's & IESO

v. Planned Transmission and Distribution investments – Transmitter's & LDC's

7. 11:30 AM – Discussion about sub-regional areas within the ELS Region

**GLPT/AII**

a. What are sub-regions

Try to sub-divide a province so that not everybody in the region has to be involved. Without knowing the scope we can't know what if any sub-regions are needed. Jim does not think that East Lake Superior will require any sub-regions.

b. Should GLPT Transmission System have sub-regions

This was not discussed at length, sub regions probably not required for this region.

8. 11:45 AM – Discussion of next steps and actions

**GLPT/AII**

**Bob Caughlan**- How do you involve load customers?

**Ajay** – we contacted customers for information. Take that information into account for best estimate.

**Jim** –The City of Sault Ste Marie is the main customer of PUC. PUC should insure open dialogue with the city as the Regional Planning Process is .

10 years will be forecasting limit – generally anything past 10 years will not be accurate enough for purpose of the needs screening. Agreed by group.

**Darren** – If something is unforeseen in the cycle such as excessive use of load, transmitter lead will be made aware of this.

	Action Items from meeting	
Jim Tait	Jim to define schedule and actions for participants that is needed than schedule a follow up meeting with timelines to group. Jim to start triggers Tues. Aug. 5 <sup>th</sup> .	Closed
Jim Tait	Minutes will be released to group by Thursday next week	Closed

9. 10:24AM - Adjourn



Great Lakes Power Transmission LP  
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[www.glp.ca](http://www.glp.ca)

# Great Lakes Power Transmission

EB-2014-0238  
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8/12/2014

PUC Distribution Inc.  
500 Second Line East  
P.O. Box 9000  
Sault Ste. Marie, Ontario, P6A 6P2  
Phone (705) 759-6541 Fax (705) 759-1758

**Dear Mr. Rob Harten**

Following the kickoff of Regional Planning and in order to conduct the needs screening portion of the process GLPT will require certain information from all relevant parties.

GLPT is requesting the following information from PUC;

1. Gross and Net Load forecast for the next 10years, provided on the following basis:
  - a. In megawatts ("MW") with power factor assumptions provided;
  - b. At the supply Transformer station or delivery point
2. Regional system reliability and performance issues.
3. Any additional information considered relevant.

Please find attached a load forecast template for your convenience.

To complete the Needs Screen assessment in a timely and efficient manner a suggested Timeline with additional meeting dates has been provided, please review and identify if the timeline will fit your schedule and your ability to assign resources to these tasks.





### Suggested Timeline

Needs Screening Task	Start	Finish	Responsible Party
Data Gathering	August 5, 2014	September 25, 2014	GLPT, Hydro One, IESO, OPA, API, PUC, Chapleau PUC
Analysis of Data	September 25, 2014	November 4, 2014	GLPT
Draft Report	November 4, 2014	November 17, 2014	GLPT
Review Preliminary Report *	November 18, 2014	December 2, 2014	GLPT, Hydro One, IESO, OPA, API, PUC, Chapleau PUC
Finalize Report	December 2, 2014	December 8, 2014	GLPT
Review Final Report**	December 9, 2014	December 16, 2014	GLPT, Hydro One, IESO, OPA, API, PUC, Chapleau PUC

\*Group Preliminary Review Meeting – December 2, 2014

\*\*Group Final Review Meeting – December 16, 2014

Great Lakes Power Transmission looks forward to working with you in executing the Regional Planning Process.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Tait", is displayed on a light gray background.

Jim Tait  
Technical Supervisor, Engineering  
Great Lakes Power Transmission LP

Cc: Claudio Stefano  
Darren Seabrook

# **RETIREMENT PLAN OF GREAT LAKES POWER TRANSMISSION LP REPORT ON THE ACTUARIAL VALUATION FOR FUNDING PURPOSES AS AT DECEMBER 31, 2013 SEPTEMBER 2014**

Financial Services Commission of Ontario Registration Number: 1212844  
Canada Revenue Agency Registration Number: 1212844

**Note to reader regarding actuarial valuations:**

This valuation report may not be relied upon for any purpose other than those explicitly noted in the Introduction, nor may it be relied upon by any party other than the parties noted in the Introduction. Mercer is not responsible for the consequences of any other use. A valuation report is a snapshot of a plan's estimated financial condition at a particular point in time; it does not predict a pension plan's future financial condition or its ability to pay benefits in the future. If maintained indefinitely, a plan's total cost will depend on a number of factors, including the amount of benefits the plan pays, the number of people paid benefits, the amount of plan expenses, and the amount earned on any assets invested to pay the benefits. These amounts and other variables are uncertain and unknowable at the valuation date. The content of the report may not be modified, incorporated into or used in other material, sold or otherwise provided, in whole or in part, to any other person or entity, without Mercer's permission. All parts of this report, including any documents incorporated by reference, are integral to understanding and explaining its contents; no part may be taken out of context, used, or relied upon without reference to the report as a whole.

To prepare the results in this report, actuarial assumptions are used to model a single scenario from a range of possibilities for each valuation basis. The results based on that single scenario are included in this report. However, the future is uncertain and the plan's actual experience will differ from those assumptions; these differences may be significant or material. Different assumptions or scenarios within the range of possibilities may also be reasonable, and results based on those assumptions would be different. Furthermore, actuarial assumptions may be changed from one valuation to the next because of changes in regulatory and professional requirements, developments in case law, plan experience, changes in expectations about the future, and other factors.

The valuation results shown in this report also illustrate the sensitivity to one of the key actuarial assumptions, the discount rate. We note that the results presented herein rely on many assumptions, all of which are subject to uncertainty, with a broad range of possible outcomes, and the results are sensitive to all the assumptions used in the valuation.

Should the plan be wound up, the going concern funded status and solvency financial position, if different from the wind-up financial position, become irrelevant. The hypothetical wind-up financial position estimates the financial position of the plan assuming it is wound up on the valuation date. Emerging experience will affect the wind-up financial position of the plan assuming it is wound up in the future. In fact, even if the plan were wound up on the valuation date, the financial position would continue to fluctuate until the benefits are fully settled.

Decisions about benefit changes, granting new benefits, investment policy, funding policy, benefit security, and/or benefit-related issues should not be made solely on the basis of this valuation, but only after careful consideration of alternative economic, financial, demographic, and societal factors, including financial scenarios that assume future sustained investment losses.

Funding calculations reflect our understanding of the requirements of the *Ontario Pension Benefits Act*, the *Income Tax Act*, and related regulations that are effective as of the valuation date. Mercer is not a law firm, and the analysis presented in this report is not intended to be a legal opinion. You should consider securing the advice of legal counsel with respect to any legal matters related to this report.

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# 1

## Summary of Results

	31.12.2013	31.12.2012
<b>Going Concern Financial Status</b>		
Market value of assets	\$19,347,900	\$17,097,900
Going concern funding target	\$15,830,900	\$16,303,400
Funding excess (shortfall)	\$3,517,000	\$794,500
Prior Year Credit Balance	\$0	(\$307,600)
Net Position	\$3,517,000	\$486,900
<b>Hypothetical Wind-up Financial Position</b>		
Wind-up assets	\$19,287,900	\$17,037,900
Wind-up liability	\$21,666,200	\$22,532,900
Wind-up excess (shortfall)	(\$2,378,300)	(\$5,495,000)
<b>Funding Requirements in the Year Following the Valuation<sup>1</sup></b>		
Total current service cost	\$342,700	\$438,200
Estimated members' required contributions	(\$110,100)	(\$133,400)
Estimated employer's current service cost	\$232,600	\$304,800
Expense allowance	\$140,000	\$100,000
Total	\$372,600	\$404,800
Employer's current service cost as a percentage of members' pensionable earnings <sup>2</sup>	11.5%	12.7%
Minimum special payments – in year after Valuation	\$597,400	\$539,400
Minimum special payments – one year after Valuation	\$597,400	\$753,800
Estimated minimum employer contribution – in year after Valuation	\$970,000	\$944,200
Estimated maximum eligible employer contribution	\$2,750,900	\$5,899,800
Next required valuation date	December 31, 2016	December 31, 2013

<sup>1</sup> Provided for reference purposes only. Contributions must be remitted to the Plan in accordance with the Minimum Funding Requirements and Maximum Eligible Contributions sections of this report.

<sup>2</sup> Excluding expense allowance.

# 2

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## Introduction

### To Great Lakes Power Transmission LP

At the request of Great Lakes Power Transmission LP, we have conducted an actuarial valuation of the Retirement Plan of Great Lakes Power Transmission LP (the “Plan”), sponsored by Great Lakes Power Transmission LP (the “Company”), as at the valuation date, December 31, 2013. We are pleased to present the results of the valuation.

### Purpose

The purpose of this valuation is to determine:

- The funded status of the plan as at December 31, 2013 on going concern, hypothetical wind-up, and solvency bases;
- The minimum required funding contributions from 2014, in accordance with the *Ontario Pension Benefits Act*; and
- The maximum permissible funding contributions from 2014, in accordance with the *Income Tax Act*.

The information contained in this report was prepared for the internal use of the Company, and for filing with the Financial Services Commission of Ontario and with the Canada Revenue Agency, in connection with our actuarial valuation of the Plan. This report will be filed with the Financial Services Commission of Ontario and with the Canada Revenue Agency. This report is not intended or suitable for any other purpose.

In accordance with pension benefits legislation, the next actuarial valuation of the Plan will be required as at a date not later than December 31, 2016, or as at the date of an earlier amendment to the Plan.

### Terms of Engagement

In accordance with our terms of engagement with the Company, our actuarial valuation of the Plan is based on the following material terms:

- It has been prepared in accordance with applicable pension legislation and actuarial standards of practice in Canada.
- As instructed by the Company, we have reflected a margin for adverse deviations in our going concern valuation by reducing the going concern discount rate by 0.44% per year.

- We have reflected the Company decisions for determining the solvency funding requirements, summarized as follows:
  - The same plan wind-up scenario was hypothesized for both hypothetical wind-up and solvency valuations.
  - Although permissible, no benefits were excluded from the solvency liabilities.
  - The solvency financial position was determined on a market value basis.
  - The one-year deferral of new solvency special payments was elected.

See the Valuation Results - Solvency section of the report for more information.

## Events since the Last Valuation at December 31, 2012

### ***Pension Plan***

There have been no special events since the last valuation date.

This valuation reflects the provisions of the Plan as at December 31, 2013. The Plan will be amended effective July 1, 2012 to reflect the amendment made to the *Pension Benefits Act (Ontario)* and the Regulations to the Act as described in the Introduction of this report. The upcoming changes do not materially impact the cost of the Plan. The cost of these legislated minimum benefit improvements is reflected in the valuation.

We are not aware of any other pending definitive or virtually definitive amendments coming into effect during the period covered by this report. The Plan provisions are summarised in Appendix F.

### ***Assumptions***

We have used the same going concern valuation assumptions and methods as were used for the previous valuation, except for the following:

	Current valuation	Previous valuation
Discount rate:	6.05%	5.75%
Inflation:	2.00%	2.25%
ITA limit / YMPE increases:	2.50%	2.75%
Pensionable earnings increases:	3.00%	3.25%
Post retirement pension increase:	1.50%	2.00%
Interest on employee required contributions:	1.45%	1.58%
Retirement rates:	25% at each age starting at un-reduced age until age 64; remainder at age 65	60% at un-reduced age, remainder at age 65
Mortality rates:	100% of the rates of the 2014 Private Sector Canadian Pensioners Mortality Table (CPM2014Priv)	100% of the rates of the 1994 Uninsured Pensioner Mortality Table
Mortality Improvements:	Fully generational using scale CPM-B	Fully generational using scale AA



	Current valuation	Previous valuation
Expense Allowance:	\$140,000	\$100,000

We have changed the method to determine the post retirement pension increases assumption since the previous valuation. A description of the new method is summarized in Appendix C.

The hypothetical wind-up and solvency assumptions have been updated to reflect market conditions at the valuation date.

A summary of the going concern methods and assumptions is provided in Appendix C. A summary of the hypothetical wind-up and solvency methods and assumptions is provided in Appendix D.

### ***Regulatory Environment and Actuarial Standards***

There have been no changes to the Act or the relevant regulations which impact the funding of the Plan

### **Subsequent Events**

After checking with representatives of the Company, to the best of our knowledge there have been no events subsequent to the valuation date which, in our opinion, would have a material impact on the results of the valuation. Our valuation reflects the financial position of the Plan as of the valuation date and does not take into account any experience after the valuation date.

### **Impact of Case Law**

This report has been prepared on the assumption that all of the assets in the pension fund are available to meet all of the claims on the Plan. We are not in a position to assess the impact that the Ontario Court of Appeal's decision in *Aegon Canada Inc. and Transamerica Life Canada versus ING Canada Inc.* or similar decisions in other jurisdictions might have on the validity of this assumption.

On July 29, 2004, the Supreme Court of Canada dismissed the appeal in *Monsanto Canada Inc. versus Superintendent of Financial Services ("Monsanto")*, thereby upholding the requirements to distribute surplus on partial plan wind-up under the *Pension Benefits Act (Ontario)*. The decision has retroactive application and applies on the termination of Ontario employees if they are included in a partial plan wind-up, regardless of the province in which the pension plan is registered.

We are not aware of any partial plan wind-up having been declared in respect of the Plan where the Monsanto decision may apply. In preparing this actuarial valuation, we have therefore assumed that all the Plan's assets are available to cover the Plan's liabilities presented in this report. The subsequent declaration of a partial wind-up of the Plan where Monsanto may apply in respect of a past event, or disclosure of an existing past partial wind-up, could cause an additional claim on the Plan's assets, the consequences of which would be addressed in a subsequent report. We note the discretionary nature of the power of the regulatory authorities to declare partial wind-ups, and the lack of clarity with respect to the retroactive scope of that power. We are making no representation as to whether the regulatory authorities might declare a partial wind-up in respect of other events in the Plan's history.

# 3

## Valuation Results – Going Concern

### Financial Status

A going concern valuation compares the relationship between the value of Plan assets and the present value of expected future benefit cash flows in respect of accrued service, assuming the Plan will be maintained indefinitely.

The results of the current valuation, compared with those from the previous valuation, are summarized as follows:

	31.12.2013	31.12.2012
<b>Assets</b>		
Market value of assets	\$19,347,900	\$17,097,900
<b>Going concern funding target</b>		
• Active members	\$5,824,700	\$7,386,000
• Pensioners and survivors	\$9,796,900	\$8,917,400
• Deferred pensioners	\$209,300	\$0
Total	\$15,830,900	\$16,303,400
Funding excess (shortfall)	\$3,517,000	\$794,500
Prior Year Credit Balance	\$0	(\$307,600)
Net position	\$3,517,000	\$486,900

The going concern funding target includes a provision for adverse deviations.

## Reconciliation of Financial Status

Funding excess (shortfall) as at previous valuation		\$794,500
Interest on funding excess (shortfall) at 5.75% per year		\$45,700
Employer's special payments, with interest		\$238,400
Expected funding excess (shortfall)		\$1,078,600
Net experience gains (losses)		
• Investment return	\$1,411,600	
• Increases in pensionable earnings	\$38,100	
• Indexation	\$65,400	
• Mortality	(\$87,900)	
• Retirement	\$160,400	
• Termination	\$244,300	
• Expenses	(\$79,300)	
Total experience gains (losses)	\$1,752,600	\$1,752,600
Impact of changes in assumptions		
• Economic assumptions		\$1,398,000
• Mortality assumption		(\$549,200)
• Other demographic assumptions		(\$139,100)
Net impact of other elements of gains and losses		(\$23,900)
Funding excess (shortfall) as at current valuation		\$3,517,000

## Current Service Cost

The current service cost is an estimate of the present value of the additional expected future benefit cash flows in respect of pensionable service that will accrue after the valuation date, assuming the Plan will be maintained indefinitely.

The current service cost during the year following the valuation date, compared with the corresponding value determined in the previous valuation, is as follows:

	2014	2013
Total current service cost	\$342,700	\$438,200
Estimated members' required contributions	(\$110,100)	(\$133,400)
Estimated employer's current service cost	\$232,600	\$304,800
Expense allowance	\$140,000	\$100,000
Total	\$372,600	\$404,800
Employer's current service cost expressed as a percentage of members' pensionable earnings <sup>3</sup>	11.5%	12.7%

<sup>3</sup> Excluding expense allowance.

The key factors that have caused a change in the employer's current service cost since the previous valuation are summarized in the following table:

Employer's current service cost as at previous valuation	12.7%
Demographic changes	0.5%
Changes in assumptions	(1.7%)
Employer's current service cost as at current valuation	11.5%

## Discount Rate Sensitivity

The following table summarizes the effect on the going concern funding target shown in this report of using a discount rate which is 1.00% lower than that used in the valuation:

Scenario	Valuation Basis	Reduce Discount Rate by 1%
<b>Going concern funding target</b>	\$15,830,900	\$18,120,300
<b>Current service cost</b>		
• Total current service cost	\$342,700	\$424,400
• Estimated members' required contributions	(\$110,100)	(\$110,100)
• Estimated employer's current service cost	\$232,600	\$314,300
• Expense allowance	\$140,000	\$140,000
Total	\$372,600	\$454,300

# 4

## Valuation Results – Hypothetical Wind-up

### Financial Position

When conducting a hypothetical wind-up valuation, we determine the relationship between the respective values of the Plan's assets and its liabilities assuming the Plan is wound up and settled on the valuation date, assuming benefits are settled in accordance with the Act and under circumstances producing the maximum wind-up liabilities on the valuation date. However, to the extent permitted by law, the actuary may disregard:

- Benefits that would not be payable under the hypothesized scenario.
- Plan member earnings after the valuation date.

The hypothetical wind-up financial position as of the valuation date, compared with that at the previous valuation, is as follows:

	31.12.2013	31.12.2012
<b>Assets</b>		
Market value of assets	\$19,347,900	\$17,097,900
Termination expense provision	(\$60,000)	(\$60,000)
Wind-up assets	\$19,287,900	\$17,037,900
<b>Present value of accrued benefits for:</b>		
• Active members	\$8,455,400	\$10,976,600
• Pensioners and survivors	\$12,867,300	\$11,556,300
• Deferred pensioners	\$343,500	\$0
Total wind-up liability	\$21,666,200	\$22,532,900
Wind-up excess (shortfall)	(\$2,378,300)	(\$5,495,000)

## Wind-up Incremental Cost to December 31, 2016

The wind-up incremental cost is an estimate of the present value of the projected change in the hypothetical wind-up liabilities from the valuation date until the next scheduled valuation date, adjusted for the benefit payments expected to be made in that period.

The hypothetical wind-up incremental cost determined in this valuation is as follows:

	31.12.2013
Number of years covered by report	3 years
Total hypothetical wind-up liabilities at the valuation date (A)	\$21,666,200
Present value of projected hypothetical wind-up liability at the next required valuation (including expected new entrants) plus benefit payments until the next required valuation (B)	\$23,880,400
Hypothetical wind-up incremental cost (B – A)	\$2,214,200

The incremental cost is not an appropriate measure of the contributions that would be required to maintain the financial position of the Plan on a hypothetical wind-up basis unchanged from the valuation date to the next required valuation date, if actual experience is exactly in accordance with the going concern valuation assumptions. This is because it does not reflect the fact that the expected return on plan assets (based on the going concern assumptions) is greater than the discount rate used to determine the hypothetical wind-up liabilities.

## Discount Rate Sensitivity

The following table summarizes the effect on the hypothetical wind-up liabilities shown in this report of using a discount rate which is 1.00% lower than that used in the valuation:

Scenario	Valuation Basis	Reduce Discount Rate by 1%
Total hypothetical wind-up liability	\$21,666,200	\$25,012,600

# 5

## Valuation Results – Solvency

### Overview

The Act also requires the financial position of the Plan to be determined on a solvency basis. The financial position on a solvency basis is determined in a similar manner to the Hypothetical Wind-up Basis, except for the following:

Exceptions	Reflected in valuation based on the terms of engagement
The circumstance under which the Plan is assumed to be wound up could differ for the solvency and hypothetical wind-up valuations.	The same circumstances were assumed for the solvency valuation as were assumed for the hypothetical wind-up valuation.
Certain benefits can be excluded from the solvency financial position. These include: (a) any escalated adjustment (e.g. indexing), (b) certain plant closure benefits, (c) certain permanent layoff benefits, (d) special allowances other than funded special allowances, (e) consent benefits other than funded consent benefits, (f) prospective benefit increases, (g) potential early retirement window benefit values, and (h) pension benefits and ancillary benefits payable under a qualifying annuity contract.	No benefits were excluded from the solvency liabilities shown in this valuation.
The financial position on the solvency basis needs to be adjusted for any Prior Year Credit Balance.	Not applicable as at December 31, 2013.
The solvency financial position can be determined by smoothing assets and the solvency discount rate over a period of up to 5 years.	Smoothing was not used.
The benefit rate increases coming into effect after the valuation date can be reflected in the solvency valuation.	Not applicable.

### Financial Position

The financial position on a solvency basis is the same as the financial position on the hypothetical wind-up basis shown in the previous section. The transfer ratio is 89%, compared to 74% at the previous valuation.

# 6

## Minimum Funding Requirements

The Act prescribes the minimum contributions that Company must make to the Plan. The minimum contributions in respect of a defined benefit component of a pension plan are comprised of going concern current service cost and special payments to fund any going concern or solvency shortfalls.

On the basis of the assumptions and methods described in this report, the rule for determining the minimum required employer monthly contributions, as well as an estimate of the employer contributions, from the valuation date until the next required valuation are as follows:

Employer's contribution rule				Estimated employer's contributions	
Period beginning	Monthly current service cost <sup>4</sup>	Explicit monthly expense allowance	Minimum monthly special payments	Monthly current service cost including expense allowance	Total minimum monthly contributions
January 1, 2014	11.5%	\$11,667	\$49,785	\$31,050	\$80,835
January 1, 2015	11.5%	\$11,667	\$49,785	\$31,631	\$81,416
January 1, 2016	11.5%	\$11,667	\$49,785	\$32,230	\$82,015

The estimated contribution amounts above are based on projected members' pensionable earnings. Therefore, the actual employer's current service cost will be different from the above estimates and, as such, the contribution requirements should be monitored closely to ensure contributions are made in accordance with the Act.

The development of the minimum special payments is summarized in Appendix A.

## Other Considerations

### *Differences Between Valuation Bases*

There is no provision in the minimum funding requirements to fund the difference between the hypothetical wind-up and solvency shortfalls, if any.

In addition, although minimum funding requirements do include a requirement to fund the going concern current service cost, there is no requirement to fund the expected growth in the hypothetical wind-up or solvency liability after the valuation date, which could be greater than the going concern current service cost.

<sup>4</sup> Expressed as a percentage of member's pensionable earnings.



### ***Timing of Contributions***

Funding contributions are due on a monthly basis. Contributions for current service cost including the expense allowance must be made within 30 days following the month to which they apply. Special payment contributions must be made in the month to which they apply.

### ***Retroactive Contributions***

The Company must contribute the excess, if any, of the minimum contribution recommended in this report over contributions actually made in respect of the period following the valuation date. This contribution, along with an allowance for interest, is due no later than 60 days following the date this report is filed.

### ***Payment of Benefits***

The Act imposes certain restrictions on the payment of lump sums from the Plan when the transfer ratio revealed in an actuarial valuation is less than one. If the transfer ratio shown in this report is less than one, the plan administrator should ensure that the monthly special payments are sufficient to meet the requirements of the Act to allow for the full payment of benefits, and otherwise should take the prescribed actions.

Additional restrictions are imposed when:

- The transfer ratio revealed in the most recently filed actuarial valuation is less than one and the administrator knows or 'ought to know' that the transfer ratio of the Plan has declined by 10% or more since the date the last valuation was filed.
- The transfer ratio revealed in the most recently filed actuarial valuation is greater than or equal to one and the administrator knows or 'ought to know' that the transfer ratio of the Plan has declined to less than 0.9 since the date the last valuation was filed.

As such, the administrator should monitor the transfer ratio of the Plan and, if necessary, take the prescribed actions.

### ***Letters of Credit***

Minimum funding requirements in respect of solvency deficiencies that otherwise require monthly contributions to the pension fund may be met, in the alternative, by establishing an irrevocable letter of credit subject to the conditions established by the Act. Required solvency special payments in excess of those met by a letter of credit must be met by monthly contributions to the pension fund.

# 7

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## Maximum Eligible Contributions

The *Income Tax Act* (the “ITA”) limits the amount of employer contributions that can be remitted to the defined benefit component of a registered pension plan. However, notwithstanding the limit imposed by the ITA, for plans which are not ‘Designated’ as defined in the ITA, in general, the minimum required contributions under the Act can be remitted.

In accordance with Section 147.2 of the ITA and *Income Tax Regulation* 8516, for a plan which is underfunded on either a going concern or on a hypothetical wind-up basis, the maximum permitted contributions are equal to the employer’s current service cost, including the explicit expense allowance if applicable, plus the greater of the going concern funding shortfall and hypothetical wind-up shortfall.

For a plan which is fully funded on both going concern and hypothetical wind-up bases, the employer can remit a contribution equal to the employer’s current service cost, including the explicit expense allowance if applicable, as long as the surplus in the plan does not exceed a prescribed threshold. Specifically, in accordance with Section 147.2 of the ITA, for a plan which is fully funded on both going concern and hypothetical wind-up bases, the plan may not retain its registered status if the employer makes a contribution while the going concern funding excess exceeds 25% of the going concern funding target.

## Schedule of Maximum Contributions

The Company is permitted to fully fund the greater of the going concern and hypothetical wind-up shortfalls; \$2,378,300, as well as make current service cost contributions. The portion of this contribution representing the payment of the hypothetical wind-up shortfall can be increased with interest at 3.10% per year from the valuation date to the date the payment is made, and must be reduced by the amount of any deficit funding made from the valuation date to the date the payment is made.

Assuming the Company contributes the greater of the going concern and hypothetical wind-up shortfall of \$2,378,300 as of the valuation date, the rule for determining the estimated maximum eligible annual contributions, as well as an estimate of the maximum eligible contributions until the next valuation, are as follows:

Employer's contribution rule				Estimated employer's contributions
Year beginning	Monthly current service cost <sup>5</sup>	Monthly expense allowance	Deficit Funding	Monthly current service cost including expense allowance
January 1, 2014	11.5%	\$11,667	n/a	\$31,050
January 1, 2015	11.5%	\$11,667	n/a	\$31,631
January 1, 2016	11.5%	\$11,667	n/a	\$32,230

The employer's current service cost in the above table was estimated based on projected members' pensionable earnings. The actual employer's current service cost will be different from these estimates and, as such, the contribution requirements should be monitored closely to ensure compliance with the ITA.

<sup>5</sup> Expressed as a percentage of member's pensionable earnings.

# 8

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## Actuarial Opinion

In our opinion, for the purposes of the valuations,

- The membership data on which the valuation is based are sufficient and reliable.
- The assumptions are appropriate.
- The methods employed in the valuation are appropriate.

This report has been prepared, and our opinions given, in accordance with accepted actuarial practice in Canada. It has also been prepared in accordance with the funding and solvency standards set by the *Pension Benefits Act (Ontario)*.



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Caroline Lavoie

Fellow of the Society of Actuaries

Fellow of the Canadian Institute of Actuaries



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Sylvie Bourbonnais

Fellow of the Society of Actuaries

Fellow of the Canadian Institute of Actuaries

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September 23, 2014

Date

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September 23, 2014

Date

# APPENDIX A

## Prescribed Disclosure

### Definitions

The Act defines a number of terms as follows:

Defined Term	Description	Result
Transfer Ratio	The ratio of: (a) solvency assets minus the lesser of the Prior Year Credit Balance and the minimum required employer contributions until the next required valuation; to (b) the sum of the solvency liabilities and liabilities for benefits, other than benefits payable under qualifying annuity contracts that were excluded in calculating the solvency liabilities.	0.89
Prior Year Credit Balance	Accumulated excess of contributions made to the pension plan in excess of the minimum required contributions (note: only applies if the Company chooses to treat the excess contributions as a Prior Year Credit Balance).	\$0
Solvency Assets	Market value of assets including accrued or receivable income and excluding the value of any qualifying annuity contracts <sup>6</sup> .	\$19,347,900
Solvency Asset Adjustment	The sum of: (a) the difference between smoothed value of assets and the market value of assets (b) the present value of going concern special payments (including those identified in this report) within 6 years following the valuation date (c) the present value of any previously scheduled solvency special payments (excluding those identified in this report)	\$0 \$0 \$2,826,500
		<u>\$2,826,500</u>

<sup>6</sup> In accordance with accepted actuarial practices, for purpose of determining the financial position, the market value of plan assets was adjusted for any in-transit benefit payments, contributions, and other in-transit cash flows.

Solvency Liabilities	Liabilities determined as if the plan had been wound up on the valuation date, including liabilities for plant closure benefits or permanent layoff benefits that would be immediately payable if the employer's business were discontinued on the valuation date of the report, but, if elected by the plan sponsor, excluding liabilities for, <ul style="list-style-type: none"> <li>(a) any escalated adjustment,</li> <li>(b) excluded plant closure benefits,</li> <li>(c) excluded permanent layoff benefits,</li> <li>(d) special allowances other than funded special allowances,</li> <li>(e) consent benefits other than funded consent benefits,</li> <li>(f) prospective benefit increases,</li> <li>(g) potential early retirement window benefit values, and</li> <li>(h) pension benefits and ancillary benefits payable under a qualifying annuity contract.</li> </ul>	\$21,666,200
Solvency Liability Adjustment	The amount by which solvency liabilities are adjusted as a result of using a solvency valuation interest rate that is the average of market interest rates calculated over the period of time used in the determination of the smoothed value of assets.	\$0
Solvency Deficiency	The amount, if any, by which the sum of: <ul style="list-style-type: none"> <li>(a) the solvency liabilities</li> <li>(b) the solvency liability adjustment</li> <li>(c) the prior year credit balance</li> </ul> Exceeds the sum of <ul style="list-style-type: none"> <li>(d) the solvency assets net of estimated termination expenses<sup>7</sup></li> <li>(e) the solvency asset adjustment</li> </ul>	<div> <div>\$21,666,200</div> <div>\$0</div> <div>\$0</div> <div>\$21,666,200</div> <div>\$19,287,900</div> <div>\$2,826,500</div> <div>\$22,114,400</div> <div>\$0</div> </div>

## Timing of Next Required Valuation

In accordance with the Act the next valuation of the Plan would be required at an effective date within one year of the current valuation date if:

- The ratio of solvency assets to solvency liabilities is less than 85%.
- The employer elected to exclude plant closure or permanent lay-off benefits under Section 5(18) of the regulations, and has not rescinded that election.

Otherwise, the next valuation of the Plan would be required at an effective date no later than three years after the current valuation date.

Accordingly, the next valuation of the Plan will be required as of December 31, 2016.

<sup>7</sup> In accordance with accepted actuarial practice, for purposes of determining the financial position, the market value of plan assets was reduced by a provision for estimated termination expenses payable from the Plan's assets that may reasonably be expected to be incurred in terminating the Plan and to be charged to the Plan.

## Special Payments

Based on the results of this valuation, the Plan is not fully funded. In accordance with the Act, any going concern deficits must be amortized over a period not exceeding 15 years, beginning on a date not later than 12 months after December 31, 2013, and any solvency deficits must be amortized over a period not exceeding 5 years, also beginning on a date not later than 12 months after December 31, 2013.

As such, special payments must be made as follows:

Type of payment	Start date	End date	Monthly Special Payment	Present Value Solvency Basis <sup>8</sup>
Consolidated Solvency	December 31, 2011	December 31, 2016	\$5,103	\$175,300
Solvency	December 31, 2012	December 31, 2017	\$26,817	\$1,210,200
Solvency	December 31, 2013	December 31, 2018	\$17,865	\$992,800
Total			\$49,785	\$2,378,300

As the Plan does not have a going concern deficit, no going concern special payments are required.

The present value of the previously scheduled solvency payments exceeds the solvency shortfall. In accordance with the Act, the excess can be used to reduce any solvency relief special payment (i.e. "Consolidated Solvency" in the table above) and the period of any Solvency special payment schedule. Therefore, the monthly payment for the Consolidated Solvency schedule, commencing on December 31, 2011, was reduced from \$18,131 to \$5,103.

<sup>8</sup> Calculation is based on the average solvency discount rate.

## Pension Benefit Guarantee Fund (PBGF) Assessment

The PBGF assessment base and liabilities are derived as follows:

Solvency assets	\$19,347,900 (a)
PBGF liabilities	\$21,666,200 (b)
Solvency liabilities	\$21,666,200 (c)
Ontario asset ratio	100% (d) = (b) ÷ (c)
Ontario portion of the fund	\$19,347,900 (e) = (a) x (d)
PBGF assessment base	\$2,318,300 (f) = (b) – (e)
Amount of additional liability for plant closure and/or permanent layoff benefits which is not funded and subject to the 2% assessment pursuant to s.37(4)	\$0 (g)

The PBGF assessment is calculated as follows:

\$5 for each Ontario member	\$255 (h)
0.5% of PBGF assessment base up to 10% of PBGF liabilities	\$10,833 (i)
1.0% of PBGF assessment base between 10% and 20% of PBGF liabilities	\$1,517 (j)
1.5% of PBGF assessment base over 20% of PBGF liabilities	\$0 (k)
Sum of (h), (i), (j) and (k)	\$12,605 (l)
\$300 for each Ontario member	\$15,300 (m)
Lesser of (l) and (m)	\$12,605 (n)
2.0% of additional liabilities ((g) x 2%)	\$0 (o)
Total Guarantee Fund Assessment ((n) + (o), no less than \$250) (before applicable tax)	\$12,605 (p)

## Prior Year Credit Balance

The Prior Year Credit Balance was determined as follows:

Prior Year Credit Balance at previous valuation	\$307,600 (a)
Actual employer contributions (with interest)	\$632,000 (b)
Required employer contributions (with interest)	\$939,600 (c)
Prior Year Credit Balance at current valuation	\$0 (d) = (a) + (b) – (c)



## APPENDIX B

### Plan Assets

The pension fund is held by RBC Investor Services. In preparing this report, we have relied upon the auditors' report signed by Deloitte LLP without further audit. Customarily, this information would not be verified by a plan's actuary. We have reviewed the information for internal consistency and we have no reason to doubt its substantial accuracy.

### Reconciliation of Market Value of Plan Assets

The pension fund transactions since the last valuation are summarized in the following table:

	2013
January 1	\$17,089,964
PLUS	
Members' contributions	\$131,648
Company's contributions	\$613,709
Transfer from another Pension Plan	\$7,906
Investment income and net capital gains (losses)	\$2,503,116
	\$3,256,379
LESS	
Pensions paid	\$686,185
Lump-sum refunds	\$3,369
Administration expenses	\$177,094
Investment expenses	\$112,101
	\$978,749
December 31	\$19,367,594
Gross rate of return <sup>9</sup>	14.7%
Rate of return net of investment expenses <sup>10</sup>	14.0%

The market value of assets shown in the above table is adjusted to reflect in-transit amounts as follows:

	Current Valuation	Previous Valuation
Market value of invested assets	\$19,367,594	\$17,089,964
In-transit amounts		
• Transfers	(\$19,700)	\$7,906
Market value of assets adjusted for in-transit amounts	\$19,347,894	\$17,097,870

<sup>9</sup> Assuming mid-period cash flows.

<sup>10</sup> Assuming mid-period cash flows.

We have tested the pensions paid, the lump-sums paid, and the contributions for consistency with the membership data for the Plan members who have received benefits or made contributions. The results of these tests were satisfactory.

## Investment Policy

The plan administrator has adopted a statement of investment policy and procedures. This policy is intended to provide guidelines for the manager(s) as to the level of risk that is consistent with the Plan's investment objectives. A significant component of this investment policy is the asset mix.

The plan administrator is solely responsible for selecting the plan's investment policies, asset allocations, and individual investments.

The constraints on the asset mix and the actual asset mix at the valuation date are provided for information purposes:

	Investment Policy			Actual Asset Mix as at December 31, 2013
	Minimum	Target	Maximum	
Canadian bonds	35%	40%	45%	29%
Canadian equities	20%	25%	30%	28%
Global equities	30%	35%	40%	43%
Cash and cash equivalents	0%	0%	0%	0%
		100%		100%

Because of the mismatch between the Plan's assets (which are invested in accordance with the above investment policy) and the Plan's liabilities (which tend to behave like long bonds) the Plan's financial position will fluctuate over time. These fluctuations could be significant and could cause the Plan to become underfunded or overfunded even if the Company contributes to the Plan based on the funding requirements presented in this report.

The actual asset mix at December 31, 2013 is out of balance with the investment policy due to a significant decline in the Canadian bonds market and the strong performance of Canadian and Global equities during 2013. The portfolio has been rebalanced in 2014.

## APPENDIX C

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### Methods and Assumptions – Going Concern Valuation of Assets

For this valuation, we have used the market value of assets.

#### Going Concern Funding Target

Over time, the real cost to the employer of a pension plan is the excess of benefits and expenses over member contributions and investment earnings. The actuarial cost method allocates this cost to annual time periods.

For purposes of the going concern valuation, we have continued to use the projected unit credit actuarial cost method. Under this method, we determine the present value of benefit cash flows expected to be paid in respect of service accrued prior to the valuation date, based on projected final average earnings. This is referred to as the funding target. For each individual plan member, accumulated contributions with interest are established as a minimum actuarial liability.

The funding excess or funding shortfall, as the case may be, is the difference between the market or smoothed value of assets and the funding target. A funding excess on a market value basis indicates that the current market value of assets and expected investment earnings are expected to be sufficient to meet the cash flows in respect of benefits accrued to the valuation date as well as expected expenses – assuming the plan is maintained indefinitely. A funding shortfall on a market value basis indicates the opposite – that the current market value of the assets is not expected to be sufficient to meet the plan's cash flow requirements in respect of accrued benefits, absent additional contributions.

As required under the Act, a funding shortfall must be amortized over no more than 15 years through special payments. A funding excess may, from an actuarial standpoint, be applied immediately to reduce required employer current service contributions unless precluded by the terms of the plan or by legislation.

The actuarial cost method used for the purposes of this valuation produces a reasonable matching of contributions with accruing benefits. Because benefits are recognized as they accrue, the actuarial cost method provides an effective funding target for a plan that is maintained indefinitely.

#### **Current Service Cost**

The current service cost is the present value of projected benefits to be paid under the plan with respect to service expected to accrue during the period until the next valuation.

The employer's current service cost is the total current service cost reduced by the members' required contributions.

The employer's current service cost has been expressed as a percentage of the members' pensionable earnings to provide an automatic adjustment in the event of fluctuations in membership and/or pensionable earnings.

Under the projected unit credit actuarial cost method, the current service cost for an individual member will increase each year as the member approaches retirement. However, the current service cost of the entire group, expressed as a percentage of the members' pensionable earnings, can be expected to remain stable as long as the average age of the group remains constant.

## Actuarial Assumptions – Going Concern Basis

The present value of future benefit payment cash flows is based on economic and demographic assumptions. At each valuation we determine whether, in our opinion, the actuarial assumptions are still appropriate for the purposes of the valuation, and we revise them, if necessary. Emerging experience will result in gains or losses that will be revealed and considered in future actuarial valuations.

The table below shows the various assumptions used in the current valuation in comparison with those used in the previous valuation.

Assumption	Current valuation	Previous valuation
Discount rate:	6.05%	5.75%
Explicit expenses:	\$140,000	\$100,000
Inflation:	2.00%	2.25%
ITA limit / YMPE increases:	2.50%	2.75%
Pensionable earnings increases:	3.00%	3.25%
Post-retirement pension increases:	1.50%	2.00%
Interest on employee required contributions:	1.45%	1.58%
Retirement rates:	25% at each age starting at unreduced age until age 64; remainder at age 65	60% at unreduced age, remainder at age 65
Termination rates:	None	None
Mortality rates:	100% of the rates of the 2014 Private Sector Canadian Pensioners Mortality Table (CPM2014Priv)	100% of the rates of the 1994 Uninsured Pensioner Mortality Table
Mortality improvements:	Fully generational using CPM Improvement Scale B (CPM-B)	Fully generational using Scale AA
Disability rates:	None	None
Eligible spouse at retirement:	80%	80%
Spousal age difference:	Male 3 years older	Male 3 years older

The assumptions are best-estimate with the exception that the discount rate includes a margin for adverse deviations, as shown in Rationale for Assumptions.

## ***Pensionable Earnings***

The benefits ultimately paid will depend on each member's final average earnings. To calculate the pension benefits payable upon retirement, death, or termination of employment, we have taken 2013 earnings and assumed that such pensionable earnings will increase at the assumed rate.

## ***Stochastic model of inflation***

The post-retirement pension increases assumption is based on the Plan partial indexation formula and a stochastic model of inflation.

The stochastic model of inflation is based on an assumption of median inflation of 2% per year (consistent with the Bank of Canada's target) and a distribution of annual inflation which is consistent with the last 30 years of history.

A model based on the last 30 years of history strikes a reasonable balance between the relatively stable inflation experience of the past 20 years (during which the Bank of Canada actively managed inflation) and a somewhat longer period exhibiting greater variation. This approach recognizes that future inflation will continue to be actively managed by the Bank of Canada but that it can also be impacted by external economic factors (such as US Monetary policies) beyond local control. Consequently, future annual inflation may be outside the 1%-3% range currently targeted by the Bank of Canada.

The assumed distribution of inflation was determined based on historical 12-month periods over the past 30 years. The distribution differs from a log-normal distribution in that it is more skewed to the right and has fatter tails. Although calendar year experience over the past 30 years did not exhibit deflation, some 12-month periods did, and the modeled distribution does provide for a small probability of deflation.

The model also displays relatively high serial correlation i.e. years of high inflation tend to be followed by years with similarly high inflation, and the same with low inflation.

The model produces 1,000 scenarios over a 20 years period. The modeled scenarios have the following characteristics:

	<b>Current valuation</b>
Annualized inflation over 20 years:	Median: 2.0% Minimum: 0.3% Maximum: 4.8% 80% of scenarios between 1.3% and 2.9%
Volatility of inflation:	Annual standard deviation of 1.5% over a single year in the long-term (lower in the short-term due to serial correlation) Average, calculated over the 1,000 scenarios, of standard deviation over 20 years: 1.3%

## Rationale for Assumptions

A rationale for each of the assumptions used in the current valuation is provided below.

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### Discount Rate

We have discounted the expected benefit payment cash flows using the expected investment return on the market value of the fund. Other bases for discounting the expected benefit payment cash flows may be appropriate, particularly for purposes other than those specifically identified in this valuation report.

The discount rate is comprised of the following:

- Estimated returns for each major asset class consistent with market conditions on the valuation date and the target asset mix specified in the Plan's investment policy
- Additional returns assumed to be achievable due to active equity management, equal to the fees related to active equity management. Such fees were determined by the difference between the provision for total investment expenses and the hypothetical fees that would be incurred for passive management of all assets.
- Implicit provision for investment expenses is based on each manager's fee level and target asset mix specified in the Plan's investment policy
- A margin for adverse deviations of 0.44%

The discount rate was developed as follows:

Assumed investment return	6.64%
Additional returns for active management	0.40%
Investment expense provision	(0.55%)
Margin for adverse deviation	(0.44%)
Net discount rate	6.05%

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### Expenses

The assumption is based on the average amount of non-investment expenses over the last 3 years.

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### Inflation

The inflation assumption is based on market expectations of long-term inflation implied by the yields on nominal and real return bonds at the valuation date.

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### Income Tax Act Pension Limit and Year's Maximum Pensionable Earnings

The assumption is based on historical real economic growth and the underlying inflation assumption.

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### Pensionable Earnings

The assumption is based on general wage growth assumptions increased by our best estimate of future merit and promotional increases over general wage growth considering current economic, financial market conditions and company expectations.

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### Post-Retirement Pension Increases

The assumption is based on the Plan formula and stochastic model of inflation.

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**Interest on Employee Required Contributions**

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The assumption is based on Plan terms and is equal to the average of the yields of 5-year personal fixed term chartered bank deposits (CANSIM series V122515) in the year prior to the valuation date.

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**Retirement Rates**

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Due to the size of the Plan, there is no meaningful retirement experience.

The assumption is based on the actual retirement experience observed during the years 2003 to 2012 for all Canadian defined benefit plans sponsored by Brookfield Renewable. We have combined the experience of the defined benefit plans to increase the results' credibility.

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**Termination Rates**

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Use of a different assumption would not have a material impact on the valuation.

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**Mortality Rates**

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The assumption for the mortality rates is based on the Canadian Pensioners' Mortality (CPM) study published by the Canadian Institute of Actuaries in February 2014.

Due to the size of the Plan, specific data on plan mortality experience is insufficient to determine the mortality rates. After considering plan-specific characteristics, such as the type of employment, the industry experience, pension and employment income for the plan members, and data in the CPM study, it was determined to use the CPM mortality rates without adjustment.

There is broad consensus among actuaries and other longevity experts that mortality improvement will continue in the future, but the degree of future mortality improvement is uncertain. The mortality improvement scale published in the CPM study represents one reasonable outlook for future improvement. We have used the Private sector CPM mortality improvement scale without adjustment.

Based on the assumption used, the life expectancy of a member age 65 at the valuation date is 21.4 years for males and 23.9 years for females.

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**Disability Rates**

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Use of a different assumption would not have a material impact on the valuation.

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**Eligible Spouse**

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The assumption is based on an industry standard for non-retired members (actual status used for retirees).

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**Spousal Age Difference**

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The assumption is based on an industry standard showing males are typically 3 years older than their spouse.

## APPENDIX D

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### Methods and Assumptions – Hypothetical Wind-up and Solvency

#### Hypothetical Wind-up Basis

The Canadian Institute of Actuaries requires actuaries to report the financial position of a pension plan on the assumption that the plan is wound up on the effective date of the valuation, with benefits determined on the assumption that the pension plan has neither a surplus nor a deficit. For the purposes of the hypothetical wind-up valuation, the plan wind-up is assumed to occur in circumstances that maximize the actuarial liability.

To determine the actuarial liability on the hypothetical wind-up basis, we have valued those benefits that would have been paid had the Plan been wound up on the valuation date, with all members fully vested in their accrued benefits.

No benefits payable on plan wind-up under the above postulated scenario were excluded from our calculations.

Upon plan wind-up, members are given options for the method of settling their benefit entitlements. The options vary by eligibility and by province of employment, but in general, involve either a lump sum transfer or an immediate or deferred pension.

The value of benefits assumed to be settled through a lump sum transfer is based on the assumptions described in Section 3500 – *Pension Commuted Values* of the Canadian Institute of Actuaries' Standards of Practice applicable for December 31, 2013.

Benefits provided as an immediate or deferred pension are assumed to be settled through the purchase of annuities based on an estimate of the cost of purchasing annuities. We have estimated the cost of settlement through purchase of annuities in accordance with the *Canadian Institute of Actuaries Educational Note: Assumptions for Hypothetical Wind-up and Solvency Valuations with Effective Dates Between December 31, 2013 and March 30, 2014*.

However, there is limited data available to provide credible guidance on the cost of a purchase of indexed annuities in Canada. The post-retirement interest rate was determined based on the Plan's indexation formula and a stochastic model of inflation. The stochastic model of inflation is based on an assumption of median inflation of 1.88% per year (difference between the yield on Government of Canada marketable bonds with maturities over 10 years (CANSIM series V39062) and the yield on real-return bonds (CANSIM series V39057)) and a distribution of annual inflation which is consistent with the last 30 years of history.

A model based on the last 30 years of history strikes a reasonable balance between the relatively stable inflation experience of the past 20 years (during which the Bank of Canada actively managed inflation) and a somewhat longer period exhibiting greater variation. This approach recognizes that future inflation will continue to be actively managed by the Bank of Canada but that it can also be impacted by external economic factors (such as US Monetary



policies) beyond local control. Consequently, future annual inflation may be outside the 1%-3% range currently targeted by the Bank of Canada.

The assumed distribution of inflation was determined based on historical 12-month periods over the past 30 years. The distribution differs from a log-normal distribution in that it is more skewed to the right and has fatter tails. Although calendar year experience over the past 30 years did not exhibit deflation, some 12-month periods did, and the modeled distribution does provide for a small probability of deflation.

The model also displays relatively high serial correlation i.e. years of high inflation tend to be followed by years with similarly high inflation, and the same with low inflation.

The model produces 1,000 scenarios over a 20-year period. The modeled scenarios have the following characteristics:

	Current valuation
Annualized inflation over 20 years:	Median: 1.9% Minimum: 0.2% Maximum: 4.7% 80% of scenarios between 1.2% and 2.8%
Volatility of inflation:	Annual standard deviation of 1.5% over a single year in the long-term (lower in the short-term due to serial correlation) Average, calculated over the 1,000 scenarios, of standard deviation over 20 years: 1.3%

We have not included a margin for adverse deviation in the solvency and hypothetical wind-up valuations.

The assumptions are as follows:

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**Form of Benefit Settlement Elected by Member**

Lump sum	70% of active and deferred members under age 55, and 50% of active and deferred members over age 55, elect to receive their benefit entitlement in a lump sum
Annuity purchase	All remaining members are assumed to elect to receive their benefit entitlement in the form of a deferred or immediate pension. These benefits are assumed to be settled through the purchase of deferred or immediate annuities from a life insurance company.

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**Basis for Benefits Assumed to be Settled through a Lump Sum**

Mortality rates:	UP94 generational with projection scale AA
Interest rate:	3.00% per year for 10 years, 4.60% per year thereafter
Post retirement indexation:	1.26% per year for 10 years, 2.00% per year thereafter

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**Basis for Benefits Assumed to be Settled through the Purchase of an Annuity**

Mortality rates:	UP94 generational with projection scale AA
Interest rate:	3.13% per year before retirement date and 1.51% per year after retirement date (net of post-retirement indexation)

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**Retirement Age**

Maximum value:	Members are assumed to retire at the age which maximizes the value of their entitlement from the Plan, based on the eligibility requirements which have been met at the valuation date
Grow-in:	The benefit entitlement and assumed retirement age of Ontario members whose age plus service equals at least 55 at the valuation date reflect their entitlement to grow into early retirement subsidies

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**Other Assumptions**

Special payments	Discounted at the average interest rate of 3.10% per year
Family composition:	Same as for going concern valuation
Maximum pension limit:	\$2,770.00 for each year of service
Termination expenses:	\$60,000

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To determine the hypothetical wind-up position of the Plan, a provision has been made for estimated termination expenses payable from the Plan's assets in respect of actuarial and administration expenses that may reasonably be expected to be incurred in terminating the Plan and to be charged to the Plan.

Because the settlement of all benefits on wind-up is assumed to occur on the valuation date and is assumed to be uncontested, the provision for termination expenses does not include custodial, investment management, auditing, consulting, and legal expenses that would be incurred between the wind-up date and the settlement date or due to the terms of a wind-up being contested.

Expenses associated with the distribution of any surplus assets that might arise on an actual wind-up are also not included in the estimated termination expense provisions.

In determining the provision for termination expenses payable from the Plan's assets, we have assumed that the plan sponsor would be solvent on the wind-up date. We have also assumed, without analysis, that the Plan's terms as well as applicable legislation and court decisions would permit the relevant expenses to be paid from the Plan.

Actual fees incurred on an actual plan wind-up may differ materially from the estimates disclosed in this report.

## Incremental Cost

In order to determine the incremental cost, we estimate the hypothetical wind-up liabilities at the next valuation date. We have assumed that the cost of settling benefits by way of a lump sum or purchasing annuities remains consistent with the assumptions described above. Since the projected hypothetical wind-up liabilities will depend on the membership in the Plan at the next valuation date, we must make assumptions about how the Plan membership will evolve over the period until the next valuation.

We have assumed that the Plan membership will evolve in a manner consistent with the going concern assumptions as follows:

- Members terminate, retire, and die consistent with the termination, retirement, and mortality rates used for the going concern valuation.
- Pensionable earnings, the *Income Tax Act* pension limit, and the Year's Maximum Pensionable Earnings increase in accordance with the related going concern assumptions.
- Active members accrue pensionable service in accordance with the terms of the Plan.
- To accommodate for new entrants to the Plan, we have added to the projected liability an amount equal to the average annual liability of new entrants that have joined the Plan in the last 3 years. The demographics and earnings of the assumed new entrants are consistent with the new entrants hired over the past three years.

## Solvency Basis

In determining the financial position of the Plan on the solvency basis, we have used the same assumptions and methodology as were used for determining the financial position of the Plan on the hypothetical wind-up basis.

The solvency position is determined in accordance with the requirement of the Act.

## APPENDIX E

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### Membership Data

#### Analysis of Membership Data

The actuarial valuation is based on membership data as at December 31, 2013, provided by the Company.

We have applied tests for internal consistency, as well as for consistency with the data used for the previous valuation. These tests were applied to membership reconciliation, basic information (date of birth, date of hire, date of membership, gender, etc.), pensionable earnings, credited service, contributions accumulated with interest, and pensions to retirees and other members entitled to a deferred pension. Contributions, lump sum payments, and pensions to retirees were compared with corresponding amounts reported in financial statements. The results of these tests were satisfactory.

If the data supplied are not sufficient and reliable for its intended purpose, the results of our calculation may differ significantly from the results that would be obtained with such data. Although Mercer has reviewed the suitability of the data for its intended use in accordance with accepted actuarial practice in Canada, Mercer has not verified or audited any of the data or information provided.

Plan membership data are summarized below. For comparison, we have also summarized corresponding data from the previous valuation.

### Membership Data

	31.12.2013	31.12.2012
<b>Active Members</b>		
Number	25	29
Total pensionable earnings for the following year	\$2,021,692	\$2,393,179
Average pensionable earnings for the following year	\$80,868	\$82,523
Average years of pensionable service	15.3 years	14.6 years
Average age	47.8 years	46.8 years
Accumulated contributions with interest	\$1,615,387	\$1,853,300
<b>Suspended Member</b>		
Number	1	1
Average years of pensionable service	0.75 year	0.75 year
Average age	38.1 years	37.1 years
<b>Deferred Pensioners</b>		
Number	2	0
Total annual pension	\$36,480	n/a
Average annual pension	\$18,240	n/a
Average age	48.1 years	n/a
<b>Pensioners and Survivors</b>		
Number	23	22
Total annual lifetime pension	\$729,480	\$632,746
Total annual temporary pension for the following year	\$56,948	\$61,279
Average annual lifetime pension	\$31,717	\$28,761
Average age	70.4 years	69.9 years

The membership movement for all categories of membership since the previous actuarial valuation is as follows:

**Reconciliation of membership**

	Actives and Disabled Members	Suspended Members	Deferred Vested	Pensioners and Beneficiaries	Total
<b>Total at 31.12.2012</b>	<b>29</b>	<b>1</b>	<b>0</b>	<b>22</b>	<b>52</b>
New entrants	-	-	-	-	-
Terminations:					
• Not vested	-	-	-	-	-
• Transfers/lump sums	(1)	-	-	-	(1)
• Deferred pensions	(2)	-	2	-	-
Deaths	-	-	-	-	-
Retirements	(1)	-	-	1	-
Beneficiaries	-	-	-	-	-
<b>Total at 31.12.2013</b>	<b>25</b>	<b>1</b>	<b>2</b>	<b>23</b>	<b>51</b>

The distribution of the active members by age and pensionable service as at December 31, 2013 is summarized as follows:

**Distribution of Active members by Age Group and Pensionable Service as at 31.12.2013**

Age	Years of Pensionable Service								Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	
Under 25									0
25 - 29	1								1
30 - 34									0
35 - 39	2		2						4
40 - 44		1	3						4
45 - 49		1	1			2			4
50 - 54		1	3			1	4		9
55 - 59	1								1
60 - 64							1		1
65+			1						1
Total	4	3	10	0	0	3	5	0	25

The distribution of the inactive members by age as at the December 31, 2013 is summarized as follows:

**Distribution of Inactive Members by Age Group as at 31.12.2013**

Deferred Pensioners			Pensioners and Survivors	
Age	Number	Average Monthly Pension	Number	Average Monthly Pension
40 – 44	1	**		
45 – 49				
50 – 54	1	**		
55 – 59				
60 – 64			8	\$3,529
65 – 69			5	\$2,598
70 – 74			3	\$2,655
75 – 79			4	\$2,026
80 – 84			1	**
85 – 89				
90 – 94			2	**
95 – 99				
Total	2	\$1,520	23	\$2,643

\*\* Cell suppressed for confidentiality



## APPENDIX F

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### Summary of Plan Provisions

Mercer has used and relied on the plan documents, including amendments and interpretations of plan provisions, supplied by the Company. If any plan provisions supplied are not accurate and complete, the results of any calculation may differ significantly from the results that would be obtained with accurate and complete information. Moreover, plan documents may be susceptible to different interpretations, each of which could be reasonable, and the results of estimates under each of the different interpretations could vary.

This valuation is based on the plan provisions in effect on December 31, 2013. The Plan will be amended effective July 1, 2012 to reflect the amendment made to the *Pension Benefits Act (Ontario)* and Regulations to the Act. The upcoming changes do not materially impact the cost of the Plan. The cost of these legislated minimum benefit improvements is reflected in the valuations.

The following is a summary of the main provisions of the Plan in effect on December 31, 2013 (including the pending amendment that will be effective July 1, 2012). This summary is not intended as a complete description of the Plan.

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**Background**

The Retirement Plan of Great Lakes Power Limited (the "Plan") was preceded by the Retirement Annuity Plan (the "Previous Plan"), which was established on January 1, 1940, and was underwritten by Canada Life Assurance Company Group Annuity Policy P.747. Effective January 1, 1966, the Previous Plan was replaced by the Amended Retirement Annuity Plan. Contributions to the Previous Plan were discontinued and Policy P.747 was placed on a paid-up basis. Effective April 1, 1987, Policy P.747 assets and liabilities were rolled into the Plan. A separate plan was established for designated executives on January 1, 1980, and the assets and liabilities under the Amended Retirement Annuity Plan for executives who became covered under the Retirement Plan for Designated Executives of Great Lakes Power Limited were transferred to this newly established plan. With effect from January, 1981, the name of the Amended Retirement Annuity Plan was changed to the Retirement Plan of Great Lakes Power Limited.

The Plan was restated effective January 1, 1988, to comply with the revised *Pension Benefits Act (Ontario)* and incorporate all amendments up to January 1, 1993. The Plan was then amended and restated effective January 1, 1992 to incorporate all of the revisions necessary to comply with the *Income Tax Act*. Effective January 1, 1997, the Company started a Defined Contribution Plan for all employees, who are not members of the union. All non-union members were given the option of continuing in this Plan or transferring to the defined contribution plan. The Plan has been amended further from time to time since January 1, 1992.

Effective July 1, 2009 employees of the "Distribution" and "Transmission" businesses of Great Lakes Power Limited (the "Company") were transferred to separate companies affiliated with the Company, Great Lakes Power Distribution Inc. ("GLPD") and Great Lakes Power Transmission LP ("GLPT"). These employees were members of the Plan prior to July 1, 2009. New pension plans were established for the current and future employees of GLPD and GLPT. In January 2011, the Financial Services Commission of Ontario has approved the transfer of assets and liabilities from the Plan to the new pension plans with respect to the transferred employees' benefits accrued prior to July 1, 2009 in the Plan as well as benefits in the Plan for inactive members formerly employed by the "Distribution" and "Transmission" businesses of the Company. The transfer of assets occurred in May 2011.

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**Eligibility for Membership**

All full-time employees who are members of the union, and who are hired on or after January 1, 1997, become members of the Plan following completion of three months of Continuous Service. Prior to 1997, all full-time employees, including those who were not members of the union, were eligible to become members of the Plan.

Each employee, who is a member of the union and is employed on a less than full-time basis, may join the Plan following completion of 24 months of Continuous Service provided that the employee has:

- earned at least 35% of the YMPE; or
- worked 700 or more hours

in each of the two immediately preceding consecutive calendar years.

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<b>Employee Contributions</b>	<p>5% of Gross Earnings up to YMPE, 7% of Gross Earnings in excess of YMPE.</p> <p>Gross earnings are defined as total remuneration excluding overtime, for determining both benefits and employee contributions.</p> <p>Members may make additional voluntary contributions to the maximum permitted under the <i>Income Tax Act</i>.</p>
<b>Retirement Dates</b>	<p>Normal Retirement Date</p> <ul style="list-style-type: none"> <li>The normal retirement date is the first day of the month coincident with or next following the member's 65th birthday.</li> </ul> <p>Early Retirement Date</p> <ul style="list-style-type: none"> <li>Members who have attained age 55 and 24 months of continuous membership may retire early on a reduced pension. The reduction is <math>\frac{1}{4}</math> of 1% for each month prior to age 65. Members who have attained age 55 and for whom the sum of age plus continuous years of service amount to not less than 85, may retire early with an unreduced pension.</li> </ul> <p>All members who retire early will also receive a temporary pension (payable for life but in no event past age 65) of 0.7% of the member's average annual gross earnings used in the calculation of the lifetime pension up to the average YMPE for the five calendar years immediately preceding the calendar year of retirement times years of credited service since January 1, 1966 (maximum 35 years).</p> <p>Postponed Retirement</p> <ul style="list-style-type: none"> <li>An active member may postpone retirement beyond the normal retirement date, but not beyond the end of the calendar year in which they attain age 71. Under these circumstances, members are entitled to continue membership in the plan and have the right to continue to accrue pension benefits. The pension benefit accrued up to Normal Retirement Date shall be actuarially increased to reflect such postponement.</li> </ul>
<b>Normal Retirement Pension</b>	<p>Each member retiring at his Normal Retirement Date will be entitled to receive an annual pension benefit, payable monthly equal to:</p> <ul style="list-style-type: none"> <li>2.0% of the member's average annual gross earnings for the five consecutive calendar years, during the 10 calendar years preceding Normal Retirement Date that produce the highest such average, times the number of years of Credited Service (subject to a maximum of 40 years);</li> </ul> <p><b>Less</b></p> <ul style="list-style-type: none"> <li>0.7% of such earnings not in excess of the average YMPE for the five calendar years, immediately preceding the calendar year of the Normal Retirement Date, times the number of years of Credited Service since January 1, 1966, (maximum 35 years).</li> </ul> <p>Credited Service is equal to Continuous Service from date of employment with the Company for members who joined the plan when first eligible prior to January 1, 1991. For other members, Credited Service is equal to Continuous Service from the date of plan entry.</p> <p>The above pension formula applies for members retiring after January 1, 2004. A previous formula applied for members retiring before such date.</p> <p>In no event, however, will the member's benefit exceed the applicable maximum pension limits as prescribed by the <i>Income Tax Act</i>.</p>

<b>Maximum Pension</b>	<p>The maximum pension provisions are as follows:</p> <p>Pre-1992 Service Maximum Pension</p> <ul style="list-style-type: none"> <li>The member's pension shall not exceed the member's years of pensionable service, prior to January 1, 1992, to a maximum of 35 years multiplied by the lesser of: <ul style="list-style-type: none"> <li>(i) \$1,715; and</li> <li>(ii) 2.0% of the average of the member's best three consecutive years' remuneration from the Company.</li> </ul> </li> </ul> <p>Post-1991 Service Maximum Pension</p> <ul style="list-style-type: none"> <li>The member's pension shall not exceed the member's years of pensionable service, on or after January 1, 1992, multiplied by the lesser of: <ul style="list-style-type: none"> <li>(i) \$2,770.00 or such greater amount permitted under the <i>Income Tax Act</i>; and</li> <li>(ii) 2.0% of the member's highest average indexed compensation, as defined in the <i>Income Tax Act</i>.</li> </ul> </li> </ul>
<b>Post Retirement Adjustments</b>	<p>Each member who retires from active service on or after January 1, 1995 will have their pension adjusted annually. The annual adjustment will be granted in January of each year, based on the increase in the Consumer Price Index (CPI) for the 12 months ending the previous September 30th. For example, the adjustment effective January 2000, will be based on the increase in the CPI for the period September 30, 1998 to September 30, 1999.</p> <p>If the CPI increase is less than 2.0%, then the annual adjustment is equal to 100% of the CPI increase. Otherwise the annual adjustment is equal to 50% of the CPI increase, with a minimum adjustment of 2.0% and a maximum adjustment of 5.0%.</p> <p>Members who have retired less than 12 months prior to the January adjustment will receive a pro-rata share of the increase based on the number of months since commencement.</p> <p>As of September 1, 2009, the Plan is amended to grant an ad-hoc increase in certain retired members' pensions.</p>
<b>Disability Benefits</b>	<p>A member who suffers total and permanent disability will receive, commencing at his normal retirement date, an immediate pension calculated as for normal retirement, except that:</p> <ul style="list-style-type: none"> <li>(a) the service of the member with the Company will include the period during which the member is totally and permanently disabled; and</li> <li>(b) it will be assumed that the member continued to contribute to the plan and to receive remuneration from the Company at the rate of his required contribution and of his earnings at the time of disability.</li> </ul>
<b>Death Before Retirement</b>	<p><b>For Service Prior to January 1, 1987</b></p> <p>In event of death before retirement but on or after July 1, 2012, the surviving spouse if any, otherwise the designated beneficiary, will receive a lump sum refund of the member's contributions, if any, with interest.</p> <p><b>For Service on and After January 1, 1987</b></p> <p>In the event of death before retirement but on or after July 1, 2012, the surviving spouse if any, otherwise the designated beneficiary, will receive the commuted value of the deferred pension plus a refund of excess contributions, if any. The surviving spouse may elect to receive the death benefit in the form of an annuity instead of receiving a lump sum.</p> <p>Excess contributions are employee contributions, if any, plus interest, in excess of those required to fund 50% of the commuted value of the deferred pension.</p>

<b>Death After Retirement</b>	<p>Upon death of the member after retirement, the member's spouse, if then surviving, will receive an annuity for life equal to 50% of the pension that the member had been receiving. Under the <i>Pension Benefits Act (Ontario)</i>, married members must receive a joint and survivor pension that pays at least 60% of the amount of pension that the member had been receiving, unless both the member and spouse waive this option. The amount of pension would be actuarially equivalent to the normal form of pension. In the case of a member without a spouse at retirement, the normal form of pension guarantees a minimum return equal to the member's contributions with interest to date of retirement. The member may also elect an optional form of pension prior to retirement.</p>
<b>Termination Benefits</b>	<p><b>For Service Prior to January 1, 1987</b></p> <p>A member whose employment terminates on or after July 1, 2012 is entitled to a deferred pension commencing at his Normal Retirement Date, calculated on the same basis as the retirement but based on earnings and service completed to the date of termination.</p> <p><b>For Service On and After January 1, 1987</b></p> <p>A member whose employment terminates on or after July 1, 2012 is entitled to a deferred pension commencing at his Normal Retirement Date, calculated on the same basis as the retirement benefit but based on earnings and service completed to the date of termination.</p> <p>In addition, a member is also entitled to a refund of excess contributions, if any. Notwithstanding the above, a member may, in lieu of this deferred pension, elect to transfer the commuted value of the deferred pension.</p>
<b>Transferred Members</b>	<p>Each member who elected to transfer out of the Plan into the Defined Contribution Plan as of January 1, 1997, and chose to maintain their defined benefits for past service, will have their benefits calculated based on average earnings and the average YMPE for all service, including service from January 1, 1997 to the date of termination.</p>

## APPENDIX G

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### Employer Certification

With respect to the Report on the Actuarial Valuation for Funding Purposes as at December 31, 2013 of the Retirement Plan of Great Lakes Power Transmission LP (the "Plan"), I hereby certify that, to the best of my knowledge and belief:

- The valuation reflects the terms of the Great Lakes Power Transmission LP (the "Company") engagement with the actuary described in section 2 of this report, particularly the requirement to include a margin of 0.44% in the discount rate used to perform the going concern valuation and the Company's decisions in regards to determining the going-concern and solvency funding requirements.
- A copy of the official plan documents and of all amendments made up to December 31, 2013 was provided to the actuary and is reflected appropriately in the summary of plan provisions contained herein.
- The asset information summarized in Appendix B is reflective of the Plan's assets.
- The membership data provided to the actuary included a complete and accurate description of every person who is entitled to benefits under the terms of the Plan for service up to December 31, 2013.
- All events subsequent to December 31, 2013 that may have an impact on the Plan have been communicated to the actuary.

September 23, 2014  
Date

Scott Seabrook  
Signed

Scott Seabrook  
Name



Mercer (Canada) Limited  
161 Bay Street, P.O. Box 501  
Toronto, Ontario M5J 2S5  
+1 416 868 2000

*Financial Statements of*

**THE FUND OF THE RETIREMENT PLAN  
OF GREAT LAKES POWER TRANSMISSION LP**

*December 31, 2012*



**THE FUND OF THE RETIREMENT PLAN  
OF GREAT LAKES POWER TRANSMISSION LP**

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December 31, 2012

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## Independent Auditor's Report

To the Administrator of  
The Fund of the Retirement Plan of Great Lakes Power Transmission LP

We have audited the accompanying fund financial statements of the Fund of the Retirement Plan of Great Lakes Power Transmission LP (the "Fund"), which comprise the statement of net assets available for benefits as at December 31, 2012, and the statement of changes in net assets available for benefits for the year then ended, and a summary of significant accounting policies and other explanatory information. The fund financial statements have been prepared by the Administrator based on the financial reporting provisions of Regulation 909, Section 76 of the Pension Benefits Act (Ontario).

### The Administrator's Responsibility for the Fund Financial Statements

The Administrator is responsible for the preparation and fair presentation of these fund financial statements in accordance with the financial reporting provisions of Regulation 909, Section 76 of the Pension Benefits Act (Ontario), and for such internal control as the Administrator determines is necessary to enable the preparation of fund financial statements that are free from material misstatement, whether due to fraud or error.

### Auditor's Responsibility

Our responsibility is to express an opinion on these fund financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the fund financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the fund financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the fund financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the fund financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Administrator, as well as evaluating the overall presentation of the fund financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

**Opinion**

In our opinion, the fund financial statements present fairly, in all material respects, the net assets available for benefits of the Fund as at December 31, 2012 and the changes in net assets available for benefits for the year then ended in accordance with the financial reporting provisions of Regulation 909, Section 76 of the Pension Benefits Act (Ontario).

**Basis of Accounting and Restriction on Use**

Without modifying our opinion, we draw attention to Note 2 to the fund financial statements, which describes the basis of accounting. The financial statements are prepared to assist the Administrator of the Fund to meet the requirements of the Financial Services Commission of Ontario. As a result, the fund financial statements may not be suitable for another purpose. Our report is intended solely for the Administrator of the Fund and the Financial Services Commission of Ontario and should not be used by parties other than the Administrator of the Fund or the Financial Services Commission of Ontario.

The image shows a handwritten signature in black ink that reads "Deloitte LLP". The signature is written in a cursive, flowing style.

Chartered Professional Accountants, Chartered Accountants  
Licensed Public Accountants  
June 11, 2013

# **THE FUND OF THE RETIREMENT PLAN OF GREAT LAKES POWER TRANSMISSION LP**

## **Statement of Net Assets Available for Benefits**

December 31, 2012

Canadian dollars	Notes	2012	2011
<b>Assets</b>			
Cash on hand		\$ 810,963	\$ 57,448
Investments	6	16,305,513	13,631,616
Contributions receivable			
Members		11,769	13,104
Employer - current service		17,933	21,990
		<b>\$ 17,146,178</b>	<b>13,724,158</b>
<b>Liabilities</b>			
Audit fees payable		\$ 16,050	20,000
Other fees payable		40,164	15,000
		<b>56,214</b>	<b>35,000</b>
<b>Net assets available for benefits</b>		<b>\$ 17,089,964</b>	<b>\$ 13,689,158</b>

*See accompanying notes to the financial statements*

APPROVED BY THE ADMINISTRATOR



**THE FUND OF THE RETIREMENT PLAN  
OF GREAT LAKES POWER TRANSMISSION LP**  
Statement of Changes in Net Assets Available for Benefits  
Year ended December 31, 2012

Canadian dollars	Notes	2012	2011
<b>Net assets available for benefits, beginning of year</b>		<b>\$ 13,689,158</b>	<b>\$ 444,238</b>
<b>Increase in net assets available for benefits</b>			
Contributions			
Members	3	132,848	125,731
Employer	3	890,303	1,487,472
Increase due to investments			
Investment income	7	816,017	393,544
Realized loss on investments		(267,248)	(16,880)
Unrealized gain (loss) on investments		853,612	(581,275)
Total increase (decrease) due to investments		1,402,381	(204,611)
Transfers from other pension plan	10	1,903,902	12,448,687
<b>Total increase in net assets available for benefits</b>		<b>4,329,434</b>	<b>13,857,279</b>
<b>Decrease in net assets available for benefits</b>			
Administrative expenses	5	234,193	138,043
Benefit payments	4	694,435	463,385
Transfers to other pension plan		-	10,931
<b>Total decrease in net assets available for benefits</b>		<b>928,628</b>	<b>612,359</b>
<b>Net increase in net assets available for benefits, for the year</b>		<b>3,400,806</b>	<b>13,244,920</b>
<b>Net assets available for benefits, end of year</b>		<b>\$ 17,089,964</b>	<b>\$ 13,689,158</b>

*See accompanying notes to the financial statements*

# THE FUND OF THE RETIREMENT PLAN OF GREAT LAKES POWER TRANSMISSION LP

## Notes to the Financial Statements

December 31, 2012

### 1. DESCRIPTION OF THE PLAN

#### *a) General*

The following description of the terms of the Fund of the Retirement Plan of Great Lakes Power Transmission LP (the "Plan") is in summary form only. For more complete information, reference should be made to the Plan Agreement.

The Plan is a contributory defined benefit pension plan covering eligible employees of Great Lakes Power Transmission Limited Partnership ("the Partnership" or "GLPT"). The Plan is registered under the Pension Benefits Act (Ontario), registration number 1212844.

Effective July 1, 2009, employees of the "Transmission" division of Great Lakes Power Limited ("GLPL"), a related party through common ownership, were transferred to a separate Partnership affiliated with GLPL, GLPT. These employees were members of the Retirement Plan of GLPL prior to July 1, 2009. The new plan was established for current employees transferred to the Partnership and for future eligible employees of the Partnership.

An application was submitted to the Financial Services Commission of Ontario ("FSCO") for the transfer of assets and liabilities from the GLPL Plan with respect to the transferred employees' benefits accrued prior to July 1, 2009 in the GLPL Plan as well as benefits in the GLPL Plan for inactive members formerly employed by the "transmission" division of GLPL. The application was approved and the funds of \$12,448,687 were transferred as of March 31, 2011.

#### *b) Funding policy*

The Pension Benefits Act (Ontario) requires that GLPT, being the Plan Sponsor and Administrator, fund the benefits determined under the Plan. The determination of the value of these benefits is made on the basis of a triennial actuarial valuation.

#### *c) Service pensions*

The normal retirement age is 65 years for Plan members. The normal retirement pension is calculated on the basis of average annual gross earnings, length of service and average yearly maximum pensionable earnings. In addition to the normal retirement benefit for members who meet the Plan requirements, benefit coverage for early retirement, postponed retirement, disability, termination, death and survivors is available. Complete information may be found in the Plan Agreement.

#### *d) Disability pensions*

Disability pensions are paid to employees of any age who have met specific requirements regarding minimum years of credited service, and who have to leave their employment due to total and permanent disability.

#### *e) Survivors' pensions*

A survivor's pension is paid to the spouse of a retired member who, at the time of death, has met specific requirements regarding minimum years of credited service.

# THE FUND OF THE RETIREMENT PLAN OF GREAT LAKES POWER TRANSMISSION LP

## Notes to the Financial Statements

December 31, 2012

### 1. DESCRIPTION OF THE PLAN (Continued)

#### *a) Death refunds*

A death refund is payable to the estate of a pensioner or survivor for a death prior to the normal retirement date, who at the time of death, has met specific requirements regarding minimum years of credited service.

#### *b) Withdrawal refunds*

Upon application and subject to specific requirements, withdrawal refunds, with interest on the contributions, are payable to a member who ceases to be employed by the Partnership, either through a lump sum or a deferred pension commencing at the normal retirement date.

### 2. SIGNIFICANT ACCOUNTING POLICIES

#### *a) Basis of presentation*

The financial statements have been prepared in accordance with the significant accounting policies set out below to comply with the accounting requirements prescribed by FSCO for financial statements under Regulation 909, Section 76 of the Pension Benefits Act (Ontario). The basis of accounting used in these fund financial statements materially differs from Canadian generally accepted accounting principles because it excludes the actuarial liabilities of the Plan. Consequently, these fund financial statements do not purport to show the adequacy of the Plan's assets to meet the pension obligations of the defined benefit pension plan.

The Plan adopted Part IV (Section 4600) – Accounting Standards for Pension Plans, of the Canadian Institute of Chartered Accountants ("CICA") Handbook, effective January 1, 2011. Accounting Standards for Private Entities ("ASPE") as set out in Part II of the CICA Handbook have been chosen for accounting policies that do not relate to the Plan's investment portfolio, to the extent that those standards do not conflict with the requirements of Section 4600.

All amounts are reported in Canadian dollars, except as otherwise noted.

#### *b) Valuation of investments*

Investments are recorded as of the trade date and are stated at fair value. In determining fair values, quoted market prices are used where available and, where not available, an estimate of the amount which could be realized through a transaction between knowledgeable and willing third parties under no compulsion to act is used. The calculation of fair value is based on market conditions at a specific point in time and may not be reflective of future fair values. The following methods and assumptions were used to determine the fair values of the Plan's investments. Costs are disclosed as supplemental information.

Investments in bonds and equities (including investments in pooled funds) are stated at fair value, which is estimated on the basis of the results of a valuation technique that makes maximum use of listed market values based on closing bid prices, and relies as little as possible on entity-specific inputs.

Cash and short-term notes are stated at cost which approximates fair value.

## THE FUND OF THE RETIREMENT PLAN OF GREAT LAKES POWER TRANSMISSION LP

### Notes to the Financial Statements

December 31, 2012

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#### 2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

##### *c) Interest on investments and changes in fair values of investments*

Interest from investments in pooled pension funds, the only source of investment income in the Plan, is recorded separately from the change in fair value of such investments as investment income in the Statement of Changes in Net Assets Available for Benefits. Interest from pooled funds is recorded on an accrual basis.

The change in fair values of investments includes both the realized gains and losses on the sale of investments during the year and the unrealized gains and losses on investments at the end of the year. The realized and unrealized gains and losses are determined using the average cost basis.

##### *d) Transaction costs*

All transaction costs in respect of purchases and sales of investments are recorded as part of administration expenses in the Statement of Changes in Net Assets Available for Benefits.

##### *e) Contributions*

Contributions due to the Plan are recorded on an accrual basis. Transfers to the Plan are recorded when cash is received.

##### *f) Benefits*

Payments of pension benefits, refunds and transfers out of the Plan are recorded in the period in which they are paid.

##### *g) Income taxes*

The Plan is a Registered Pension Trust as defined in the Income Tax Act and is not subject to income taxes.

##### *h) Use of estimates and accounting judgments*

The preparation of financial statements requires the Plan Administrator to make estimates and assumptions, based on the information available as at the date of the financial statements, which affect the reported values of assets and liabilities, and related income and expenses. Such estimates and assumptions affect primarily the fair value of investment assets. Actual results could differ from those presented.

##### *i) Fair value hierarchy*

All financial instruments are required to be measured at fair value on initial recognition, except for certain related party transactions. Fair value measurement for financial instruments requires a three-tier hierarchy that reflects the significance of the inputs used in making the fair value measurements. The hierarchy of inputs used to value the Plan's investments is summarized below:

Level 1 - quoted prices (unadjusted) in active markets for identical assets or liabilities.



# THE FUND OF THE RETIREMENT PLAN OF GREAT LAKES POWER TRANSMISSION LP

## Notes to the Financial Statements

December 31, 2012

### 2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Level 2 - inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

Level 3 - inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Changes in valuation methods may result in transfers into or out of an investment's assigned level. The required disclosures have been included in Note 6.

### 3. EMPLOYER AND MEMBER CONTRIBUTIONS

	Employer	Member	2012 Total
Current service, required	\$ 265,919	\$ 132,848	\$398,767
Special contributions	-	-	-
Unfunded liability	209,804	-	209,804
Deficiency	414,580	-	414,580
<b>Contributions in the year</b>	<b>\$ 890,303</b>	<b>\$132,848</b>	<b>\$ 1,023,151</b>

	Employer	Member	2011 Total
Current service, required	\$ 253,428	\$ 125,731	\$ 379,159
Special contributions	765,756	-	765,756
Unfunded liability	157,347	-	157,347
Deficiency	310,941	-	310,941
<b>Contributions in the year</b>	<b>\$ 1,487,472</b>	<b>\$ 125,731</b>	<b>\$ 1,613,203</b>

### 4. BENEFIT PAYMENTS

	2012	2011
Retirement benefits	\$594,033	\$ 397,245
Death benefits	100,402	66,140
<b>Benefits paid in the year</b>	<b>\$694,435</b>	<b>\$ 463,385</b>

# THE FUND OF THE RETIREMENT PLAN OF GREAT LAKES POWER TRANSMISSION LP

## Notes to the Financial Statements

December 31, 2012

### 5. ADMINISTRATION EXPENSES

	2012	2011
Actuarial and consulting fees	\$130,549	\$ 69,546
Investment management fees	83,412	33,701
Audit fees	20,232	20,000
Trustee and custodial fees	-	2,159
Other professional fees	-	12,637
<b>Total for the year</b>	<b>\$234,193</b>	<b>\$ 138,043</b>

### 6. INVESTMENT ASSETS

#### *Investment in pooled pension funds*

The Plan holds its investments in four separate pooled funds ("the Funds") which includes Jarislowsky Fraser Canadian Equity Fund, which is managed by Jarislowsky, Fraser Limited; Walter Scott & Partners Global Fund, which is managed by Walter Scott & Partners Limited; and Beutel Goodman Canadian Income Fund and Beutel Goodman Canadian Long Term Bond Fund, which are both managed by Beutel, Goodman & Company Ltd. The three separate managers will be referred to collectively as the Fund Managers.

In the prior year, the Plan held investments solely in the Highstreet Balanced Fund. These investments were entirely sold during the year.

#### *a) Investment components*

The fair value of the investments of the Plan consist of the following:

	2012 Fair Value	2011 Fair Value
Jarislowsky Fraser Canadian Equity Fund	\$ 4,371,515	\$ -
Walter Scott & Partners Global Fund	5,648,514	-
Beutel Goodman Canadian Income Fund	2,019,417	-
Beutel Goodman Canadian Long Term Bond Fund	4,266,067	-
Highstreet Balanced Fund	-	13,631,616
	<b>\$ 16,305,513</b>	<b>\$ 13,631,616</b>

The total book value of all Funds owned by the Plan is \$15,843,317. The book values of the individual funds owned by the Partnership are as follows:

# THE FUND OF THE RETIREMENT PLAN OF GREAT LAKES POWER TRANSMISSION LP

## Notes to the Financial Statements

December 31, 2012

### 6. INVESTMENT ASSETS (Continued)

	2012 Book Value	2011 Book Value
Jarislowsky Fraser Canadian Equity Fund	\$ 4,402,975	\$ -
Walter Scott & Partners Global Fund	5,117,779	-
Beutel Goodman Canadian Income Fund	2,032,341	-
Beutel Goodman Canadian Long Term Bond Fund	4,290,222	-
Highstreet Balanced Fund	-	14,034,211
	<b>\$ 15,843,317</b>	<b>\$ 14,034,211</b>

#### b) Investment diversification

As at December 31, 2012, the Plan held a total of 1,360,836 units distributed between the Funds as follows:

Percentage of total fund	2012		2011	
	No. of Units	%	No. of Units	%
Jarislowsky Fraser Canadian Equity Fund	139,017	10	-	-
Walter Scott & Partners Global Fund	367,360	27	-	-
Beutel Goodman Canadian Income Fund	158,254	12	-	-
Beutel Goodman Canadian Long Term Bond Fund	696,205	51	-	-
Highstreet Balanced Fund	-	-	954,575	100%
	<b>1,360,836</b>	<b>100%</b>	<b>954,575</b>	<b>100%</b>

#### c) Fair value hierarchy

The following is a summary of the fair value classification levels for investments held at December 31, 2012:

	Level 1	Level 2	Level 3
Jarislowsky Fraser Canadian Equity Fund	\$4,007,876	\$363,639	-
Walter Scott & Partners Global Fund	5,648,514	-	-
Beutel Goodman Canadian Income Fund	-	2,019,417	-
Beutel Goodman Canadian Long Term Bond Fund	-	4,266,067	-
	<b>\$9,656,390</b>	<b>\$6,649,123</b>	<b>-</b>

At December 31, 2011, the Plan's investments included only units of Highstreet Balanced Fund. This investment was classified as Level 2. There were no transfers of investments between Level 1 and Level 2 during 2012 or 2011.

# THE FUND OF THE RETIREMENT PLAN OF GREAT LAKES POWER TRANSMISSION LP

## Notes to the Financial Statements

December 31, 2012

### 7. INVESTMENT INCOME

	2012	2011
Jarislowsky Fraser Canadian Equity Fund	\$ 474,032	\$ -
Walter Scott & Partners Global Fund	98,505	-
Beutel Goodman Bond Funds	243,480	-
Highstreet Balanced Fund	-	393,544
	\$ 816,017	\$ 393,544

### 8. CAPITAL MANAGEMENT

The Fund Managers manage the net assets of the Plan in accordance with the funding policy established within the Statement of Investment Policies and Procedures ("SIP&P"), which has been adopted by the sponsor GLPT.

In accordance with the Plan agreement, employees are required to contribute 4%-7%, depending on the year they became a member of the Plan. GLPT is required to provide the balance of the funding, based on triennial actuarial valuations, necessary to ensure that benefits will be fully provided for at retirement. GLPT's funding policy is to make monthly contributions to the Plan in amounts that are estimated to remain at a constant percentage of employees' compensation each year (approximately 11.5% for 2012 and 2011). There has been no change in this policy during the year.

The most recent filed actuarial valuation for the Plan was completed on December 31, 2011. The last filed valuation disclosed an unfunded liability as at December 31, 2011, which, in accordance with the federal Pension Benefits Standards Act, is being funded by GLPT making special monthly payments of \$48,219 until 2017.

The Plan is subject to regulatory inspection by the Office of the Superintendent of Financial Institutions ("OSFI") which retains the authority to direct compliance with the minimum standards of the Pension Benefits Act of Ontario. As at December 31, 2012, the Plan is in compliance with these minimum standards (2011 – In compliance).

### 9. FINANCIAL INSTRUMENTS – RISK MANAGEMENT

#### Jarislowsky Fraser Canadian Equity Fund

In managing this fund, the Jarislowsky Fraser Canadian Equity Fund utilizes a disciplined, fundamental approach in its investment selection and management, which consists of an intensive and ongoing research process of investment opportunities across a broad range of investment vehicles in various industries. Securities are purchased and held for the fund for the medium to long term.

#### Walter Scott & Partners Global Fund

## **THE FUND OF THE RETIREMENT PLAN OF GREAT LAKES POWER TRANSMISSION LP**

### **Notes to the Financial Statements**

December 31, 2012

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#### **9. FINANCIAL INSTRUMENTS – RISK MANAGEMENT (Continued)**

This investment objective of this fund is to generate long term total return by investing in securities issued by companies domiciled around the world that are believed to be capable of producing above average real returns. However no more than 15% by value of the assets may be invested in

emerging markets countries. This fund emphasizes long-term investments in profitable businesses rather than short-term speculative activity.

##### **Beutel Goodman Canadian Income Fund**

The investment objective of this fund is to seek a high rate of income return by investing primarily in fixed-income securities of Canadian government and corporate issuers. This fund invests primarily in a well-diversified portfolio of Canadian government and Canadian corporate bonds of various maturities. The bonds will usually have a credit rating of BBB or higher. This fund's portfolio turnover rate may exceed 70%. As a result, this fund may incur higher trading costs and a unit holder may be more likely to receive distributions of income or capital gains which must be included in the unit holder's income.

##### **Beutel Goodman Canadian Long Term Bond Fund**

The investment objective of this fund is to earn a high rate of income by investing primarily in long-term fixed income securities of Canadian government and corporate issuers. This fund invests primarily in a well-diversified portfolio of Canadian provincial and Canadian corporate bonds. The corporate bonds have a credit rating of BBB or higher. The average term of this fund is limited to a range of 9 to 25 years. Investments by this fund in non-Canadian securities, will generally not exceed 45% of the fund's assets taken at book value.

For the above mentioned Funds the most important risks include market risk, interest rate risk, credit risk, currency risk, liquidity risk, and other price risks. These risks and related risk management practices employed by the Funds are discussed below:

##### *a) Credit risk*

Credit risk is the risk that one party to a financial instrument will fail to discharge an obligation and cause the other party to incur a financial loss.

The Plan is exposed to credit risk through the debt instruments held by the pooled funds in which the Plan invests. As at December 31, 2012, the Plan's maximum exposure to credit risk was \$6,343,681. (2011 – \$5,493,014), which reflects the total fair value of debt instruments held. Debt instruments represent 39% (2011 - 40%) of the fair value of all investments held.

##### **Jarislowsky Fraser Canadian Equity Fund**

This fund maintains all of its investments and cash at its custodian. All transactions in listed securities are settled/paid for upon delivery using approved brokers. The risk of counterparty default is considered minimal, as delivery of securities sold is made subsequent to the broker receiving payment.

# THE FUND OF THE RETIREMENT PLAN OF GREAT LAKES POWER TRANSMISSION LP

## Notes to the Financial Statements

December 31, 2012

### 9. FINANCIAL INSTRUMENTS – RISK MANAGEMENT (Continued)

Ratings for securities which subject the portfolio to credit risk at December 31, 2012 are noted below:

Debt instruments by credit rating *	Percentage of Short Term Investments (%)
R-1High	34.1
R-1Mid	57.9
R-1Low	4.0
AAA	0.9
AA	2.2
A	0.9

\*Credit ratings are obtained primarily from Dominion Bond Rating Service, Standard & Poor's and Moody's.

#### Walter Scott & Partners Global Fund

This fund's main exposure to credit risk consists of investments in preferred shares, as well as other assets such as amounts due from brokers and subscriptions receivable. To minimize this risk, the fund primarily invests in publicly traded equity and preferred securities. Additionally, when applicable this fund's credit exposure and counterparty ratings are monitored regularly. As of December 31, 2012 this fund did not have significant exposure to credit risk.

#### Beutel Goodman

As at December 31, 2012 the Beutel Goodman Income Fund and Long Term Bond Fund invested in debt instruments with the following credit ratings:

Debt instruments by credit rating *	Percentage of NAV (%)	
	Income Fund	Long Term Bond Fund
AAA	51	42
AA	9	12
A	27	28
BBB	12	17

\*Credit ratings are obtained primarily from Dominion Bond Rating Service, Standard & Poor's and Moody's. Excludes any cash and cash equivalents.

#### Highstreet Balanced Fund

As at December 31, 2011 the Highstreet Canadian Bond Fund invested in debt instruments with the following credit ratings:

# THE FUND OF THE RETIREMENT PLAN OF GREAT LAKES POWER TRANSMISSION LP

## Notes to the Financial Statements

December 31, 2012

### 9. FINANCIAL INSTRUMENTS – RISK MANAGEMENT (Continued)

Debt instruments by credit rating *	Percentage of Highstreet Canadian Bond Fund NAV (%)	
	2012	2011
AAA	-	25.8
AA	-	35.8
A	-	37.8
BBB	-	0.6

\* Credit ratings are obtained from Dominion Bond Rating Services and Standard & Poor's

#### *b) Interest rate risk*

Interest rate risk refers to the consequences of interest rate changes on the value of the Plan's assets.

#### **Jarislowsky Fraser Canadian Equity Fund**

As at December 31, 2012, should interest rates have decreased by 25 basis points with all other variables remaining constant, the increase in net assets for the year would amount to approximately \$21. Conversely, if interest rates had risen by 25 basis points, the decrease in net assets would have amounted to approximately \$10.

#### **Walter Scott & Partners Global Fund**

To mitigate interest rate risk, this fund primarily invests in publicly traded equity securities. As at December 31, 2012 this fund did not have exposure to interest rate risk.

#### **Beutel Goodman**

##### *Canadian Income Fund*

As at December 31, 2012, should interest rates have increased or decreased by 25 basis points with all other variables remaining constant, net assets would have decreased or increased respectively by approximately \$28,460.

##### *Canadian Long Term Bond Fund*

As at December 31, 2012, should interest rates have increased or decreased by 25 basis points with all other variables remaining constant, net assets would have decreased or increased respectively by approximately \$136,822.

#### **Highstreet Balanced Fund**

Interest rate changes directly impact the market value of fixed income securities held in the pooled funds. Interest rate changes will also have an indirect impact on the remaining assets in the funds. Due to the long-term nature of the pension obligation and related cash flows, asset mix decisions include consideration of differences in the interest rate sensitivity of the Plan's assets and liabilities.



# THE FUND OF THE RETIREMENT PLAN OF GREAT LAKES POWER TRANSMISSION LP

## Notes to the Financial Statements

December 31, 2012

### 9. FINANCIAL INSTRUMENTS – RISK MANAGEMENT (Continued)

As at December 31, 2011 should interest rates have increased or decreased by 1 percent with all other variables held constant, net assets would have decreased or increased respectively by approximately \$364,939.

#### c) Price risk

Equity price risk represents the risk that the fair values of financial instruments held by the Fund will fluctuate from movements in markets or by events specific to the instruments held, other than as a result of interest rate or foreign currency fluctuations.

#### Jarislowsky Fraser Canadian Equity Fund

As at December 31, 2012, if the S&P/TSX Composite Index had increased (decreased) by 5% at December 31, 2012 with all other variables held constant, this would have approximately increased (decreased) net assets by \$181,138.

#### Walter Scott & Partners Global Fund

As at December 31, 2012, if market prices increased or decreased by 5% in relation to publicly traded equities represented in the portfolio, with all other variables remaining constant, net assets would have increased or decreased by approximately \$272,347.

#### Beutel Goodman

The impact on net assets of the Fund due to a 1 percent increase or decrease in the benchmark, as at December 31, 2012, with all other variables held constant, is included in the following table.

Regression analysis has been utilized to predict the sensitivity between the Fund's return as compared to the return of the Fund's benchmark. Regression analysis utilizes 36 data points based on the monthly net returns.

Benchmark	Impact on Net Assets (\$)	
	Income Fund	Long Term Bond Fund
Dex Universe Bond Total Return Index	+/-19,768	+/- 42,282

#### Highstreet Balanced Fund

The impact on net assets of the Fund due to a 5 percent increase or decrease in the benchmark, as at December 31, with all other variables held constant, is included in the following table.

Regression analysis has been utilized to predict the sensitivity between the Fund's return as compared to the return of the Fund's benchmark. Regression analysis utilizes data points based on the daily net returns of the Fund in 2011 and 2010.



# THE FUND OF THE RETIREMENT PLAN OF GREAT LAKES POWER TRANSMISSION LP

## Notes to the Financial Statements

December 31, 2012

### 9. FINANCIAL INSTRUMENTS – RISK MANAGEMENT (Continued)

Benchmark	Impact on Net Assets (\$)
	2011
Balanced Composite Index *	+/-810,111
* DEX Universe (DEXU) 45%, TSX 25%, S&P 500 20%, EAFE 5%, DEX 91-day Treasury Bill 5%	

In practice, the actual trading results may differ from the sensitivity analysis and differences could be material.

#### d) Foreign currency risk

Currency risk is the risk that the fair values of financial instruments will be impacted by changes in foreign currency exchange rates relating to the Canadian dollar.

#### Jarislowsky Fraser Canadian Equity Fund

The assets and liabilities of this fund are predominately held in the functional currency of this fund which is the Canadian dollar. This fund is not exposed to significant foreign currency risks.

#### Walter Scott & Partners Global Fund

As at December 31, 2012, if the Canadian dollar had strengthened or weakened by 5% in relation to foreign currencies represented in the portfolio, with all other variables remaining constant, net assets would have increased or decreased by approximately \$277,038.

#### Beutel Goodman

As at December 31, 2012 the Income Fund and Long Term Bond Fund did not have significant exposure to foreign currency risk.

#### Highstreet Balanced Fund

As at December 31, 2011, the Plan did not have a significant direct exposure to foreign currencies. Although the Plan invests in units of the Highstreet U.S. and International Equity A Funds through its investment in the Highstreet Balanced Fund, which holds foreign currency denominated investments, the net asset values of those funds is computed in Canadian dollars and is the basis on which the Fund subscribes for and redeems units in those funds. The Plan's indirect exposure to foreign currencies is beyond the control of the Plan and as such, the Plan does not actively manage this risk.

#### e) Liquidity risk

Liquidity risk is the risk that the Plan will not be able to meet its financial obligations on time or without undue expense.

## **THE FUND OF THE RETIREMENT PLAN OF GREAT LAKES POWER TRANSMISSION LP**

### **Notes to the Financial Statements**

December 31, 2012

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#### **9. FINANCIAL INSTRUMENTS – RISK MANAGEMENT (Continued)**

##### **Jarislowsky Fraser Canadian Equity Fund**

Liquidity risk is managed by investing the majority of this fund's assets in investments that are traded in an active market and can be readily disposed. In addition, this fund aims to retain sufficient cash and cash equivalent positions to maintain liquidity.

##### **Walter Scott & Partners Global Fund**

Liquidity risk is managed by investing the majority of these funds assets in investments that are traded in an active market and can be readily disposed. In addition, this fund aims to retain sufficient cash and cash equivalent positions to maintain liquidity.

##### **Beutel Goodman**

As at December 31, 2012 the Income Fund and Long Term Bond Fund did not have significant exposure to liquidity risk.

##### **Highstreet Balanced Fund**

The Plan may redeem its units in the Fund on regular valuation dates throughout the year. As at Dec 31, 2011 the Fund invested all of its assets in units of other Highstreet Pooled Funds as listed in Note 6, which are redeemable on the same terms and conditions as are the units of the Fund. The Highstreet Pooled Funds invest in securities that are traded in an active market and can be readily disposed of.

#### **10. RELATED PARTY TRANSACTIONS**

During 2012, the Plan received a transfer from GLPL of \$1,903,902. During 2011 the Plan received a transfer of \$12,448,687 from GLPL upon the initial establishment and approval of the Plan, as described in note 1 a. These transactions were measured at the exchange amount, being the fair value of these items as at the date of the transfers. In accordance with the respective Policies and Procedures, the Plan does not hold any securities of GLPL or its related parties at December 31, 2012 (2011- \$Nil).

**GREAT LAKES POWER TRANSMISSION LP****2010 & 2011 - Great Lakes Power Transmission LP Other Post Employment Benefits - CAN \$ CICA**

	2011	2010
	GLP-T - OPEB	GLP-T - OPEB
<b>Change in benefit obligation</b>		
Benefit obligation - end of prior period	3,299,691	2,587,338
Current service cost (employer)	106,634	78,388
Interest cost	192,303	182,074
Employee contributions	0	0
Plan amendments	0	108,551
Benefits paid	-123,844	-199,208
Net transfer in (out)	0	0
Acquisitions (divestitures)	0	0
Increase (decrease) in obligation due to curtailment	0	0
Obligation being settled	0	0
Special termination benefits	0	0
Actuarial loss (gain)	272,299	542,548
Foreign exchange rate changes	0	0
Benefit obligation - end	<u>3,747,083</u>	<u>3,299,691</u>
<b>Change in plan assets</b>		
Market value of plan assets - end of prior period	0	0
Actual return on plan assets	0	0
Employer contributions	123,844	199,208
Employee contributions	0	0
Benefits paid	-123,844	-199,208
Surplus paid out to employer	0	0
Settlement payments	0	0
Net transfer in (out)	0	0
Acquisitions (divestitures)	0	0
Actual plan expenses	0	0
Foreign exchange rate changes	0	0
Market value of plan assets - end	<u>0</u>	<u>0</u>
<b>Reconciliation of funded status</b>		
Funded status - surplus (deficit)	-3,747,083	-3,299,691
Employer contributions after measurement date	0	0
Unamortized transitional obligation (asset)	464,660	582,287
Unamortized past service costs	93,043	100,797
Unamortized net actuarial loss (gain)	849,094	592,223
Accrued benefit asset (liability)	-2,340,286	-2,024,384
Unamortized transitional increase (decrease) in valuation	0	0
Valuation allowance	0	0
Accrued benefit asset (liability), net of valuation allowance	<u>-2,340,286</u>	<u>-2,024,384</u>
<b>Components of expense</b>		
Current service cost (including provision for plan expenses)	106,634	78,388
Interest cost	192,303	182,074
Expected return on plan assets	0	0
Amortization of transitional obligation (asset)	117,627	117,627
Amortization of past service costs	7,754	7,754
Amortization of net actuarial loss (gain)	15,427	0
Curtailment loss (gain)	0	0
Settlement loss (gain)	0	0
Amortization of transitional increase (decrease) in VA	0	0
Increase (decrease) in valuation allowance	0	0
Special termination benefits	0	0
Net expense (income)	<u>439,745</u>	<u>385,843</u>
<b>Assumptions</b>		
At beginning of period		
Discount rate	5.75%	6.70%
Rate of compensation increase	3.50%	3.50%
Expected rate of return on plan assets	6.20%	6.70%
At end of period		
Discount rate	5.30%	5.75%
Rate of compensation increase	3.50%	3.50%

Plan ID Number	001	
Plan Name	GLPT - CICA	
Country	Canada	Canada
Financial year ending on	12/31/2012	12/31/2011
<i>Currency Information</i>		
1. Local currency	\$CDN	\$CDN
2. Reporting currency	\$CDN	\$CDN
3. Units of local currency equal to 1 unit of reporting currency		
a. Beginning of year reporting exchange rate used	1.00000	1.00000
b. Average reporting exchange rate used	1.00000	1.00000
c. End of year reporting exchange rate used	1.00000	1.00000
d. Rates for significant events		
i. Plan provision changes	1.00000	1.00000
ii. Business combinations/divestitures/transfers	1.00000	1.00000
iii. Adjustment to match local books	1.00000	1.00000
iv. Plan curtailments	1.00000	1.00000
v. Plan settlements	1.00000	1.00000
vi. Other extraordinary events results in adjustment in plan assets	1.00000	1.00000
vii. Plan combinations/divisions	1.00000	1.00000
<b>A. Change in benefit obligation</b>		
1. Benefit obligation at beginning of year	3,747,083	3,299,691
2. Current service cost	193,273	106,634
3. Interest cost	236,414	192,303
4. Plan participants' contributions	-	-
5. Amendments	-	-
6. Actuarial (gain)/loss	1,456,802	272,299
7. Benefits paid from plan/company	(131,136)	(123,844)
8. Expenses paid	-	-
9. Taxes paid	-	-
10. Premiums paid	-	-
11. Business combinations / divestitures / transfers	-	-
12. Plan combinations	-	-
13. Plan curtailments	-	-
14. Plan settlements	-	-
15. Exchange rate changes	-	-
16. Benefit obligation at end of year	5,502,435	3,747,083
<b>B. Change in plan assets</b>		
1. Fair value of plan assets at beginning of year	-	-
2. Expected return on plan assets	-	-
3. Actuarial gain/(loss) on plan assets	-	-
4. Employer contributions (incl. employer direct benefit payments)	131,136	123,844
5. Plan participants' contributions	-	-
6. Benefits paid from plan/company	(131,136)	(123,844)
7. Expenses paid	-	-
8. Taxes paid	-	-
9. Premiums paid	-	-
10. Plan settlements	-	-
11. Business combinations / divestitures / transfers	-	-
12. Plan combinations	-	-
13. Exchange rate changes	-	-
14. Fair value of plan assets at end of year	-	-

Plan ID Number	001	
Plan Name	GLPT - CICA	
Country	Canada	Canada
Financial year ending on	12/31/2012	12/31/2011
<b>C. Amounts recognized in the statement of financial position</b>		
<i>Plans that are wholly unfunded and plans that are wholly or partly funded</i>		
1. Present value of wholly or partly funded obligations	-	-
2. Fair value of plan assets	-	-
3. Deficit (surplus) for funded plans	-	-
4. Present value of wholly unfunded obligations	5,502,435	3,747,083
5. Unrecognized net actuarial gain/(loss)	(2,278,632)	(849,094)
6. Unrecognized past service (cost) benefit	(85,289)	(93,043)
7. Unrecognized transitional (obligation)	(347,033)	(464,660)
8. Net liability (asset)	2,791,480	2,340,286
<i>Amounts in the statement of financial position</i>		
1. Liabilities	2,791,480	2,340,286
2. Assets	-	-
3. Net liability (asset)	2,791,480	2,340,286
<b>D. Components of pension cost</b>		
<i>Amounts recognized in profit and loss statement</i>		
1. Current service cost	193,273	106,634
2. Interest cost	236,414	192,303
3. Expected return on plan assets	-	-
4. Expected return on reimbursement rights	-	-
5. Recognition of past service cost	7,754	7,754
6. Amortization of net (gain) loss	27,264	15,427
7. Amortization of transitional obligation	117,627	117,627
8. Curtailment (gain) / loss recognized	-	-
9. Settlement (gain) / loss recognized	-	-
10. Total pension cost recognized in the P&L account	582,331	439,745
<i>Actual return on assets</i>		
Actual return on plan assets	-	-
Actual return on reimbursement rights	-	-
<i>Amounts recognized in statement of other comprehensive income</i>		
1. Actuarial (gains) / losses immediately recognized	-	-
2. Effect of asset limitation and IAS minimum funding requirement	-	-
3. Total pension cost recognized in the OCI	-	-
<i>Cumulative amount of actuarial (gains) / losses recognized</i>		
	-	-
<i>Policy for amortizing actuarial (gains) / losses</i>		
<b>E. Principal actuarial assumptions</b>		
<i>Weighted-average assumptions to determine benefit obligations</i>		
1. Discount rate	4.50%	5.30%
2. Rate of salary increase	3.00%	3.50%
3. Rate of price inflation	N/A	N/A
4. Rate of pension increases	N/A	N/A
<i>Weighted-average assumptions to determine net pension cost</i>		
1. Discount rate	5.30%	5.75%
2. Expected long-term rate of return on plan assets	N/A	N/A

Plan ID Number	001	
Plan Name	GLPT - CICA	
Country	Canada	Canada
Financial year ending on	12/31/2012	12/31/2011
3. Rate of salary increase	3.50%	3.50%
4. Rate of price inflation	N/A	N/A
5. Rate of pension increases	N/A	N/A
<i>Assumed life expectations on retirement at age 65</i>		
1. Retiring today (member age 65)	-	-
2. Retiring in 25 years (member age 40 today)	-	-
<b>F. Plan assets</b>		
<i>Percentage of plan assets by asset allocation</i>		
1. Equity securities	0.00%	0.00%
2. Debt securities	0.00%	0.00%
3. Property	0.00%	0.00%
4. Other	0.00%	0.00%
<b>Total</b>	<u>0.00%</u>	<u>0.00%</u>
<i>Expected return on assets by asset allocation</i>		
1. Equity securities	0.00%	0.00%
2. Debt securities	0.00%	0.00%
3. Property	0.00%	0.00%
4. Other	0.00%	0.00%
<b>Total</b>	<u>0.00%</u>	<u>0.00%</u>
<i>Amounts invested in company's own financial instruments</i>		
1. Plan assets invested in company equity securities	-	-
2. Plan assets invested in company debt securities	-	-
3. Plan assets invested in property currently used by company	-	-
4. Plan assets invested in other assets currently used by company	-	-
<i>Description of basis to determine the overall expected rate of return on assets</i>		
<b>G. History of experience gains and losses</b>		
1. Defined benefit obligation	5,502,435	3,747,083
Fair value of plan assets	-	-
Deficit / (surplus)	5,502,435	3,747,083
2. Difference between the expected and actual return on plan assets		
a. Amount	-	-
b. Percentage of plan assets	0%	0%
3. Experience (gain)/ loss on plan liabilities		
a. Amount	194,537	-
b. Percentage of present value of plan liabilities	4%	0%
<b>H. Required disclosures for post-retirement medical plans</b>		
1. Assumed health care trend rate		
a. Immediate trend rate	6.60%	6.81%
b. Ultimate trend rate	4.50%	4.36%
c. Year that the rate reaches ultimate trend rate	2029	2029

Plan ID Number	001	
Plan Name	GLPT - CICA	
Country	Canada	Canada
Financial year ending on	12/31/2012	12/31/2011
2. Sensitivity to trend rate assumptions		
a. Valuation trend + 1%		
i. Effect on total service cost and interest cost components	160,333	77,845
ii. Effect on defined benefit obligation	1,226,030	821,408
b. Valuation trend - 1%		
i. Effect on total service cost and interest cost components	(115,542)	(58,016)
ii. Effect on defined benefit obligation	(935,384)	(633,146)
<b>I. Other required disclosure amounts</b>		
Contributions expected to be paid to the plan during the annual period beginning after the reporting period	140,423	131,136
<b>J. Statement of financial position reconciliation</b>		
1. Net liability (asset)	2,340,286	2,024,384
2. Pension expense recognised in P&L in the financial year	582,331	439,745
3. Amounts recognised in OCI in the financial year	-	-
4. Employer contributions made in the financial year	-	-
5. Benefits paid directly by company in the financial year	(131,136)	(123,844)
6. Credit to reimbursements	-	-
7. Business combinations / divestitures / transfers	-	-
8. Amounts recognized due to plan combinations	-	-
9. Adjustment to match local books	-	-
10. Exchange rate adjustment - (gain)/loss	-	-
11. Net liability (asset) as of end of year	2,791,480	2,340,286
<b>K. Reimbursement right information</b>		
1. Value of reimbursement rights as of the end of year	-	-
2. Projected contributions to reimbursement rights	-	-

**NOTE: All figures shown in this disclosure have only been rounded once at the final step. Differences that might occur in the summation of figures and the figures displayed in the disclosure will be as a result of the rounding applied.**

**NOTE: Section G above must be adjusted to display 5 years of historical information.**

# **IAS 19 (REV 2011) ACTUARIAL VALUATION REPORT AS AT 31 DECEMBER 2013 BROOKFIELD RENEWABLE POWER GREAT LAKES POWER LIMITED – TRANSMISSION**

04 February 2014



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## Report Highlights

Mercer has prepared this report for Great Lakes Power Limited – Transmission (“GLP Transmission”) to (i) present actuarial estimates of liabilities as at 31 December 2013 for GLP Transmission’s non-pension post-employment benefits plan (“the Plan”) to incorporate, as GLP Transmission deems appropriate, in its financial statements under International Financial Reporting Standards, and to (ii) provide an actuarial estimate of the defined benefit cost for the fiscal year ending 31 December 2014.

All figures in this report are expressed in \$CDN unless otherwise stated. Rates are expressed on a per annum basis.

Section 3 of this report provides further explanation as to the purposes and limitations of this report.

IAS 19 (REV 2011)

ACTUARIAL VALUATION REPORT AS AT 31 DECEMBER 2013

NON-PENSION POST-EMPLOYMENT BENEFITS PLAN

BROOKFIELD RENEWABLE POWER-GREAT LAKES POWER LIMITED – TRANSMISSION

## Summary of Results

Below are highlights of the results as at 31 December 2013 compared to the corresponding figures as at 31 December 2012 under IAS 19R.

	Fiscal year ending 31 December 2013	Fiscal year ending 31 December 2012
P&L charge/(credit)	\$522,849	\$429,686
Other comprehensive (income)/loss	(174,048)	1,456,802
Defined benefit cost including P&L and OCI	348,801	1,886,488
Benefit obligation	5,710,813	5,502,435
Fair value of plan assets	0	0
Net liability/(asset) at the end of the year	5,710,813	5,502,435
Cumulative OCI (gain)/loss	1,282,754	1,456,802
Discount rate at year-end	5.00%	4.50%
Assumed health care trend rates at year-end		
Initial weighted average health care trend rate	6.49%	6.60%
Ultimate weighted average health care trend rate	4.50%	4.50%
Year the rate reaches ultimate trend rate	2029	2029

The defined benefit cost for the fiscal year ending 31 December 2013 includes no charges/credits due to special events.

Details of the disclosure information are shown in Appendix A and Appendix G.

The estimated defined benefit cost for the fiscal year ending 31 December 2014 is \$550,717. Please refer to Appendix B for a detailed breakdown.

Please note that the actual defined benefit cost for the fiscal year ending 31 December 2014 may be substantially different from the estimate and may be revised if assets and/or liabilities are remeasured during the year due to a significant event.

We have not been notified by GLP Transmission nor are we aware of any events subsequent to 31 December 2013, which in our opinion would have a material impact on the results of the valuation.

## Changes in Plan Provisions

There were no changes to the plan provisions since the last disclosure as at 31 December 2012.

A summary of the plan provisions may be found in Appendix E.

## Changes in Actuarial Assumptions

The actuarial assumptions changed since the last disclosure as at 31 December 2012. Details are shown in Appendix C. The approach used for setting the assumptions is similar to the prior year.

## Changes in Actuarial Methods

There have been no changes to the actuarial methods or accounting policies since the prior valuation. Details of the actuarial methods can be found in Appendix D.

## Changes in Participant Data

There have been no changes to the participant data since the prior valuation. Details of the participant data can be found in Appendix F.

To our knowledge there have been no other changes since the prior valuation that will affect the valuation results.

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## Transition to IAS 19R

GLP Transmission adopted International Financial Reporting Standard – International Accounting Standard 19 (REV 2011) (“IAS 19R”) on 01 January 2013. Due to the requirement to provide comparative information, GLP Transmission transitioned to IAS 19R on 01 January 2012.

Under the prior version of IAS 19, GLP Transmission used the corridor approach for recognizing gain and losses instead of Other Comprehensive Income (OCI). Under IAS 19R, the corridor method is no longer available and GLP Transmission is reporting on an OCI basis. Under the OCI approach, future gains and losses will be reflected in OCI and not the profit and loss statement.

# 2

## Basis of Valuation

### Plan Data

To prepare this report Mercer has used and relied on participant data as at 01 April 2012, as supplied by the management of GLP Transmission (“Management”) without further audit. Customarily, this information would not be verified by a plan’s actuary. We have reviewed this information for internal consistency and we have no reason to doubt its substantial accuracy. The participant data is summarized in Appendix F.

GLP Transmission is responsible for ensuring that such participant data provides an accurate description of all persons who are participants under the terms of the Plan or otherwise entitled to benefits that is sufficiently comprehensive and accurate for the purposes of this report. If the data supplied are not sufficiently comprehensive and accurate for the purposes of this report, the valuation results may differ significantly from the results that would be obtained with such data; this may require a later revision of this report. We have applied tests for internal consistency, as well as for consistency with the data used for the previous valuation. These tests were applied to membership reconciliation and basic information (date of birth, date of hire, gender, etc.). The results of these tests were satisfactory.

### Actuarial Assumptions

To prepare the valuation report, assumptions are used in a forward looking financial and demographic model to present a single scenario from a wide range of possibilities; the results based on that single scenario are included in the valuation. The future is uncertain and the plan’s actual experience will differ from those assumptions; these differences may be significant or material because these results are very sensitive to the assumptions made and, in some cases, to the interaction between the assumptions.

Different assumptions or scenarios within the range of possibilities may also be reasonable and results based on those assumptions would be different. As a result of the uncertainty inherent in a forward looking projection over a very long period of time, no one projection is uniquely 'correct' and many alternative projections of the future could also be regarded as reasonable. Two different actuaries could, quite reasonably, arrive at different results based on the same data and different views of the future. A 'sensitivity analysis' shows the degree to which results would be different if you substitute alternative assumptions within the range of possibilities for those utilized in this report.

An indication of the sensitivity of the results to changes in the most material assumptions is included in Appendix A. At GLP Transmission's request, Mercer is available to perform additional sensitivity or scenario analysis.

Assumptions may also be changed from one valuation to the next because of changes in mandated requirements, plan experience, changes in expectations about the future and other factors. A change in assumptions is not an indication that prior assumptions were unreasonable when made.

## Actuarial Methods

A valuation report is only a snapshot of a plan's estimated financial condition at a particular point in time; it does not predict the plan's future financial condition or its ability to pay benefits in the future and does not provide any guarantee of future financial soundness of the plan. Over time, a plan's total cost will depend on a number of factors, including the amount of benefits the plan pays, the number of people paid benefits, the period of time over which benefits are paid and plan expenses to pay benefits. These amounts and other variables are uncertain and unknowable at the valuation date.

Because modelling all aspects of a situation is not possible or practical, we may use summary information, estimates, or simplifications of estimates to facilitate the modelling of future events in an efficient and cost-effective manner. We may also exclude factors or data that, if used, in our judgment, would not have significantly affected our results. Use of such simplifying techniques does not, in our judgment, affect the reasonableness of valuation results for the plan.

Valuations do not affect the ultimate cost of the plan, only the timing of when benefit costs are recognized. Cost recognition occurs over time. If the costs recognized over a period of years are lower or higher than necessary, for whatever reason, normal and expected practice is to adjust future expense levels with a view to recognizing the entire cost of the plan over time.

As instructed, Mercer has prepared the accounting disclosures in this report based on GLP Transmission's accounting policies.

A summary of the actuarial methods and accounting policies is provided in Appendix D.

## Plan Provisions

Mercer has used and relied on the plan documents, including amendments, and interpretations of plan provisions, supplied by GLP Transmission as summarized in Appendix E. GLP Transmission is solely responsible for the validity, accuracy and comprehensiveness of this information. If any plan provisions supplied are not accurate and complete, the valuation results may differ significantly from the results that would be obtained with accurate and complete information. Moreover, plan documents may be subject to different interpretations, each of which could be reasonable, and the results under each of the different interpretations could vary.

These plan provisions have been verified by GLP Transmission under the Employer Certification in Appendix H.



# 3

## Notices and Statement of Opinion

Mercer has prepared this report exclusively for GLP Transmission; subject to this limitation, GLP Transmission may direct that this report be provided to its auditors in connection with the audit of its financial statements. Mercer is not responsible for use of this report by any other party.

The only purposes of this report are to present actuarial estimates of liabilities as at 31 December 2013 for GLP Transmission to incorporate, as GLP Transmission deems appropriate, in its financial statements under International Financial Reporting Standards, and to provide an actuarial estimate of the defined benefit cost for the fiscal year ending 31 December 2014.

This report may not be used for any other purpose. Mercer is not responsible for the consequences of any unauthorized use. Its content may not be modified, incorporated into or used in other material, sold or otherwise provided, in whole or in part, to any other person or entity, without Mercer's permission.

This report was prepared in accordance with generally accepted actuarial principles and procedures. The actuarial assumptions were selected by GLP Transmission.

All parts of this report, including any documents incorporated by reference, are integral to understanding and explaining its contents; no part may be taken out of context, used or relied upon without reference to the report as a whole.

Decisions about benefit changes, granting new benefits, investment policy, funding policy, benefit security and/or benefit-related issues should not be made solely on the basis of this valuation, but only after careful consideration of alternative economic, financial, demographic and societal factors.

GLP Transmission is ultimately responsible for selecting the Plan's accounting policies, methods and assumptions. This information is referenced or described in Section 2 of this report. GLP Transmission is solely responsible for communicating to Mercer any changes required to those policies, methods and assumptions.

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Mercer is providing the valuation report in its capacity as actuary and as such, the report is not a substitute for advice from an accountant or lawyer.

The calculations have been made in accordance with our understanding of applicable laws and regulations, and of requirements of International Financial Reporting Standards, reflecting application of GLP Transmission's accounting policies described in this report.

GLP Transmission should notify Mercer promptly after receipt of this valuation report if GLP Transmission disagrees with anything contained herein or is aware of any information that would affect the results of this report that has not been communicated to Mercer or incorporated therein. The valuation report will be deemed final and acceptable to GLP Transmission unless GLP Transmission promptly provides such notice to Mercer.

## Statement of Opinion

The methods used in the valuation of benefit obligations and determination of plan costs were selected by the management of Brookfield ("Management") in accordance with the requirements of International Financial Reporting Standards.

The preparers of the financial statements have selected the assumptions used in the valuations of the plan obligations and determination of plan costs. They are Management's best estimate assumptions, selected for accounting purposes, in accordance with International Financial Reporting Standards. I am not expressing any opinion on these assumptions.

In my opinion, the data on which the valuations are based are sufficient and reliable for the purposes of the valuations.

This report has been prepared, and my opinion given, in accordance with accepted actuarial practice in Canada.

Respectfully submitted,



Lois Pavlich  
Fellow of the Society of Actuaries  
Fellow of the Canadian Institute of Actuaries

04 February 2014

Date

Mercer  
161 Bay Street, P.O. Box 501  
Toronto, Ontario M5J 2S5  
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# APPENDIX A

## Disclosure Information

Financial year ending on	12/31/2013	12/31/2012
<b>A. Change in defined benefit obligation</b>		
1. Defined benefit obligation at end of prior year	5,502,435	3,747,083
2. Service cost		
a. Current service cost	278,399	203,516
b. Past service cost	-	-
c. (Gain) / loss on settlements	-	-
3. Interest expense	244,450	226,170
4. Cash flows		
a. Benefit payments from plan	-	-
b. Benefit payments from employer	(140,423)	(131,136)
c. Settlement payments from plan	-	-
d. Participant contributions	-	-
e. Administrative expenses included in the DBO	-	-
f. Taxes included in the DBO	-	-
g. Insurance premiums for risk benefits	-	-
5. Other significant events		
a. Increase (decrease) due to effect of any business combinations / divestitures / transfers	-	-
b. Increase (decrease) due to plan combinations	-	-
6. Remeasurements		
a. Effect of changes in demographic assumptions	423,097	401,605
b. Effect of changes in financial assumptions	(597,145)	860,660
c. Effect of experience adjustments	-	194,537
7. Effect of changes in foreign exchange rates	-	-
8. Defined benefit obligation at end of year	5,710,813	5,502,435

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Financial year ending on	12/31/2013	12/31/2012
<b>B. Change in fair value of plan assets</b>		
1. Fair value of plan assets at end of prior year	-	-
2. Interest income	-	-
3. Cash flows		
a. Total employer contributions		
(i) Employer contributions	-	-
(ii) Employer direct benefit payments	140,423	131,136
b. Participant contributions	-	-
c. Benefit payments from plan	-	-
d. Benefit payments from employer	(140,423)	(131,136)
e. Settlement payments from plan	-	-
f. Administrative expenses paid from plan assets	-	-
g. Taxes paid from plan assets	-	-
h. Insurance premiums for risk benefits	-	-
4. Other significant events		
a. Increase (decrease) due to effect of any business combinations / divestitures / transfers	-	-
b. Increase (decrease) due to plan combinations	-	-
5. Remeasurements		
a. Return on plan assets (excluding interest income)	-	-
6. Effect of changes in foreign exchange rates	-	-
7. Fair value of plan assets at end of year	-	-
<b>C. Amounts recognized in the statement of financial position</b>		
1. Defined benefit obligation	5,710,813	5,502,435
2. Fair value of plan assets	-	-
3. Funded status	5,710,813	5,502,435
4. Effect of asset ceiling/onerous liability	-	-
5. Net liability (asset)	5,710,813	5,502,435

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Financial year ending on	12/31/2013	12/31/2012
<b>D. Components of defined benefit cost</b>		
1. Service cost		
a. Current service cost	278,399	203,516
b. Reimbursement service cost	-	-
c. Past service cost	-	-
d. (Gain) / loss on settlements	-	-
e. Total service cost	278,399	203,516
2. Net interest cost		
a. Interest expense on DBO	244,450	226,170
b. Interest (income) on plan assets	-	-
c. Interest (income) on reimbursement rights	-	-
d. Interest expense on effect of (asset ceiling)/onerous liability	-	-
e. Total net interest cost	244,450	226,170
3. Remeasurements of Other Long Term Benefits	-	-
4. Administrative expenses and taxes	-	-
5. Defined benefit cost included in P&L	522,849	429,686
6. Remeasurements (recognized in other comprehensive income)		
a. Effect of changes in demographic assumptions	423,097	401,605
b. Effect of changes in financial assumptions	(597,145)	860,660
c. Effect of experience adjustments	-	194,537
d. (Return) on plan assets (excluding interest income) *	-	-
e. (Return) on reimbursement rights (excluding interest income)	-	-
f. Changes in asset ceiling/onerous liability (excluding interest income)	-	-
g. Total remeasurements included in OCI	(174,048)	1,456,802
7. Total defined benefit cost recognized in P&L and OCI	348,801	1,886,488
<b>E. Net defined benefit liability (asset) reconciliation</b>		
1. Net defined benefit liability (asset)	5,502,435	3,747,083
2. Defined benefit cost included in P&L	522,849	429,686
3. Total remeasurements included in OCI	(174,048)	1,456,802
4. Other significant events		
a. Net transfer in/(out) (including the effect of any business combinations/divestitures)	-	-
b. Amounts recognized due to plan combinations	-	-
5. Cash flows		
a. Employer contributions	-	-
b. Employer direct benefit payments	(140,423)	(131,136)
6. Credit to reimbursements	-	-
7. Effect of changes in foreign exchange rates	-	-
8. Net defined benefit liability (asset) as of end of year	5,710,813	5,502,435

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Financial year ending on	12/31/2013	12/31/2012
<b>F. Defined benefit obligation</b>		
1. Defined benefit obligation by participant status		
a. Actives	3,249,749	3,202,537
b. Vested deferreds	-	-
c. Retirees	2,461,064	2,299,898
d. Total	5,710,813	5,502,435
<b>G. Significant actuarial assumptions</b>		
<i>Weighted-average assumptions to determine benefit obligations</i>		
1. Discount rate	5.00%	4.50%
2. Post-retirement mortality table	90 % UP94 Generational with 150% Scale AA	UP94 Generational
3. Retirement rate	Age and Service Based	Age and Service Based
4. Health care Trend	6.49%	6.60%
<i>Weighted-average assumptions to determine defined benefit cost</i>		
1. Discount rate	4.50%	5.30%
2. Post-retirement mortality table	UP94 Generational	UP94 Generational
3. Retirement rate	Age and Service Based	Age and Service Based
4. Health care Trend	6.60%	6.81%
<b>H. Sensitivity analysis</b>		
1. Discount rate		
a. Discount rate - 100 basis points	6,809,933	
Assumption	4.00%	
b. Discount rate + 100 basis points	4,757,194	
Assumption	6.00%	
2. Mortality		
a. Life Expectancy - 1 year	5,492,218	
b. Life Expectancy + 1 year	5,933,989	
3. Retirement		
a. Expected Retirement Age - 1 year	5,830,142	
b. Expected Retirement Age + 1 year	5,591,484	
4. Health care cost trend rates		
a. Health care cost trend rates - 100 basis points	4,685,657	
Assumption - Initial	5.49%	
Assumption - Ultimate	3.50%	
b. Health care cost trend rates + 100 basis points	7,068,022	
Assumption - Initial	7.49%	
Assumption - Ultimate	5.50%	

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Financial year ending on

12/31/2013

12/31/2012

**I. Expected cash flows for following year**

1. Expected employer contributions	142,037
2. Expected contributions to reimbursement rights	-
3. Expected total benefit payments	
Year 1	142,037
Year 2	161,219
Year 3	166,666
Year 4	173,627
Year 5	184,551
Next 5 years	1,110,701



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## APPENDIX B

### Estimated 2014 Defined Benefit Cost Information

Financial year ending on	12/31/2014
<b>A. Components of projected defined benefit cost</b>	
1. Service cost	
a. Current service cost	268,727
b. Reimbursement service cost	-
c. Past service cost	-
d. (Gain) / loss on settlements	-
e. Total service cost	268,727
2. Net interest cost	
a. Interest expense on DBO	281,990
b. Interest (income) on plan assets	-
c. Interest (income) on reimbursement rights	-
d. Interest expense on effect of (asset ceiling)/onerous liability	-
e. Total net interest cost	281,990
3. Remeasurements of Other Long Term Benefits	-
4. Administrative expenses and taxes	-
5. Defined benefit cost included in P&L	550,717

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Financial year ending on

12/31/2014**B. Expected cash flows used to determine defined benefit cost**

1. Employer contributions	-
2. Participant contributions	-
3. Benefit payments from plan	-
4. Benefit payments from employer	142,037
5. Settlement payments from plan	-
6. Administrative expenses	-
7. Taxes	-
8. Insurance premiums for risk benefits	-
9. Employer contributions to reimbursement rights	-
10. Reimbursements to employer	-

**C. Weighted-average assumptions to determine defined benefit cost**

1. Discount rate	5.00%
2. Post-retirement mortality table	90 % UP94 Generational with 150% Scale AA
3. Retirement rate	Age and Service Based
4. Health care Trend	6.49%

## APPENDIX C

### Actuarial Assumptions

The assumptions as at the reporting date are used to determine the present value of the benefit obligation at that date and the defined benefit cost for the following year. We have used actuarial assumptions selected by GLP Transmission. The principal financial and demographic assumptions used at 31 December 2013 and 31 December 2012 are shown in the table below.

<i>Discount rate</i>	<ul style="list-style-type: none"> <li>• 5.30% per annum for 2012 defined benefit cost determination</li> <li>• 4.50% per annum for 2012 disclosure and 2013 defined benefit cost determination</li> <li>• 5.00% per annum for 2013 disclosure and estimated 2014 defined benefit cost determination</li> </ul>	
<i>Salary increases</i>	N/A	
<i>Health care cost trend rates</i>	Semi-Private Hospital	4.5% per annum
	Prescription Drugs	8.5% per annum in 2012 grading down to 4.5% per annum in and after 2029
	Other Medical	4.5% per annum
	Vision Care	4.5% per annum
	Dental	4.5% per annum
<i>Mortality for 2012 disclosure and 2013 defined benefit cost determination</i>	Uninsured Pensioners 1994 fully generational mortality table	
<i>Mortality for 2013 disclosure and estimated 2014 defined benefit cost determination</i>	90% of UP 1994 Mortality projected to 2014 using Scale AA and projections of future mortality improvements based on 150% of projection Scale AA	
<i>Withdrawal or disability</i>	No allowance for withdrawal or disability	
<i>Retirement rates</i>	60% at earliest age when fully eligible for benefits, and 40% at age 65	
<i>Dependent coverage</i>	Active members electing dependant coverage upon retirement varies by gender as follows:	
	• Males	80%
	• Females	80%
	Actual coverage data provided by the client is used for retired members.	

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<i>Age difference</i>	For active members, a male is assumed to be 3 years older than his spouse. Actual data provided by the client is used for retired members.					
<i>2012 age 65 per capita claim costs excluding administration and taxes</i>	Semi-Private Hospital		\$110			
	Prescription Drugs <sup>1</sup>		2,710			
	Other Medical		400			
	Vision Care		60			
	Dental Care		400			
	<b>Total</b>		<b>\$3,680</b>			
<i>Increases in utilization by age</i>	<b>Age</b>	<b>Vision</b>	<b>Hospital</b>	<b>Drugs</b>	<b>Other</b>	<b>Dental</b>
	55	106%	45%	75%	106%	107%
	60	103%	64%	88%	103%	104%
	65	100%	100%	100% <sup>2</sup>	100%	100%
	70	97%	161%	109%	102%	95%
	75	95%	253%	113%	110%	90%
	80	92%	388%	114%	121%	83%
<i>Prescription drug offset assumption at age 65 and after</i>	70% of claims (plan does not cover the ODB \$100 deductible and \$6.11 dispensing fee)					
<i>Administrative expenses as a percentage of paid claims</i>	Drugs – 8.9%					
	Other Medical – 11.4%					
	Dental – 9.2%					
	Life Insurance – 3.6%					
<i>Taxes</i>	Ontario – 10% of claims and administrative expenses					
	Québec – 11.35% of claims and administrative expenses					
<i>Participation</i>	100% of eligible members are assumed to participate in the retiree health plan					

<sup>1</sup> The costs shown for prescription drugs at age 65 are prior to the assumed offset at age 65.

<sup>2</sup> The utilization factors shown for prescription drugs are prior to the effect of any provincial drug programs.

# APPENDIX D

## Actuarial Methods

This Appendix describes the methods used to value the Plan as well as accounting policies used to calculate the defined benefit cost.

### Valuations and Extrapolations

We have prepared an actuarial valuation of GLP Transmission's Non-Pension Post-Employment Benefit Plan identified in section 1 for accounting purposes as at 01 April 2012 and extrapolated those results to 31 December 2012. In accordance with our mandate, the purpose of this valuation and extrapolation is to determine the defined benefit cost of the Plan in accordance with IAS 19R for the fiscal year beginning 01 January 2013 and ending 31 December 2013 to enable the GLP Transmission to account for the cost of the Plan under IAS 19R.

In addition, we have prepared a second actuarial valuation of GLP Transmission's non-pension post-employment benefits for accounting purposes as at 01 April 2012 and extrapolated those results to 31 December 2013. In accordance with our mandate, the purpose of this valuation and extrapolation is to determine the obligations of the Plan in accordance with IAS 19R to enable GLP Transmission to satisfy the disclosure requirements under IAS 19R.

### Cost Method

The present value of defined benefit obligations, the current service cost, and if applicable the past service costs in this report have been calculated using the Projected Unit Credit Method as described in IAS 19R. The objective under this method is to expense each member's benefits under the Plan as they accrue, taking into consideration projections of benefit costs to and during retirement.

The Defined Benefit Obligation ("DBO") for each individual is determined under this method as follows:

- For each active member, a "full eligibility" date is determined as the date the member has or will have met the age and service requirements to qualify for all benefits after retirement. Full eligibility for GLP – Transmission is:
  - Age 55 and 2 years of continuous service for union employees hired prior to 01 January 2012
  - Age 55 and 14 years of continuous service for union employees hired after 01 January 2012
  - The later of age 55 and the date at which age plus service equals 85 for salaried employees

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- The DBO for active members who have not yet reached “full eligibility” is the actuarial present value of that member’s projected benefits multiplied by the ratio of service at the valuation date to projected service at “full eligibility”.
- The DBO for retirees or active members who have reached the “full eligibility” date is the actuarial present value of current or projected benefits.

Current service cost for each individual is determined under this method as follows:

- For active members who have not yet reached “full eligibility” the current service cost is the actuarial present value of the benefit deemed to accrue in the fiscal year and is determined as the present value of all future projected benefits divided by the projected service at “full eligibility”.
- The current service cost is nil for retirees and for active members who have reached “full eligibility”.

A plan’s current service cost is the sum of the individual current service costs, and a plan’s DBO is the sum of the individual DBOs for all members under the plan.

### ***Changes Since Prior Valuation***

There have been no changes to the cost method since the last valuation.

### ***Excluded Benefits***

LTD payments for medical and dental benefits have been excluded due to materiality reasons.

### ***Plan Assets***

The non-pension post-employment benefits described in this report are funded on a pay-as-you-go basis. GLP Transmission funds on a cash basis as benefits are paid. No assets have been segregated and restricted to provide the non-pension post-employment benefits.

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## Accounting Policies

### Past Service Costs

In accordance with IAS 19R, past service costs/(credits) emerging from plan amendments will be recognized immediately in the P&L defined benefit cost.

### Gains and Losses

Gains and losses flow through OCI.

### Attribution

Obligations are attributed to the period beginning on the member's date of hire and ending on the date the member reaches first full eligibility for benefits.

### Claims Data

We have used claims and expense data submitted by Brookfield Renewable Power, without further audit and membership data as supplied by GLP Transmission. We have reviewed the information for internal consistency, and we have no reason to doubt its substantial accuracy

# APPENDIX E

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## Plan Provisions

The following is a summary of what we understand to be the most relevant plan provisions for purposes of this report. This broadly reflects the benefits communicated to members via membership booklets, announcements and correspondence outlining special terms where applicable. This summary should not be used for purposes of determining individual plan benefits.

### *Eligibility*

- Retirees entitled to a pension are eligible for life insurance, medical and dental coverage as described below.
- An employee may retire and be eligible for benefits at:
  - Age 55 and 2 years of continuous service for union employees hired prior to 01 January 2010
  - Age 55 and 14 years of continuous service for union employees hired after 01 January 2010
  - The later of age 55 and the date at which age plus service equals 85 for salaried employees hired prior to 01 January 2012
- Spouses and dependants are eligible for medical and dental coverage while the retiree is alive, and upon employee death, widow coverage is also provided.

### *Benefits*

#### **Life Insurance**

- Life insurance coverage equal to \$3,000 for all eligible employees.



## Medical

- Covered Benefits:
  - Prescription Drugs
    - Pay Direct Drug Card
    - Drugs that legally require a prescription
    - Eligible for lowest priced interchangeable alternative unless no substitution prescribed
  - Semi-private and private hospital in Canada.
  - Out of country hospital coverage
  - Paramedical Services (subject to various per visit maximums)
  - Ambulance Services
  - Eye exams limited to \$75 per visit
  - Private duty nursing by a registered nurse, including in home coverage and out of country coverage.

## Vision Care

- Contact lenses, eyeglass lenses and prescription and sunglasses prescribed by a licensed physician or optometrist
- Frames for eyeglass lenses
- Maximum of \$400/2 years

## Dental

- Co-insurance:
  - Diagnostic & Preventive Services (100%)
- Exclusions & Limitations
  - ODA Fee Guide: Current Year
  - One complete set of dentures per lifetime

IAS 19 (REV 2011)

ACTUARIAL VALUATION REPORT AS AT 31 DECEMBER 2013

NON-PENSION POST-EMPLOYMENT BENEFITS PLAN

BROOKFIELD RENEWABLE POWER-GREAT LAKES POWER LIMITED – TRANSMISSION

## APPENDIX F

### Participant Data

The actuarial valuations are based on Participant data as at 01 April 2012, provided by GLP Transmission.

Participant data are summarized below. For comparison, we have also summarized corresponding data from the previous valuation.

GLP Transmission	01.04.12	01.01.09
<b>Active Members</b>		
Number	51	34
Average years of service	11.4 years	13.4 years
Average age	43.9	44.5
<b>Retirees and Surviving Spouses</b>		
Number retirees	18	18
Average age	68.7	66.6
Average life insurance benefit	\$3,000	\$3,000
Number retirees with spouse	16	16
Average age of spouses	64.8	62.9
Number of surviving spouses	6	8
Average age of surviving spouses	82.1	78.5

IAS 19 (REV 2011)

ACTUARIAL VALUATION REPORT AS AT 31 DECEMBER 2013

NON-PENSION POST-EMPLOYMENT BENEFITS PLAN

BROOKFIELD RENEWABLE POWER-GREAT LAKES POWER LIMITED – TRANSMISSION

Appendix 1 Staff-22(a)

Page 33 of 37

The distribution of the active GLP Transmission participants by age and completed years of service as at 01 April 2012 is summarized as follows:

**Distribution of Active GLP Transmission Participants  
By Age Group and Completed Years of Service as at 01.04.12**

Age	Years of Completed Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
Under 20								0
20 - 24								0
25 - 29	4	1						5
30 - 34	5							5
35 - 39	4	2	3					9
40 - 44	4	4						8
45 - 49	1	4		1	1	2		9
50 - 54		1	3		1	1	3	9
55 - 59	1					1	2	4
60 - 64		1			1			2
65+								0
<b>Total</b>	<b>19</b>	<b>13</b>	<b>6</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>51</b>

IAS 19 (REV 2011)

ACTUARIAL VALUATION REPORT AS AT 31 DECEMBER 2013

NON-PENSION POST-EMPLOYMENT BENEFITS PLAN

BROOKFIELD RENEWABLE POWER-GREAT LAKES POWER LIMITED – TRANSMISSION

Appendix 1 Staff-22(a)

Page 34 of 37

The distribution of the GLP Transmission retirees and surviving spouses by age as at 01 April 2012 is summarized as follows:

**Distribution of GLP Transmission Retirees and Surviving  
Spouses By Age Group as at 01.04.12**

<b>Age</b>	<b>Number</b>
Under 50	0
50 - 54	0
55 - 59	3
60 - 64	8
65 - 69	2
70 - 74	4
75 - 79	2
80 - 84	1
85 - 89	1
90+	3
<b>Total</b>	<b>24</b>

IAS 19 (REV 2011)

ACTUARIAL VALUATION REPORT AS AT 31 DECEMBER 2013

NON-PENSION POST-EMPLOYMENT BENEFITS PLAN

BROOKFIELD RENEWABLE POWER-GREAT LAKES POWER LIMITED – TRANSMISSION

## APPENDIX G

### Additional Information

#### *Analysis of Liability (Gain) Loss*

<b>(Gains) and losses due to:</b>	<b>Due to Remeasurement at 31 December 2013</b>
Change in Discount Rate	(\$597,145)
Change in Mortality Table	423,097
<b>Total</b>	<b>(\$174,048)</b>

#### *Non-Pension Post-Employment Benefit Obligation as at 31 December 2013*

	<b>Total</b>
Current retirees	2,461,064
Active participants fully eligible	643,961
Active participants not fully eligible	2,605,788
<b>Total</b>	<b>5,710,813</b>

IAS 19 (REV 2011)

ACTUARIAL VALUATION REPORT AS AT 31 DECEMBER 2013

NON-PENSION POST-EMPLOYMENT BENEFITS PLAN

BROOKFIELD RENEWABLE POWER-GREAT LAKES POWER LIMITED – TRANSMISSION

## APPENDIX H

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### Employer Certification

With respect to the Actuarial Valuation Report for fiscal year ending 31 December 2013 and estimated defined benefit cost for 31 December 2014 under International Financial Reporting Standards of the GLP Transmission's Non-Pension Post-Employment Benefit Plan, I hereby certify that, to the best of my knowledge and belief:

- The participant data supplied to the actuary provides a complete and accurate description of all persons who are entitled to benefits under the terms of the Plan for service up to the date of the valuation.
- Copies of the official plan documents and of all amendments made up to 31 December 2013 have been supplied to the actuary.
- All constructive obligation (as defined under International Financial Reporting Standards) have been communicated to the actuary.
- Accounting policies as adopted by GLP Transmission are those described in this report.
- The actuarial methods to be used for the purposes of the valuation are those described in this report.
- GLP Transmission's best estimate assumptions for purposes of the valuations and the extrapolation of the financial position of the Plan as at 31 December 2013 are those described in this report.
- All events subsequent to the valuation that may have an impact on the results of the valuation or of a future valuation have been communicated to the actuary.

Jan 31, 2014

Date



Signed

Scott Seabrook

Name

Director of Administration

Title



Mercer (Canada) Limited  
161 Bay Street, P.O. Box 501  
Toronto, Ontario M5J 2S5  
+1 416 868 2000

Exhibit 9, Tab 3, Schedule 1

Responses to SEC Interrogatories



**School Energy Coalition (“SEC”) Interrogatories  
Great Lakes Power Transmission LP (“GLPT”)  
2015-2016 Cost of Service Revenue Requirement  
EB-2014-0238**

**1-SEC-1**

**Question:**

Does the Applicant or one of its corporate affiliates/parents produce a Business Plan or similar type of document for the Applicant’s operations? If so, please provide a copy.

**Response:**

GLPT has attached a copy of its 2015-2019 business plan as Appendix 1-SEC-1.

**1-SEC-2**

**Reference:** Ex.1-5-11

**Question:**

Please explain the Applicant's governance structure, with specific emphasis on the approval of its annual budget and rate applications.

**Response:**

GLPT prepares a five year business plan where the first two years are reflected in GLPT's rate application information. The plan is submitted to the Vice President, Operations of GLPT for approval. Once the plan is approved by the Vice President, Operations of GLPT, the plan is presented to the Electric Utility Group management of Brookfield. Once approved by the Electric Utility Group management, the plan is considered approved and the information is provided to the corporate managers of GLPT. With the rate application information embedded in the business plan, this approval also includes the approval for the rate application.

## 2-SEC-3

**Reference:** Ex.2-1-1-p.4,15

**Question:**

With respect to the Wood Structure Replacement program:

- (a) Please provide the forecasted and actual budgets for the program for each year between 2012-2014.
- (b) Please provide the number of wood structures replaced, by type, for each year between 2012-2014 .

**Response:**

- a) GLPT has provided the table below displaying OEB approved figures and actual/forecast figures for the project for 2012-2014.

*Table 2-SEC-3 A – Approved vs. Actual Wood Structure Replacements*

	Project		
	OEB Approved	Actual/Forecast	Variance
2012	\$1,360,400	\$1,345,400	(\$15,000)
2013	1,710,400	1,757,100	46,700
2014	3,183,500	3,183,500	-
<b>Total</b>	<b>\$6,254,300</b>	<b>\$6,286,000</b>	<b>\$31,700</b>

- b) GLPT has provided the table below displaying the number of wood structures and poles replaced for each of 2012-2014

*Table 2-SEC-3 B – Structures & Poles Replaced 2012-2014*

<i>Year</i>	<i>Wood Structures Replaced</i>
<i>2012</i>	<i>8</i>
<i>2013</i>	<i>13</i>
<i>2014</i>	<i>20</i>

## 2-SEC-5

**Reference:** Ex.2-1-1-p.8

### Question:

With respect to the Highway 101 TS 44kv Upgrade project:

- (a) Please provide the number and duration of outages at the Highway 101 TS for each year between 2008-2014.
- (b) Please provide details regarding the average standard of performance and minimum standard of performance for each year between 2008-2014.

### Response:

- a) Please refer to GLPT's response to part (b) below for the actual statistics at Highway 101 TS.
- b) The tables below provide details regarding the average standard of performance, minimum standard of performance and actual performance for both duration and frequency of outages at the Highway 101 TS delivery point for each year between 2008 and 2014.

*Table 2-SEC-5 A – Frequency Statistics at Highway 101 TS*

<b>Frequency (# of Outages) Statistics - Highway 101 TS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>YTD 2014</b>	<b>Avg</b>
Average Standard of Performance - Frequency	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Minimum Standard of Performance - Frequency	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
GLPT Actual Frequency	2.0	-	6.0	5.0	13.0	2.0	1.0	4.1

*Table 2-SEC-5 B – Duration Statistics at Highway 101 TS*

<b>Duration Statistics - Highway 101 TS</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>YTD 2014</b>	<b>Avg</b>
Average Standard of Performance - Duration (Minutes)	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
Minimum Standard of Performance - Duration (Minutes)	360.0	360.0	360.0	360.0	360.0	360.0	360.0	360.0
GLPT Actual Duration (Minutes)	212.0	-	1,045.0	233.0	1,549.0	402.0	14.0	494.0

As indicated by *Table 2-SEC-5 B* GLPT's concern lies with the duration of outages that occur at Highway 101 TS. Over the past 7 years (including a part year in 2014), the average duration has been 494 minutes compared to the minimum standard of 360 minutes and the average standard of 89 minutes.

**2-SEC-6**

**Reference:** Ex.2-1-1

**Question:**

Please provide the forecasted in-service date for all material capital projects in 2014, 2015, and 2016.

**Response:**

The table below provides the forecasted in-service dates for all material capital projects in 2014, 2015 and 2016.

*Table 2-SEC-6 A*

Year	Project	Projected in Service Date
2014	Wood Structure Replacements	Q4 2014
2014	Third Line TS Oil Containment	Q3 2014
2015	Wood Structure Replacements	Q3 2015
2015	Highway 101 TS 44kV Upgrades	Q3 2015
2015	ERP Upgrade	Q3 2015
2016	Wood Structure Replacements	Q3 2016
2016	Anjigami Refurbishment	Q3 2016
2016	Watson TS T2 Breaker and Protection Upgrade	Q3 2016
2016	MacKay Ground Grid	Q3 2016
2016	Magpie CT Replacement	Q3 2016

**2-SEC-7**

**Reference:** Ex.2-1-3

**Question:**

Please provide a copy of the 2010 Navigant lead lag study.

**Response:**

GLPT has attached the lead lag study prepared by Navigant in 2010 for the 2011 and 2012 test years as Appendix 2-SEC-7

#### 4-SEC-8

**Reference:** Ex.4-2-1-Appendix A

**Question:**

Please provide a list of all other transmission companies that are part of the First Quartile Consulting cost analysis.

**Response:**

The companies in the comparison panel are the following:

- Baltimore Gas and Electric (BGE)
- CenterPoint Energy
- ComEd
- KCP&L
- Oncor Electric Delivery
- PECO Energy
- Portland General Electric
- Public Service Electric & Gas
- Puget Sound Energy
- Tucson Electric
- Westar Energy

#### 4-SEC-9

**Reference:** Ex.4-2-1-p.3

**Question:**

Please explain why the Applicant believes it is appropriate to forecast its 2015 and 2016 inflation rate based on inflation data from 2009-2013? Does the Applicant have any information from any source regarding forecasted inflation rates for 2015 and 2016? If so, please provide details.

**Response:**

The inflation rate methodology used by GLPT (i.e., based on historical data) for the 2015-2016 test years is the same as that used in GLPT's 2013-2014 test years which was determined via settlement with all parties in EB-2012-0300.

The rate used by GLPT is in line with the Bank of Canada's inflation target of 2% with a tolerance band of 1%, as demonstrated at:

<http://www.bankofcanada.ca/core-functions/monetary-policy/framework/inflation-control-target/>

The rate used by GLPT is also in line with the 2% rate provided by Hydro One Transmission in Table 2 on page 3 of Exhibit A, Tab 15, Schedule 1, and in Table 2 on page 1 of Exhibit I, Tab 3, Schedule 1 of its 2015-2016 rate application, EB-2014-0140. The rates provided by Hydro One are based on forecasts from Global Insight.



#### 4-SEC-10

**Reference:** Ex.4-2-1

**Question:**

Please detail all productivity initiatives that the Applicant has undertaken in 2013 and 2014, any forecasting to undertake in 2015 and 2016. Please detail the expected cost savings from these initiatives.

**Response:**

GLPT is consistently seeking productivity improvements in an effort to manage upward cost pressure and continue to operate within its approved OM&A envelopes. These measures include:

*2013-2014:*

- (i) From a human resource perspective GLPT is providing improved tools and reports that allow its management group to make optimal decisions and maximize the value delivered by the workforce. These include overtime reports that help GLPT manage overtime costs and sick time reports that assist managers with managing sick days. GLPT estimates that it has been able to reduce its overtime costs by close to \$50,000 per year to assist in mitigating negotiated increases in labour costs that are higher than the year-over-year increases in GLPT's OM&A recovery.
- (ii) In 2014, GLPT changed its eligibility criteria for post-employment benefits – non-union employees who started with GLPT after January 1, 2005 are no longer eligible for post-employment benefits. GLPT anticipates that this will decrease its annual expense by approximately \$100,000, helping offset other increases in pension and benefit expenses.
- (iii) GLPT is seeking efficiencies within its lines and forestry patrolling. In past years patrols were executed separately where two foresters would patrol a line section and two linemen would patrol a line section. GLPT has established a new approach of one forester and one lineman dedicated to the same patrol to allow for gathering of necessary data for both the lines and forestry departments with only the single travel requirement. This type of efficiency not only increases GLPT's overall operational effectiveness, but it has allowed GLPT to launch a new public safety initiative on its right of way and absorb the cost within its approved OM&A envelope. The new initiative is a public safety hazard assessment on the right of way, completed by an independent third party paired up with a GLPT forester.

*2015-2016:*

- (i) Starting in 2015 GLPT intends to conduct a detailed review of its Lines and Forestry preventative maintenance programs to ensure best use of resources in the field. The current right of way maintenance program was initiated in the early 2000's and 2015 will mark the completion of two full cycles of GLPT's entire right of way. Based on the improved condition of the vegetation on the right of way, the new tools and resources available to GLPT staff (i.e., Toughbook computers in the field, GIS system, etc.), and the efficiencies in pairing up forestry and lines patrols, GLPT believes there is an opportunity to review the program and find further efficiencies to improve productivity.

The activities in the test period would include a review of the types of maintenance activities undertaken, the cycles over which the maintenance takes place, and the drivers for the various activities that are currently part of the maintenance plan. GLPT is optimistic that it will find efficiencies that it can implement in its right of way maintenance program starting in 2017.

- (ii) As discussed in other parts of this application, GLPT is looking to improve productivity through the implementation of a new ERP System in 2015. While this is not expected to result in immediate cost savings it is expected to improve productivity and quality of operational reporting. The longer term efficiencies are described in some more detail in GLPT's response to 2-Staff-8 part (b).

GLPT notes that while it does realize some efficiencies and cost savings in these areas, the savings are primarily used to offset or mitigate non-discretionary cost increases in other areas of the business.

#### 4-SEC-11

**Reference:** Ex.4-2-1-p.14

**Question:**

Please provide the rationale for the proposed Compliance Analyst position.

**Response:**

As described on pages 12-15 of Exhibit 4, Tab 2, Schedule 1 there are a number of non-discretionary and continuing changes taking place in the electricity industry in Ontario that affect GLPT and its compliance program. The changes include, among other things:

- i. Updates to Critical Infrastructure Protection (“CIP”) standards governed by North American Electric Reliability Corporation (“NERC”). A revised and more complex version of standards (v5) will be adopted by GLPT during the test period and will require maintenance to ensure compliance at all times.
- ii. A change to the definition of the Bulk Electric System (“BES”), as defined by NERC, resulting in new compliance measures that must be put in place by GLPT. These new compliance concerns are discussed in more detail in GLPT’s response to 4-Energy Probe-14 part (d).

The role of the Compliance Analyst position will be to execute all of the incremental tasks and duties related to compliance. In addition, the Compliance Analyst will alleviate some of the responsibility and accountability of GLPT’s Manager, GLP System Control to ensure that appropriate focus is paid to all of the duties of the position in the face of changing regulatory compliance requirements. It is not reasonable to expect the incremental compliance requirements to be absorbed by the management team at GLPT. Further to that, the filling of the Compliance Analyst role will position GLPT for potential succession planning in the future.

GLPT has provided additional information on the duties of the Compliance Analyst in its response to 4-Energy Probe-16 parts (a) and (d).

**4-SEC-12**

**Reference:** Ex.4-2-1-p.17

**Question:**

What percentage of the Applicant's employees historically retire within the first year of their eligibility?

**Response:**

In its response to this interrogatory GLPT has only used data related to unionized employees. This ensures that a fair comparison is made to the unionized First Operators who will be eligible to retire as referenced in the pre-filed evidence.

Since GLPT began operating on a stand-alone basis on July 1, 2009, there have been three unionized employees who have achieved eligibility for an unreduced pension. Of these three employees, two achieved eligibility for an unreduced pension based on the combination of their age and years of service, where both of these retired in the first month of eligibility.

The third employee became eligible for an unreduced pension at September 1, 2013 upon reaching age 65, and is still working with GLPT. However, while the employee is eligible for an unreduced pension, the employee has a limited number of years of service, thus providing an incentive to continue working beyond age 65.

As described in GLPT's response to 4-Energy Probe-17 part (d), GLPT hired a First Operator in January 2014 as the start of a succession plan. The new First Operator was hired to replace the individual who is still working but eligible for retirement. Management understands that this particular employee is intending to retire in the first part of 2015, which aligns with GLPT's proposed 12-18 month overlap for the hiring of a First Operator.

GLPT also notes that the three individuals who will be eligible for retirement in the next three years, as referenced in the pre-filed evidence, will all be eligible for an unreduced pension based on the combination of their age and years of service, not as a result of reaching age 65. These three individuals are incremental to the three individuals who had already achieved eligibility for retirement.

**4-SEC-13**

**Reference:** Ex.4-2-3-p.7

**Question:**

Please provide a copy of the Navigant report referenced.

**Response:**

GLPT has attached the Navigant report on corporate cost allocation as Appendix 4-SEC-13.

#### 4-SEC-14

**Reference:** Ex.6-1-2-p.3

**Question:**

Please provide information to support the reasonableness of the quantum of the Comstock Claim costs.

**Response:**

GLPT has provided information on the quantum of the Comstock Claim costs in its response to 6-Staff-28.

The Comstock claim was filed in 2006. As described on page 3 of Exhibit 6, Tab 1, Schedule 2, the costs incurred by GLPT in relation to the claim up to December 31, 2013 are related to legal and witness costs for the proceeding. The costs included the exchange between the parties of approximately 44,000 documents, and the substantial completion of examinations for discovery, since the onset of litigation. These are typical elements of such commercial litigation, and the associated quantum of costs reflects the complexity of the Comstock Claim and the intensity with which it was pursued.

Ultimately, costs incurred by GLPT to date have been incurred with the long-term protection of ratepayers in mind and to ensure that the claim is properly evaluated and defended.

#### 4-SEC-15

**Reference:** Ex.6-1-2-p.13

**Question:**

Please provide details to support the reasonableness of the Applicant incurring \$54,972 in legal costs in support of the East-West Tie Line designation process.

**Response:**

GLPT's role in the East-West Tie Line designation process was as an incumbent transmitter. In this role, GLPT was required by the Board to both participate in the proceeding and provide a significant amount of information during the designation process. GLPT obtained independent external counsel to ensure that the appropriate confidentiality/firewall protocol was followed throughout the process, and that no one applicant was treated favourably or given information selectively over another.

The legal costs incurred by GLPT were standard and appropriate for a party to a proceeding, and included:

- Correspondence with the Ontario Energy Board;
- Preparation of its submissions and review of other parties' submissions;
- Protecting confidentiality by developing and adhering to appropriate firewall protocols, as described above;
- Reviewing and following procedural orders; and
- Attending consultations at the Ontario Energy Board

The costs were incurred prudently by GLPT in its role as an incumbent transmitter in the EWT Line Designation process.

Exhibit 9, Tab 3, Schedule 1

Appendices to Responses to SEC Interrogatories



## Financial Model

### **Great Lakes Power Transmission LP 2015-2019 Financial Budget**

## **Great Lakes Power Transmission LP**

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## **Financial Statements**

**Great Lakes Power Transmission LP**

Balance Sheet - Annual

	2015	2016	2017	2018	2019
<b>Assets</b>					
<b>Current assets</b>					
Cash	\$ 3,970,920	\$ 3,973,550	\$ 4,084,073	\$ 3,706,169	\$ 2,348,866
Trade and other receivables	3,380,825	3,418,206	3,380,687	3,402,111	3,367,957
Due from related parties	35,000	35,000	35,000	35,000	35,000
Prepaid expenses and other	450,000	450,000	450,000	450,000	450,000
	<u>7,836,745</u>	<u>7,876,756</u>	<u>7,949,760</u>	<u>7,593,280</u>	<u>6,201,823</u>
<b>Property, plant and equipment</b>					
Gross	257,340,984	267,109,668	276,778,174	285,883,978	295,983,689
CWIP	1,943,145	1,554,132	1,338,583	1,748,375	1,148,583
Accum. deprec.	(36,740,554)	(46,576,741)	(56,412,928)	(66,249,115)	(76,085,302)
<b>Property, plant and equipment, net</b>	<u>222,543,575</u>	<u>222,087,059</u>	<u>221,703,829</u>	<u>221,383,238</u>	<u>221,046,970</u>
	<u>\$ 230,380,319</u>	<u>\$ 229,963,815</u>	<u>\$ 229,653,589</u>	<u>\$ 228,976,518</u>	<u>\$ 227,248,792</u>
<b>Liabilities and Partners' equity</b>					
<b>Current liabilities</b>					
Trade and other payables	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,400,000	\$ 2,400,000
Current portion of trans senior bonds	2,326,642	2,482,735	2,649,299	2,827,038	3,016,701
Due to related parties	180,000	180,000	180,000	180,000	180,000
	<u>4,506,642</u>	<u>4,662,735</u>	<u>4,829,299</u>	<u>5,407,038</u>	<u>5,596,701</u>
<b>Pension liability</b>	<u>7,052,000</u>	<u>7,052,000</u>	<u>7,052,000</u>	<u>7,052,000</u>	<u>7,052,000</u>
<b>Trans senior bonds</b>	<u>110,627,376</u>	<u>108,364,285</u>	<u>105,942,817</u>	<u>103,351,884</u>	<u>100,579,627</u>
	<u>122,186,018</u>	<u>120,079,020</u>	<u>117,824,115</u>	<u>115,810,922</u>	<u>113,228,328</u>
<b>Partners' equity</b>	<u>108,194,301</u>	<u>109,884,795</u>	<u>111,829,473</u>	<u>113,165,597</u>	<u>114,020,465</u>
	<u>\$ 230,380,319</u>	<u>\$ 229,963,815</u>	<u>\$ 229,653,589</u>	<u>\$ 228,976,518</u>	<u>\$ 227,248,792</u>

## Great Lakes Power Transmission LP

### Statement of Partners' Equity - Annual

	2015	2016	2017	2018	2019
Opening balance	\$ 106,506,554	\$ 108,194,301	\$ 109,884,795	\$ 111,829,473	\$ 113,165,597
Net income	11,987,747	12,190,494	12,444,679	11,836,123	11,354,868
Distributions paid	(10,300,000)	(10,500,000)	(10,500,000)	(10,500,000)	(10,500,000)
<b>Closing balance</b>	<b>\$ 108,194,301</b>	<b>\$ 109,884,795</b>	<b>\$ 111,829,473</b>	<b>\$ 113,165,597</b>	<b>\$ 114,020,465</b>

**Great Lakes Power Transmission LP**

Income Statement - Annual

	2015	2016	2017	2018	2019
<b>Revenues</b>					
Transmission revenues	\$ 39,782,071	\$ 40,230,644	\$ 40,568,242	\$ 40,825,334	\$ 40,415,485
Regulatory account collection	787,816	787,816	787,852	-	-
<b>Total Revenues</b>	<b>40,569,887</b>	<b>41,018,460</b>	<b>41,356,094</b>	<b>40,825,334</b>	<b>40,415,485</b>
<b>Operating Expenses</b>					
Operations and administration	8,577,857	8,839,895	9,016,693	9,197,027	9,380,967
Maintenance	2,058,238	2,099,300	2,141,286	2,184,112	2,227,794
Insurance	365,000	372,282	379,728	387,322	395,069
Property taxes	237,800	240,800	245,616	250,528	255,539
Extraordinary expenditure	20,000	20,500	20,910	21,328	21,755
<b>Total Operating Expenses</b>	<b>11,258,895</b>	<b>11,572,777</b>	<b>11,804,233</b>	<b>12,040,317</b>	<b>12,281,124</b>
<b>Net Operating Income</b>	<b>29,310,992</b>	<b>29,445,683</b>	<b>29,551,862</b>	<b>28,785,017</b>	<b>28,134,362</b>
Interest - senior bonds	7,685,537	7,539,258	7,383,166	7,216,602	7,038,863
Deferred financing fees - senior bonds	211,570	219,644	227,830	236,105	244,443
Capitalized interest	(250,000)	(250,000)	(250,000)	(250,000)	(250,000)
Depreciation of transmission assets	9,766,038	9,836,187	9,836,187	9,836,187	9,836,187
Non controlling interest					
	<b>17,413,145</b>	<b>17,345,089</b>	<b>17,197,183</b>	<b>17,038,894</b>	<b>16,869,494</b>
Other income	(89,900)	(89,900)	(90,000)	(90,000)	(90,000)
<b>Net Income</b>	<b>\$ 11,987,747</b>	<b>\$ 12,190,494</b>	<b>\$ 12,444,679</b>	<b>\$ 11,836,123</b>	<b>\$ 11,354,868</b>

**Great Lakes Power Transmission LP**

## Statement of Cash Flows - Annual

	2015	2016	2017	2018	2019
<b>Operating Activities</b>					
Net Income	\$ 11,987,747	\$ 12,190,494	\$ 12,444,679	\$ 11,836,123	\$ 11,354,868
Items not affecting cash;					
Depreciation of transmission assets	9,766,038	9,836,187	9,836,187	9,836,187	9,836,187
Deferred financing fees	211,570	219,644	227,830	236,105	244,443
Net change in non-cash working capital & other	(215,377)	(37,381)	37,519	378,576	34,154
	21,749,979	22,208,943	22,546,215	22,286,991	21,469,653
<b>Investing Activities</b>					
Additions to property, plant and equipment	(9,219,800)	(9,379,671)	(9,452,957)	(9,515,596)	(9,499,919)
	(9,219,800)	(9,379,671)	(9,452,957)	(9,515,596)	(9,499,919)
<b>Financing Activities</b>					
Principal repayment - Trans senior bonds	(2,180,364)	(2,326,642)	(2,482,735)	(2,649,299)	(2,827,038)
Distributions paid	(10,300,000)	(10,500,000)	(10,500,000)	(10,500,000)	(10,500,000)
	(12,480,364)	(12,826,642)	(12,982,735)	(13,149,299)	(13,327,038)
(Decrease) increase in cash	49,815	2,630	110,524	(377,904)	(1,357,304)
Cash, beginning balance	3,921,105	3,970,920	3,973,550	4,084,073	3,706,169
<b>Cash, ending balance</b>	<b>\$ 3,970,920</b>	<b>\$ 3,973,550</b>	<b>\$ 4,084,073</b>	<b>\$ 3,706,169</b>	<b>\$ 2,348,866</b>

## Great Lakes Power Transmission LP

### Notes to Financial Model

For the years ending December 31, 2015, 2016, 2017, 2018 & 2019

#### 1. NATURE AND DESCRIPTION OF BUSINESS

GLPT is engaged in the safe, reliable, cost efficient and environmentally responsible transmission of electricity in the areas adjacent to Sault Ste. Marie, Canada and is subject to the regulations of the Ontario Energy Board (the "OEB").

#### 2. BASIS OF PRESENTATION

These forecasted financial statements are prospective results of operations and financial position based on assumptions that reflect the entity's expected courses of action for the period covered given management's best judgments as to the most probable set of economic conditions, together with one or more assumptions, which are consistent with management's judgment.

#### 3. BALANCE SHEET ASSUMPTIONS

##### Cash

GLPT expects to generate surplus cash periodically over the forecast periods. This excess cash will be distributed to the parent company on a quarterly basis in the first month of each quarter.

##### Trade and other receivables

Trade receivables are based on current month revenues, collectible from the Independent Electricity System Operator ("IESO") approximately 20 calendar days after the end of the month.

##### Due from related parties

GLPT has agreements in place for sharing the following assets with Sault Hydro Operations ("SHO"): (1) Fibre Optic assets, (2) Office Building and (3) Radio System assets. Fibre optic assets and the building are owned by SHO, requiring a lease payment from GLPT to SHO, while the Radio Systems assets are owned by GLPT, requiring a lease payment from SHO to GLPT.

Lease	GLPT	SHO	Total
Fibre Optic	241,443	-	241,443
Building	336,188	-	336,188
Radio	-	34,683	34,683
	<b>\$ 577,631</b>	<b>\$ 34,683</b>	<b>\$ 612,314</b>

##### Prepaid expenses and other

Prepaid expenses and other include but are not limited to OEB fees, Canadian Electricity Association fees, Electrical Safety Authority fees, insurance premiums and inventory.

##### Property, plant and equipment

Property, plant and equipment consists both of capital assets as well as construction work in progress. Property, plant and equipment are depreciated on a straight line basis at rates between 1.67% and 20%.

The company transfers assets classified as construction work in progress to property, plant and equipment when the asset being constructed is available to be put into service.

##### Trade and other payables

Trade and other payables represents trade accounts payable supporting operating and capital expenditures, and the interest payable on outstanding debt.

Interest on outstanding debt is accrued monthly with interest payments on Trans senior bonds made semi-annually in June and December.



## Great Lakes Power Transmission LP

### Notes to Financial Model

For the years ending December 31, 2015, 2016, 2017, 2018 & 2019

#### Due to related parties

GLPT has agreements in place for sharing the following assets with Sault Hydro Operations ("SHO"): (1) Fibre Optic assets, (2) Office Building and (3) Radio System assets. Fibre optic assets and the building are owned by SHO, requiring a lease payment from GLPT to SHO, while the Radio Systems assets are owned by GLPT, requiring a lease payment from SHO to GLPT.

Lease	GLPT	SHO	Total
Fibre Optic	241,443	-	241,443
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Radio	-	34,683	34,683
	<b>\$ 577,631</b>	<b>\$ 34,683</b>	<b>\$ 612,314</b>

#### Pension liability

GLPT participates in a non-registered post-employment benefit plan and a defined benefit pension plan. The net liability associated with these plans is reflected on the balance sheet as a pension liability. As a result of the implementation of IAS 19R in 2013, GLPT was required to recognize all unamortized losses incurred within the pension plan. This recognition of unamortized losses eliminated GLPT's pension asset and significantly increased its pension liability. It is assumed that pension expenses will be approximately equal to pension contributions and no material changes will take place to the existing liability over the term of these projected financial statements.

#### Trans senior bonds

Senior bonds have been issued for CDN\$120 million, the balance reflected on the balance sheet is net of financing fees and repaid principal. The financing fees will be amortized over a 20 year period.

Under the current bond agreement, principal re-payments began in December 2013. Principal repayment amounts that are due within one year are reflected as a current liability.

## 4. INCOME STATEMENT ASSUMPTIONS

#### Revenue

GLPT will file a rate application in 2014 for 2015-2016. Revenue for 2015 - 2016 is calculated using a Cost of Service approach to develop the company's annual revenue requirement. It is expected that the company will submit and receive approval for new revenue requirement effective January 1 of each year. Each year's revenue requirement will be dependent on the cost of capital parameters issued by the OEB for that year, particularly the Return on Equity component. For the cost of debt component, GLPT will utilize its effective debt rates based on outstanding third party debt for each year.

#### Regulatory account collection

In 2010, GLPT adopted IFRS for corporate reporting. As such, no regulatory assets or liabilities are recorded on the balance sheet. Any change in regulatory accounts instead flows through the Income Statement as either 'Regulatory Account Collection' or 'Regulatory Asset Costs'. 'Regulatory Account Collection' represents the disbursal of existing account balances. GLPT tracks all regulatory accounts separately. GLPT's assumptions related to balance collections and disbursements are found on the "Deferral Accounts" schedule.

#### Operating expenses

Operations, maintenance, administration, insurance, property taxes and extraordinary expenditures for 2014 are based on the OEB-approved 2014 budget. GLPT will file a rate application in 2014 for the 2015-2016 test years. It is expected that the company will submit and receive approval for new OM&A costs effective January 1 of each year. The incremental OM&A expenses for 2017 and 2018 are assumed to be collected through an OEB-approved revenue requirement.

## Great Lakes Power Transmission LP

### Notes to Financial Model

For the years ending December 31, 2015, 2016, 2017, 2018 & 2019

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#### Interest and financing fees

Interest expense is recorded on the outstanding Senior bonds at an effective rate of 6.89%, with a coupon interest rate of 6.60%.

#### Capitalized interest

Interest on funds used during construction is charged to construction work in progress at the company's weighted average interest rate on the outstanding Trans senior bonds. Interest is charged based on monthly closing balances in the construction work in progress account.

#### Depreciation of property, plant and equipment

Depreciation of the company's property, plant and equipment is forecasted based on net fixed asset values. Property, plant and equipment is depreciated on a straight line basis at rates between 1.67% and 20%.

#### Current and deferred income taxes

GLPT is a Limited Partnership, and as such does not pay income tax at the company level.

#### Other income

Where applicable, other income would represent revenues, expenses, gains or losses from activities that are not operational in nature (i.e., interest income earned on bank balance).

### 5. CASH FLOW ASSUMPTIONS

#### Depreciation and Amortization

Depreciation of the company's property, plant and equipment is forecasted based on net fixed asset values. Property, plant and equipment is depreciated on a straight line basis at rates between 1.67% and 20%.

#### Non-Cash Working Capital

Items considered as non-cash working capital include: trade and other receivables, prepaid expenses, and trade and other payable. The year-to-year variances in these accounts are reflected in the cash flow forecast.

#### Additions to Property Plant and Equipment

The cash flow budget is affected by the forecasted capital spending for each year. All capital spending is tracked through construction work in progress. The company transfers assets classified as construction work in progress to property, plant and equipment when the asset being constructed is put into service.

#### Distributions Paid

Distributions paid represent funds that are transferred to the parent company. Distributions will be paid in the first month of each quarter and will be based on the cash flow generated in the previous quarter, with consideration given to the cash requirements for the upcoming quarter.

GLPT will make payments to the parent company related to a corporate cost allocation in each year.

All distributions payments will abide by covenants found in GLPT's existing Deed of Trust.

## **Support Schedules**

**Great Lakes Power Transmission LP**

## Revenue Requirement Calculations

<i>Fiscal Year End: December 31</i>	2015	2016	2017	2018	2019
<b><u>Rate Base</u></b>					
Opening Gross Assets	\$ 250,064	\$ 259,284	\$ 268,664	\$ 278,117	\$ 287,632
Opening Accumulated Depreciation	(26,975)	(36,741)	(46,577)	(56,413)	(66,249)
Net Assets	223,090	222,544	222,087	221,704	221,383
Opening CWIP	(2,183)	(1,943)	(1,554)	(1,339)	(1,748)
Opening Rate Base Assets (excl. working capital)	220,906	220,600	220,533	220,365	219,635
Annual Capital Expenditure	9,220	9,380	9,453	9,516	9,500
Change in CWIP	240	389	216	(410)	600
Annual Depreciation Expense	(9,766)	(9,836)	(9,836)	(9,836)	(9,836)
Closing Gross Assets	259,284	268,664	278,117	287,632	297,132
Closing Accumulated Depreciation	(36,741)	(46,577)	(56,413)	(66,249)	(76,085)
Net Assets	222,544	222,087	221,704	221,383	221,047
Closing CWIP	(1,943)	(1,554)	(1,339)	(1,748)	(1,149)
Closing Rate Base Assets (excl. working capital)	220,600	220,533	220,365	219,635	219,898
Average Fixed Assets	220,753	220,567	220,449	220,000	219,767
Add: Allowance for Working Capital	474	490	490	490	490
Less: Excluded Assets **	(2,467)	(2,402)	(2,337)	(2,272)	(2,207)
<b>Rate Base</b>	<b>\$ 218,760</b>	<b>\$ 218,654</b>	<b>\$ 218,602</b>	<b>\$ 218,218</b>	<b>\$ 218,049</b>
<b><u>Regulated Return on Rate Base</u></b>					
Cost of Equity (Ke)	9.36%	9.36%	9.36%	9.36%	9.36%
Cost of Debt (Kd) *	6.87%	6.87%	6.87%	6.87%	6.87%
Cost of Short Term Debt	2.11%	2.11%	2.11%	2.11%	2.11%
Equity/Total Capital	40.00%	40.00%	40.00%	40.00%	40.00%
Debt/Total Capital	56.00%	56.00%	56.00%	56.00%	56.00%
Short Term Debt/Capital	4.00%	4.00%	4.00%	4.00%	4.00%
<b>Regulatory WACC</b>	<b>7.68%</b>	<b>7.68%</b>	<b>7.68%</b>	<b>7.68%</b>	<b>7.68%</b>
Regulated Return on Equity	\$ 8,190	\$ 8,186	\$ 8,184	\$ 8,170	\$ 8,164
Regulated Return on Debt	8,606	8,602	8,599	8,584	8,578
<b>Regulated Return on Rate Base</b>	<b>\$ 16,796</b>	<b>\$ 16,788</b>	<b>\$ 16,784</b>	<b>\$ 16,754</b>	<b>\$ 16,741</b>
<b><u>Revenue Requirement Calculation</u></b>					
Regulated Return on Rate Base	\$ 16,796	\$ 16,788	\$ 16,784	\$ 16,754	\$ 16,741
Depreciation Expense	9,701	9,771	9,771	9,771	9,771
OM&A	11,021	11,332	11,559	11,790	12,026
Municipal Taxes	238	241	246	251	256
Grossed up Income Taxes	2,115	2,189	2,299	2,349	1,712
Other Income	(90)	(90)	(90)	(90)	(90)
<b>Service Revenue Requirement</b>	<b>\$ 39,782</b>	<b>\$ 40,231</b>	<b>\$ 40,568</b>	<b>\$ 40,825</b>	<b>\$ 40,415</b>
<b>Revenue per Plan</b>	<b>\$ 39,782</b>	<b>\$ 40,231</b>	<b>\$ 40,568</b>	<b>\$ 40,825</b>	<b>\$ 40,415</b>
<b><u>Regulatory Tax Schedule</u></b>					
Target Net Income	\$ 8,190	\$ 8,186	\$ 8,184	\$ 8,170	\$ 8,164
Depreciation Expense	9,701	9,771	9,771	9,771	9,771
Less: CCA	(12,024)	(11,886)	(11,580)	(11,425)	(13,188)
<b>Taxable Net Income</b>	<b>5,867</b>	<b>6,071</b>	<b>6,376</b>	<b>6,516</b>	<b>4,747</b>
Income Tax Rate	26.50%	26.50%	26.50%	26.50%	26.50%
Income Taxes	1,555	1,609	1,690	1,727	1,258
Provision for Income Taxes	561	580	609	623	454
<b>Total Income Taxes</b>	<b>\$ 2,115</b>	<b>\$ 2,189</b>	<b>\$ 2,299</b>	<b>\$ 2,349</b>	<b>\$ 1,712</b>

\*\*Excluded assets are made up of (i) capitalized land transfer tax paid on the transfer of assets from GLPL to GLPT, and (ii) breakers installed at MacKay TS that were deemed to provide a benefit to local generation (owned by Brookfield) and not to ratepayers.

**Great Lakes Power Transmission LP**

## Annual Capital Expenditures

	2015	2016	2017	2018	2019
<b>Identified Major Projects</b>					
Wood Structure Replacement Program	\$ 5,105,000	\$ 2,657,200	\$ 3,270,951	\$ 3,200,000	\$ 2,670,000
ERP Software Upgrade & Work Mgmt System	450,000	-	-	-	-
Land Acquisition	380,000	580,000	-	-	-
HWY 101 44 kV Upgrades	805,600	-	-	-	-
Anjigami TS Refurbishment	-	1,670,200	-	-	-
Maggie TS CT Replacements	-	549,908	-	-	-
Watson TS - T2 HV Breaker Upgrade	-	776,700	-	-	-
MacKay TS Ground Grid	-	739,280	-	-	-
Watson TS Protection Upgrade	-	-	1,419,660	-	-
Goulais TS Civil refurbishment - Transformer	-	-	1,320,000	-	-
Radio System replacement	-	-	540,000	660,000	-
Anjigami TS 115 & 44 KV protection Upgrade	-	-	1,042,003	-	-
Clergue TS Replace 12 kV Breaker and Switchgear	-	-	-	1,048,301	2,096,602
Batchawana TS Transformer Replacement	-	-	-	449,792	1,101,214
Third Line TS T2 replacement	-	-	-	1,683,000	2,020,500
<b>Annual Programs</b>					
Fleet Requirements	250,000	250,000	200,000	210,000	180,000
Engineering	855,000	870,000	680,000	660,000	660,000
IT Infrastructure	258,500	276,000	247,500	247,500	247,500
SCADA, Telecom, Communications upgrades	150,000	100,080	130,340	693,000	130,000
Building / System Upgrades	500,000	450,000	400,000	400,000	100,100
<b>Other Additions to CWIP</b>	465,700	460,303	202,503	264,003	294,003
<b>Total Capital Expenditures</b>	<b>9,219,800</b>	<b>9,379,671</b>	<b>9,452,957</b>	<b>9,515,596</b>	<b>9,499,919</b>
<b>Opening CWIP</b>	2,183,342	1,943,145	1,554,132	1,338,583	1,748,375
<b>Amounts Closed to Capital</b>	(9,459,997)	(9,768,684)	(9,668,506)	(9,105,804)	(10,099,711)
<b>Closing CWIP</b>	<b>\$ 1,943,145</b>	<b>\$ 1,554,132</b>	<b>\$ 1,338,583</b>	<b>\$ 1,748,375</b>	<b>\$ 1,148,583</b>

**Great Lakes Power Transmission LP**

Property, Plant and Equipment - Annual

	2015	2016	2017	2018	2019
<b>Cost Base</b>					
Opening Cost Base	\$ 247,880,987	\$ 257,340,984	\$ 267,109,668	\$ 276,778,174	\$ 285,883,978
Disposal of Property, Plant and Equipment - Gross	-	-	-	-	-
Capitalized (Assets in service out of CWIP)	9,459,997	9,768,684	9,668,506	9,105,804	10,099,711
Closing Cost Base	257,340,984	267,109,668	276,778,174	285,883,978	295,983,689
Add: CWIP	1,943,145	1,554,132	1,338,583	1,748,375	1,148,583
Gross Asset Value	259,284,129	268,663,800	278,116,757	287,632,353	297,132,272
<b>Accumulated Depreciation</b>					
Opening Accumulated Depreciation	26,974,516	36,740,554	46,576,741	56,412,928	66,249,115
Depreciation Expense	9,766,038	9,836,187	9,836,187	9,836,187	9,836,187
Disposal of Property, Plant and Equipment - Accum.	-	-	-	-	-
Closing Accumulated Depreciation	36,740,554	46,576,741	56,412,928	66,249,115	76,085,302
Net Book Value	222,543,575	222,087,059	221,703,829	221,383,238	221,046,970
CWIP	(1,943,145)	(1,554,132)	(1,338,583)	(1,748,375)	(1,148,583)
<b>Net Fixed Asset Value (removal of CWIP)</b>	<b>220,600,430</b>	<b>220,532,927</b>	<b>220,365,246</b>	<b>219,634,863</b>	<b>219,898,387</b>
<b>Construction Work in Progress (CWIP)</b>					
Opening CWIP	2,183,342	1,943,145	1,554,132	1,338,583	1,748,375
Additions to CWIP	9,219,800	9,379,671	9,452,957	9,515,596	9,499,919
Capitalized Interest	250,000	250,000	250,000	250,000	250,000
Interest capitalized assumed to be in purchases	(250,000)	(250,000)	(250,000)	(250,000)	(250,000)
Transfers to Cost Base	(9,459,997)	(9,768,684)	(9,668,506)	(9,105,804)	(10,099,711)
Closing CWIP	1,943,145	1,554,132	1,338,583	1,748,375	1,148,583
<b>Property, plant and equipment, net</b>	<b>\$ 222,543,575</b>	<b>\$ 222,087,059</b>	<b>\$ 221,703,829</b>	<b>\$ 221,383,238</b>	<b>\$ 221,046,970</b>

# Great Lakes Power Transmission LP

## Operating Expenses Analysis - Annual

	2015	2016	2017	2018	2019
<b>Operations and Administration</b>					
General Administration	\$ 1,513,642	\$ 1,543,840	\$ 1,574,716	\$ 1,606,211	\$ 1,638,335
Corporate Cost Allocation	411,500	419,709	428,104	436,666	445,399
Information Technology	694,820	708,682	722,856	737,313	752,059
Finance & Accounting	694,019	707,865	722,022	736,462	751,192
Health, Safety & Environment	251,958	256,984	262,124	267,366	272,714
Engineering & Asset Management	511,255	521,455	531,884	542,522	553,372
System Control & Communications	2,709,956	2,854,930	2,912,029	2,970,269	3,029,675
Building Costs	529,116	539,672	550,466	561,475	572,704
Stations Operational Activities	735,340	750,010	765,010	780,310	795,916
Lines Operational Activities	494,809	504,680	514,774	525,069	535,570
Other Operations & Admin	31,441	32,068	32,710	33,364	34,031
<b>Subtotal Operations &amp; Admin</b>	<b>\$ 8,577,857</b>	<b>\$ 8,839,895</b>	<b>\$ 9,016,693</b>	<b>\$ 9,197,027</b>	<b>\$ 9,380,967</b>
<b>Maintenance</b>					
Right of Way Maintenance (Forestry)	\$ 1,004,224	\$ 1,024,259	\$ 1,044,744	\$ 1,065,639	\$ 1,086,951
ROW Access Roads & Trails	150,000	152,993	156,052	159,173	162,357
Regular Line Maintenance	111,555	113,781	116,056	118,378	120,745
Regular Station Maintenance	768,459	783,789	799,465	815,454	831,763
Other Maintenance	24,000	24,479	24,968	25,468	25,977
<b>Subtotal Maintenance</b>	<b>\$ 2,058,238</b>	<b>\$ 2,099,300</b>	<b>\$ 2,141,286</b>	<b>\$ 2,184,112</b>	<b>\$ 2,227,794</b>
Insurance	365,000	372,282	379,728	387,322	395,069
Extraordinary Expenditures	20,000	20,500	20,910	21,328	21,755
Property Taxes	237,800	240,800	245,616	250,528	255,539
<b>Total Operating Expenses</b>	<b>\$ 11,258,895</b>	<b>\$ 11,572,777</b>	<b>\$ 11,804,233</b>	<b>\$ 12,040,317</b>	<b>\$ 12,281,124</b>

## Great Lakes Power Transmission LP

## Deferral Accounts Summary

		Forecasted	2014		Net		Net		Net		Net		Net		Net
	31-Dec-13	2014	Carrying	Forecast 31-	Change	2015	Change	31-Dec-16	Change	31-Dec-17	Change	31-Dec-18	Change	31-Dec-19	Change
		Activity	Charges	Dec-2014	2015	Reclass	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Regulatory Assets:</b>															
IFRS CGAAP Transition	-	(433.9)	-	(433.9)	144.6	(289.3)	144.6	(144.6)	144.6	(0.0)	-	(0.0)	-	(0.0)	-
EWT Incumbent Deferral Account	56.2	-	0.8	57.0	-	(57.0)	-	-	-	-	-	-	-	-	-
BES Deferral Account	7.0	-	0.1	7.1	-	-	7.1	-	7.1	-	7.1	-	7.1	-	7.1
Loss on Disposal Recovery	453.9	181.2	(1.0)	634.1	-	(634.1)	-	-	-	-	-	-	-	-	-
EWT Variance Account	276.1	170.0	5.3	451.3	-	(451.3)	-	-	-	-	-	-	-	-	-
Comstock Claim	2,321.4	-	32.9	2,354.3	-	(2,354.3)	-	-	-	-	-	-	-	-	-
Aggregate Regulatory Asset	-	-	-	-	(932.5)	2,797.4	1,864.9	(932.5)	932.5	(932.5)	(0.0)	-	(0.0)	-	(0.0)
<b>Total Regulatory Assets</b>	<b>3,114.5</b>	<b>(82.7)</b>	<b>38.1</b>	<b>3,069.9</b>	<b>(787.8)</b>	<b>(699.4)</b>	<b>1,582.7</b>	<b>(787.8)</b>	<b>794.9</b>	<b>(787.9)</b>	<b>7.0</b>	<b>-</b>	<b>7.0</b>	<b>-</b>	<b>7.0</b>
<b>Regulatory Liabilities:</b>															
3 Year Liability Payback	(1,437.1)	748.6	(10.9)	(699.4)	-	699.4	-	-	-	-	-	-	-	-	-
<b>Total Regulatory Liabilities</b>	<b>(1,437.1)</b>	<b>748.6</b>	<b>(10.9)</b>	<b>(699.4)</b>	<b>-</b>	<b>699.4</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Net Regulatory Liabilities (Assets):</b>	<b>\$1,677.4</b>	<b>\$665.9</b>	<b>\$27.2</b>	<b>\$2,370.5</b>	<b>(\$787.8)</b>	<b>\$0.0</b>	<b>\$1,582.7</b>	<b>(\$787.8)</b>	<b>\$794.9</b>	<b>(\$787.9)</b>	<b>\$7.0</b>	<b>\$0.0</b>	<b>\$7.0</b>	<b>\$0.0</b>	<b>\$7.0</b>

\* Balance does not include carrying charges for 2015 and beyond that will be accrued to balance as there is no impact on cash



## **Management Schedules**

# Great Lakes Power Transmission LP

## Ratio Analysis

	Budget 2015	Budget 2016	Budget 2017	Budget 2018	Budget 2019
Revenue	\$ 39,782,071	\$ 40,230,644	\$ 40,568,242	\$ 40,825,334	\$ 40,415,485
Regulatory Account Collection	787,816	787,816	787,852	-	-
G&A Costs	(11,258,895)	(11,572,777)	(11,804,233)	(12,040,317)	(12,281,124)
<b>EBITDA</b>	<b>29,310,992</b>	<b>29,445,683</b>	<b>29,551,862</b>	<b>28,785,017</b>	<b>28,134,362</b>
Interest Income	89,900	89,900	90,000	90,000	90,000
Interest Expense - Senior	(7,685,537)	(7,539,258)	(7,383,166)	(7,216,602)	(7,038,863)
<b>FFO</b>	<b>21,715,356</b>	<b>21,996,325</b>	<b>22,258,696</b>	<b>21,658,415</b>	<b>21,185,499</b>
Depreciation	(9,766,038)	(9,836,187)	(9,836,187)	(9,836,187)	(9,836,187)
Non-cash interest expense	38,430	30,356	22,170	13,895	5,557
<b>Net Income</b>	<b>11,987,747</b>	<b>12,190,494</b>	<b>12,444,679</b>	<b>11,836,123</b>	<b>11,354,868</b>
Maintenance Capex	-	-	-	-	-
<b>AFFO</b>	<b>21,715,356</b>	<b>21,996,325</b>	<b>22,258,696</b>	<b>21,658,415</b>	<b>21,185,499</b>
Growth Capex	(9,219,800)	(9,379,671)	(9,452,957)	(9,515,596)	(9,499,919)
Senior Debt Amortization	(2,180,364)	(2,326,642)	(2,482,735)	(2,649,299)	(2,827,038)
Working Capital & Other	(215,377)	(37,381)	37,519	378,576	34,154
<b>Free Cash Flow to Equity</b>	<b>10,099,815</b>	<b>10,252,630</b>	<b>10,360,524</b>	<b>9,872,096</b>	<b>8,892,696</b>
Distributions Paid	(10,300,000)	(10,500,000)	(10,500,000)	(10,500,000)	(10,500,000)

### GLPT Coverage Ratios

EBITDA / Interest	3.81	3.91	4.00	3.99	4.00
FFO / Interest	2.83	2.92	3.01	3.00	3.01
EBITDA / Interest & Principal (min 1.5)	2.97	2.98	3.00	2.92	2.85

### Capital Structure (GLPT)

Debt (LTD)	112,954,018	110,847,020	108,592,115	106,178,922	103,596,328
Equity (adj for DTL @ \$9M)	108,194,301	109,884,795	111,829,473	113,165,597	114,020,465
Total Investment	221,148,319	220,731,815	220,421,589	219,344,518	217,616,792
Debt	51.1%	50.2%	49.3%	48.4%	47.6%
Equity	48.9%	49.8%	50.7%	51.6%	52.4%
Rate Base	218,760,206	218,654,215	218,601,623	218,217,591	218,049,161

### Reconciliation vs Approved EBITDA Return

#### Anticipated EBITDA Return on Rate Base

WACC per Current Rates	7.68%	7.68%	7.68%	7.68%	7.68%
Add: Taxes	0.97%	1.00%	1.05%	1.08%	0.78%
Add: Depreciation	4.43%	4.47%	4.47%	4.48%	4.48%
	<b>13.08%</b>	<b>13.15%</b>	<b>13.20%</b>	<b>13.23%</b>	<b>12.94%</b>

#### EBITDA Return Calculation

EBITDA	29,310,992	29,445,683	29,551,862	28,785,017	28,134,362
EBITDA Return on Rate Base	13.40%	13.47%	13.52%	13.19%	12.90%

# Great Lakes Power Transmission LP

## Ratio Analysis

	Budget 2015	Budget 2016	Budget 2017	Budget 2018	Budget 2019
<b><u>Profitability Ratios</u></b>					
<b>Return on Equity</b>					
Adjusted Net Income (no reg impact)	9,496,033	9,633,428	9,786,090	9,923,456	10,088,658
Average Equity	112,100,428	109,039,548	110,857,134	112,497,535	113,593,031
Budgeted ROE	8.47%	8.83%	8.83%	8.82%	8.88%
OEB-Deemed ROE	9.36%	9.36%	9.36%	9.36%	9.36%
<b>FFO/AFFO Yield</b>					
Annual FFO	21,715,356	21,996,325	22,258,696	21,658,415	21,185,499
Average Invested Capital	126,868,934	138,324,774	149,952,284	161,410,840	172,332,797
Budgeted FFO Yield	17.12%	15.90%	14.84%	13.42%	12.29%
<b>Cash on Cash Return</b>					
Annual Cash Distributions	10,300,000	10,500,000	10,500,000	10,500,000	10,500,000
Average Equity	112,100,428	109,039,548	110,857,134	112,497,535	113,593,031
Budgeted Cash on Cash	9.19%	9.63%	9.47%	9.33%	9.24%
<b><u>Invested Capital Continuity</u></b>					
Opening Invested Capital	121,161,256	132,576,612	144,072,936	155,831,632	166,990,047
Add: AFFO	21,715,356	21,996,325	22,258,696	21,658,415	21,185,499
Less: Distributions	(10,300,000)	(10,500,000)	(10,500,000)	(10,500,000)	(10,500,000)
Ending Invested Capital	132,576,612	144,072,936	155,831,632	166,990,047	177,675,546
<b><u>CapEx Backlog</u></b>					
Opening CapEx Backlog	4,059,461	14,068,342	4,688,671	14,203,714	4,688,118
Add: Projects Secured	19,228,681	-	18,968,000	-	19,000,000
Less: Growth CapEx	(9,219,800)	(9,379,671)	(9,452,957)	(9,515,596)	(9,499,919)
Ending CapEx Backlog	14,068,342	4,688,671	14,203,714	4,688,118	14,188,199

# A DETERMINATION OF THE WORKING CAPITAL REQUIREMENTS OF GREAT LAKES POWER TRANSMISSION LP ("GLPT")

**Presented to:**

**Great Lakes Power**

**AUGUST 11, 2010**

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Navigant Consulting has prepared this report at the request of Great Lakes Power Transmission LP ("the Company"). In preparing this report Navigant Consulting has relied upon the Company's revenue and expense data for 2011 and 2012. Navigant Consulting has not independently confirmed the accuracy of such data supplied by the Company.

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## SECTION I: INTRODUCTION AND OVERVIEW

### Summary

Navigant Consulting Inc. ("NCI") was retained by Great Lakes Power Transmission LP ("GLPT" or "The Company") to review the working capital requirements of the Company. The purpose of the review was to update the Company's study filed in the Ontario Energy Board's ("OEB" or "The Board") docket EB-2009-0408 as well as develop an estimate of working capital requirements for the Company to include in its upcoming 2011-2012 rate application before the Board. This report discusses the results of NCI's review and update.

The following are key findings from the review and update:

1. The Revenue Lag Days and Expense Lead Days identified by NCI are either generally consistent or in line with that presented by the Company in its prior rate application, i.e., EB-2009-0408.
2. The implementation of the Harmonized Sales Tax (or "HST") in Ontario results in a working capital requirement lower than what it might have been under the previously applicable Goods and Services Tax (or "GST") regime.
3. Results from the study applied to the Company's proposed transmission expenses indicate that working capital amounts of approximately \$371,000 and \$264,000 will be required by the Company in 2011 and 2012 respectively. These amounts represent approximately 4.0% and 2.8% of the Company proposed Operations, Maintenance, and Administration (or "OM&A") Expenses in 2011 and 2012.

### Working Capital

Working capital is the amount of funds required to finance the day-to-day operations of a regulated utility and are included as part of a rate base for ratemaking purposes. A lead-lag study is the most accurate basis for determination of working capital and was used by NCI for this purpose.

A lead-lag study generally analyzes two time periods:

- the time between the date customers receive service and the date that customers' payments are available to the Company (or "lag") and,
- the time between the Company receipt of goods and services from its vendors and payment for those goods and services at a later date (or "lead")<sup>1</sup>.

"Leads" and "Lags" are both measured in days and are generally dollar-weighted. The dollar-weighted net lag (i.e., lag minus lead) days is then divided by 365 (or 366 if a leap year is selected) and then multiplied by the annual test year cash expenses to determine the amount of working capital required for operations. The resulting amount of working capital is then included as part of the Company's rate base for the purpose of determining revenue requirements.

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<sup>1</sup> A positive lag (or lead) indicates that payments are received (or paid for) after the provision of a good or service.

## Key Concepts

Several key concepts need to be defined up-front as they surface throughout the lead-lag study described in this report.

**Mid-Point Method:** When a service is provided to (or by) the Company over a period of time, the service is deemed to have been received (or provided) evenly over the midpoint of the period, unless specific information regarding the provision (or receipt) of that service is available indicating otherwise. If both the service end date (“Y”) and the service start date (“X”) are known, the mid-point of a service period can be calculated using the formula:

$$\text{Mid-Point} = \frac{(Y-X)+1}{2}$$

When specific start and end dates are unknown but it is known that a service is evenly distributed over the mid-point of a period, an alternative formula that is typically used is shown below. The formula uses the number of days in a year (A) and the number of periods in a year (B):

$$\text{Mid-Point} = \frac{A/B}{2}$$

**Statutory Approach:** In conjunction with the use of the mid-point method, it is important to note that not all areas of this study may utilize dates on which actual payments were made by the Company. In some instances, particularly the Goods and Services Tax (“or GST”) and its successor, the Harmonized Sales Tax (“HST”), the due date for payments are established by statute or by regulation with significant penalties in place for missing the due date. In these instances, the due date established by statute has been used in lieu of when payments were actually made or will be made.

**Expense Lead Components:** As used in this study, Expense Leads are defined to consist of two components: a) a Service Lead component, i.e., services are assumed to be provided to the Company evenly around the mid-point of the service period, and b) a Payment Lead component, i.e., the time period from the end of the service period to the time payment was made and the funds left the Company’s possession.

**Dollar Weighting:** Both lags and leads should be dollar-weighted to more accurately reflect the flow of dollars. To use an example, let's suppose that a particular transaction has a Cash Outflow Lead time of 100 days and its dollar value was \$100. Let's suppose further that another transaction has a Cash Outflow Lead time of 30 days with a dollar value of \$1 Million. A simple un-weighted average of the two transactions would give us a Cash Outflow Lead time of 65 days (100+30 divided by 2). On the other hand, dollar weighting the two transactions gives us a Cash Outflow Lead time that would be closer to 30 days, an answer which is more representative of how the dollars actually flowed in this example.

## Method

Performing a lead-lag study requires two key undertakings:

1. Developing an understanding of how the regulated business works, i.e., in terms of products and services sold to customers or purchased from vendors and the collections and payment policies and procedures that govern such transactions; and



- 
2. Modelling such operations using data from a relevant period of time and a representative data set. It is important to ascertain and factor into the study whether (or not) there are known changes to existing business policies and procedures going forward. Where such changes are known and material, they should be factored into the study.

To develop an understanding of the Company's operations, interviews with the regulated utility's Controller and Staff from the Payroll department were conducted. Some key questions that were addressed during the course of the interviews included:

- a. What is being sold (or bought)? If a service is being provided (purchased), over what time period was the service provided (or purchased)?
- b. Who are the buyers (sellers)?
- c. What are the terms for payment? Are the terms for payment driven by industry norms or by company policy? Is there flexibility in the terms for payment?
- d. Are any changes expected to the terms for payment either driven by industry or internally by the Company? What is the basis for such changes (if any)?
- e. How is payment made (e.g., cash, check, electronic funds transfer)?

Except where otherwise noted, the twelve months ended June 30, 2010 was used in the analysis. Development of the data set entailed gathering raw data from GLPT's accounting systems. Once the raw data had been gathered from the multiple in-house systems, sampling and data validation was performed to the extent necessary and appropriate.

## Organization of the Report

Section II of this report discusses the lags associated with the Company's collections of revenues. Included in Section II is a description of the sources of such revenues and how they were treated for the purposes of deriving an overall revenue lag.

Section III presents a description of the various expenses and their attendant lead times. Included in the discussion on expense leads are the lead times on OM&A costs and the GST/HST. The methods used to calculate the expense lead times associated with each of the items as well as the results from the application of the methods are described.

Finally, Section IV presents the working capital requirements of GLPT including those associated with the GST and HST.

## SECTION II: REVENUE LAGS

GLPT has two sources of revenues: a) from the Ontario Independent System Operator (“IESO”) for the provision of transmission service, and b) from miscellaneous jobs performed for its larger transmission level customers. For the 12 months ended June 30, 2010, approximately 99% of its revenues were derived from the IESO with the remainder derived from other sources. When the invoice amounts and individual lag times associated with both these sources of revenues are combined on a dollar-weighted basis, an overall revenue lag time of 35.84 days is derived for GLPT’s Transmission operations. The information is shown on Table 1 below.

*Table 1. Calculation of Total Revenue Lag*

Description	Amount \$s	Lag Time Days	Weighting Factor	Weighted Lag Time Days
(A)	(B)	(C)	(D)	(E)
IESO Revenues	35,977,107	35.44	98.96%	35.07
Other Revenues	379,763	73.11	1.04%	0.76
Total	36,356,870			<u>35.84 days</u>

### IESO Revenues

As mentioned earlier, the Company derives approximately 99% of its revenues from the sales of transmission service to the IESO. This service is provided to the IESO on a monthly basis. When actual transactions for the twelve months ended June 30, 2010 were examined, a dollar-weighted revenue lag time of 35.44 days was determined and reflected in Table 1. This revenue lag time takes into consideration both the service lag time (a half month) and the time taken to collect the revenues (generally around the 20th of the month following the end of a service month).

### Other Revenues

GLPT generally realizes other (Miscellaneous) revenues from jobbing and contracting activities. Taking into account funds received from actual work performed for the twelve months ended June 30, 2010, the period over which the work was performed, and the date on which the funds were received by the Company, a dollar-weighted revenue lag time of 73.11 days was determined and reflected in Table 1.

## SECTION III: EXPENSE LEADS

A determination of working capital requires not only a determination of how long it takes a Company such as GLPT to collect revenues (revenue lag) but also, how long it takes to pay expenses (or expense leads). An Expense Lead is the time period between when a good or service is provided to the Company and when the Company generally pays for that service. And, as mentioned earlier in this report, expense leads have two components: a) a service lead time, and b) a payment lead time.

The following items, recorded as Operations, Maintenance, and Administration (“OM&A”) expenses by GLPT, were considered in NCI’s study:

1. Payroll and Benefits
2. Rents and Leases
3. Office Supplies
4. Outside Services
5. Property Insurance
6. Regulatory Expenses

In addition, the working capital requirements associated with the Company’s payment of Property Taxes was also considered in NCI’s study. The net benefit associated with the Goods and Services Tax (“GST”) and its successor, the Harmonized Sales Tax (“HST”) is discussed separately following the discussion on the leads associated with the expense items listed above and property taxes.

### Payroll and Benefits

Based on interviews with Company Staff, NCI identified that payroll and benefits consisted of the following items:

- Basic Payroll for Salaried, Union, and Retired Employees
- Pension Contributions (both defined contribution and defined benefit)
- Group Health, Dental, and Life Insurance
- Employer Health Tax Premiums
- Payments for Long Term Disability Coverage
- Payments made by the Company to the Workers Safety Improvement Board (WSIB)
- Canadian Revenue Agency Payments (Canada Pension Plan, Employment insurance, and Income Taxes) and Miscellaneous Deductions

On a dollar-weighted basis, these items were identified to have an expense lead time 15.94 days in 2011 and 2012.

A summary of the expense lead time associated with payroll and benefits is shown in Table 2. Note that the dollar amounts shown in Table 2 are amounts estimated to be charged to expense and exclude payroll related dollars that are estimated to be charged to Capital accounts.

Table 2: Payroll and Benefits Expense Lead Time 2011-2012

Item	Expense Lead Days	2009/10 Amounts \$s	Weighting Factor	Weighted Lead Time Days
(A)	(B)	(C)	(D)	(E)
Basic Payroll – Salary	16.09	1,968,799	34.02%	5.47
Basic Payroll – Union	16.15	1,689,949	29.20%	4.72
Basic Payroll – Retirees	45.58	66,148	1.14%	0.52
Pensions - Defined Contribution	20.06	120,200	2.08%	0.42
Pensions - Defined Benefit	17.96	327,947	5.67%	1.02
Group Health, Dental, and Life Insurance	19.38	271,206	4.69%	0.91
Employer Health Tax Premiums	28.40	74,740	1.29%	0.37
Long Term Disability	(1.64)	49,184	0.85%	(0.01)
WSIB	44.67	42,807	0.74%	0.33
Canadian Revenue Agency Payments	10.71	1,147,154	19.82%	2.12
Miscellaneous Deductions – Salary	16.00	2,682	0.05%	0.01
Miscellaneous Deductions – Union	16.00	26,219	0.45%	0.07
<b>Total</b>		5,787,037	100.00%	<b><u>15.94 days</u></b>

The derivation of this expense lead time took into account the following:

- Salaried and Union Employees are paid bi-weekly with, on average, a nine day lag; Retirees were paid quarterly typically on the last day of any given quarter.
- Remittances to the Canadian Revenue Agency were determined based on the required schedule for payments in 2011 and 2012. Pay periods from the 1<sup>st</sup> - 7<sup>th</sup> are due the 10<sup>th</sup> of the month, pay periods from the 8<sup>th</sup> -14<sup>th</sup> are due the 17<sup>th</sup> of the month, pay periods from the 15<sup>th</sup> - 21<sup>st</sup> are due the 24<sup>th</sup> of the month and pay periods from the 22<sup>nd</sup> to the end of the month are due the 3<sup>rd</sup> of the month.
- Payments by the Company to both the defined contribution and defined benefit pension plans were generally made in the current month for the current month. The actual remittance dates varied by month.
- Payments to the Company's provider of Group Health, Dental, and Life Insurance were generally made after the fact.
- Remittances by the Company on account of the Employer Health Tax were generally made after the fact, i.e., around the middle of the month following.
- Long Term Disability Contributions were generally pre-paid, and
- Consistent with the requirements of the WSIB, payments by the Company were generally made around the last business day of the month following.

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## Rents and Leases

The Company has four types of leases in place with Great Lakes Power Limited; Building, Supervisory Control and Data Acquisition (SCADA) equipment, Fibre Optics, and Radio leases. The lessor in the first three instances is Great Lakes Power Limited, whereas GLPT is the lessor in the Radio lease arrangement. Based on the payment terms of each lease and the expected amount of periodic lease payments for calendar year 2010, a weighted average expense lead time of 45.35 days was determined for all four leases.

## Office Supplies and Expenses

Office supplies and expenses consist generally of expense related to the day-to-day running of GLPT's offices, Executive Committee membership dues, and travel expenses of GLPT Staff. Taking into account the service period covered under membership dues, when staff travel occurred, and when dues were paid or expenses reimbursed during calendar year 2009, a weighted average expense lead time of 20.98 days was determined for GLPT's operations.

## Outside Services

For the twelve months ended June 30, 2010, the Company hired a number of outside vendors to provide it with legal, accounting, technical and operations related services. Using a sample of invoices from such vendors and information on when such vendors were paid, a dollar-weighted average expense lead time of 32.42 days was determined for GLPT's operations. The sample was selected such that all vendors of outside services, not necessarily all transactions, were included.

## Property Insurance

The Company's insurance provider provides a basket of insurance products to the Company including automobile, comprehensive general liability, umbrella liability, engineer's professional liability, and general property. General property insurance is the major item in the basket. The Company pre-pays its insurance typically around the beginning of the coverage period. Using actual payments made for the coverage period 2009-2010, a dollar-weighted expense lead time of (156.17) days was determined for GLPT's operations. Note the parentheses around the lead time indicating a pre-payment or expense "lag".

## Regulatory Expenses

The Company makes quarterly payments to the Ontario Energy Board and an annual payment to the Canadian Electricity Association ("CEA"). Payments to the Board are typically made around the beginning of each quarter. Payments to CEA are made in January for the current year. Using this information and considering actual payments made in 2009-10 an expense lead time of (70.67) days was determined. Again, the parentheses around the lead time indicates that these are pre-payments and thus constitute an expense payment "lag".

## Property Taxes

The Company pays property taxes in four instalments to the City of Sault Ste. Marie and the municipality of Wawa. Additionally, the Company makes an annual payment to Indian and Northern Affairs Canada.

All payments are made in the current year for the current year. Taking into account actual payments made for the 2009 tax year, a dollar-weighted expense lead time of (107.41) days was determined for the Company's operations. Again, the parentheses around the expense lead time indicates that on average, property taxes are being pre-paid and is thus an expense "lag".

### Goods and Services Tax (GST) and Harmonized Sales Tax (HST)

The expense lead times associated with the following items that attract GST and HST were considered in the NCI study:

- IESO Revenues;
- Rents and Leases;
- Office Supplies;
- Outside Services;
- Regulatory Expenses; and
- Capital Expenditures.

A summary of the expense lead times associated with each of the above items is provided in Table 3. Note that the statutory approach described earlier in this report was used to determine the expense lead times associated with the Company's remittances and collections of GST and HST, i.e., both remittances and collections are generally on the last day of the month following the date of the applicable invoice.

*Table 3. Expense Lead Times Associated With GST/HST payments (receipts)*

Description	Lag or Lead Days	2011 GST/HST Factor	2012 GST/HST Factor
(A)	(B)	(C)	(D)
Revenues	(46.21)	-12.66%	-12.62%
Rents and Leases	45.29	12.41%	12.37%
Office Supplies	45.65	12.51%	12.47%
Outside Services	37.10	10.16%	10.14%
Regulatory Expenses	58.14	15.93%	15.89%
Capital Expenditures	37.10	10.16%	10.14%

The Ontario government has harmonized the Ontario Provincial Sales Tax with the federal GST into a harmonized single sales tax effective July 1, 2010. Based on current information, there appears to be no change to the current schedule of both remittances and receipts of the HST compared with what existed under the GST regime. Thus, no changes to the schedule of either remittances or receipts of the HST relative to the schedule that governed the GST have been considered in this study and reflected in Table 3 above.

## SECTION IV: GLPT – WORKING CAPITAL REQUIREMENTS

Having calculated the revenue lag, expense lead, and the net lag times, the next step in the process is to calculate the Company's working capital requirement. Using the results described under the discussion of revenue lags and expense leads, and applying them to the Company's expenses for 2011-2012, the Company's working capital requirements are \$371,000 in 2011, and \$264,000 in 2012. These amounts represent approximately 4.0%, and 2.8% of the Company's OM&A expense (excluding property taxes) for each of the years.

A summary of the Company's working capital requirements is provided in Tables 4-5 for each year 2011-2012. Included within the working capital amounts shown in Tables 4-5 are GST/HST net benefits of \$(226,000) and \$(347,000) for each year 2011-2012. The derivation of these amounts is shown in Table 6.

*Table 4. Working Capital Requirements Associated With Transmission Operations - 2011*

Description	2011 Amounts \$s	Revenue Lag Time Days	Expense Lead Time Days	Net Lag Days	Working Capital Factor	Working Capital Requirements \$s	(Less) GST/HST	Net Working Capital Requirements \$s
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Payroll and Benefits	5,931,713	35.84	15.94	19.90	5.45%	323,371		
Rents and Leases	661,273	35.84	45.35	(9.51)	-2.61%	(17,237)		
Office Supplies	174,993	35.84	20.98	14.86	4.07%	7,124		
Outside Services	2,079,309	35.84	32.42	3.42	0.94%	19,458		
Property Insurance	216,788	35.84	(156.17)	192.01	52.61%	114,042		
Regulatory Expenses	160,925	35.84	(70.67)	106.50	29.18%	46,957		
Property Taxes	264,655	35.84	(107.41)	143.25	39.25%	103,866		
Total	<b>\$9,489,655</b>					<b>\$597,581</b>	<b>\$(226,448)</b>	<b><u>\$371,133</u></b>

*Table 5. Working Capital Requirements Associated With Transmission Operations - 2012*

Description	2012 Amounts \$s	Revenue Lag Time Days	Expense Lead Time Days	Net Lag Days	Working Capital Factor	Working Capital Requirements \$s	(Less) GST/HST	Net Working Capital Requirements \$s
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Payroll and Benefits	6,080,006	35.84	15.94	19.90	5.44%	330,550		
Rents and Leases	677,804	35.84	45.35	(9.51)	-2.60%	(17,619)		
Office Supplies	179,368	35.84	20.98	14.86	4.06%	7,283		
Outside Services	2,131,292	35.84	32.42	3.42	0.93%	19,890		
Property Insurance	222,207	35.84	(156.17)	192.01	52.46%	116,573		
Regulatory Expenses	164,948	35.84	(70.67)	106.50	29.10%	47,999		
Property Taxes	271,271	35.84	(107.41)	143.25	39.14%	106,172		
Total	<b>\$9,726,896</b>					<b>\$610,847</b>	<b>\$(347,048)</b>	<b><u>\$263,799</u></b>

Shown in Table 6 below is the derivation of the GST/HST Benefits and Costs included within Tables 4-5, column (H).

*Table 6. GST/HST Related Working Capital Requirements*

Description	2011 \$s	2012 \$s	Lag or Lead Days	2011 GST/HST Factor	2012 GST/HST Factor	2011 GST/HST Working Capital	2012 GST/HST Working Capital
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Revenues	36,356,870	36,356,870	(46.21)	-12.66%	-12.62%	(598,310)	(596,675)
Rents and Leases	661,273	677,804	45.29	12.41%	12.37%	10,667	10,904
Office Supplies	174,993	179,368	45.65	12.51%	12.47%	2,845	2,908
Outside Services	2,079,309	2,131,292	37.10	10.16%	10.14%	27,472	28,082
Regulatory Expenses	216,788	222,207	58.14	15.93%	15.89%	4,489	4,589
Capital Expenditures	24,703,926	15,417,884	37.10	10.16%	10.14%	326,388	203,145
Total						<u>(226,448)</u>	<u>(347,048)</u>





# Corporate Cost Allocation Analysis

Prepared for:

**Great Lakes Power**  
Transmission

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## Executive Summary

### Scope of Study

Navigant Consulting, Ltd. (Navigant) has been retained by Great Lakes Power Transmission (GLPT) to perform an analysis of the allocation of corporate costs associated with services provided to GLPT from affiliated companies. The analysis has been prepared in anticipation of GLPT's 2013/2014 transmission rate application to the Ontario Energy Board (OEB).

### Background and Overview

GLPT is part of the Brookfield Asset Management (BAM) family of companies, BAM is an asset management company that owns and operates assets with a focus on property, renewable power and infrastructure. GLPT is a limited partnership held within the infrastructure group of assets and is held by its limited partner, Brookfield Infrastructure Holdings (Canada) Inc. (BIH) and its general partner Great Lakes Power Transmission Inc. BIH is in turn held by other entities under BAM. Hereafter these organizations will be referred to as "Brookfield". Brookfield provides various services for the "Electric Utility Group" which is comprised of 5 investments that are wholly or partially owned by Brookfield as described in Appendix A.

The Corporate Shared Services provided to GLPT from Brookfield fall into two categories. The first category of services is Corporate Shared Services which includes Information Technology, Equity Resourcing, Tax, Human Resources and Finance. The Electric Utility Group budget for Corporate Shared services in this category for 2013 is \$1,321,005 and for 2014 is \$1,361,956. The second category is Executive Oversight which has a budget of \$1,485,706 for 2013 and \$1,531,763 for 2014 for the Electric Utility Group. The combined budget for the Corporate Shared Services for the Electric Utility Group for the year 2013 is \$2,806,711 and \$2,893,719 for 2014.

### Study Results

Brookfield's provision of Corporate Shared Services is considered an affiliated transaction and is therefore governed by the rules articulated in the OEB's Affiliates Relations Code (ARC). Our analysis is based upon allocation approaches commonly used by regulated utilities with respect to Corporate Shared Services. In addition, there is also recognition of whether Brookfield takes either an Owner/Operator or Shareholder role in the management of its various investments, as well as consideration of the proportion of ownership by Brookfield. The results of this study indicate that a corporate cost allocation to GLPT of \$469,717 for 2013 and \$484,278 for 2014 is reasonable.

### Benchmarking Analysis

Navigant has also performed a benchmarking analysis comparing the relative level of the corporate cost allocations for GLPT to other similar utilities in Ontario. Based on this analysis the corporate cost allocation recommended by Navigant is proportionately below other electric utilities in Ontario. GLPT's corporate cost allocation represents 1.33% of total revenue requirement, whereas the average for other comparable peer utilities in Ontario is 3.53%. Details of this analysis are included in Section 5 of this report.

## 1. Requirements of the Affiliate Relationships Code

The OEB issued the ARC which provides the rules and standards of conduct which electric distributors and transmitters must follow when entering into transactions with affiliate enterprises. Brookfield's provision of Corporate Shared Services and Executive Oversight is considered an affiliated transaction and therefore governed by the rules articulated in the ARC.

### *Requirements under the ARC*

The pricing that a utility and an affiliated enterprise can provide services to each other is specified in the ARC.

### **Requirements When a Regulated Company Sells Products or Services**

Under OEB regulation, affiliate transactions fall into two categories - affiliate services and shared corporate services. Affiliate services are outsourced services that are to be acquired from affiliates on the same basis as the market if a market exists, and on a fully allocated cost basis if there is no market. Shared corporate services include services, such as management services, shared with an affiliate and to be provided to GLPT on a fully-allocated cost basis.

### **Corporate Shared Services**

Corporate Shared Services are defined as "...business functions that provide shared strategic management and policy support to the corporate group of which the utility is a member, relating to legal, regulatory, procurement services, building or real estate support services, information management services, information technology services, corporate administration, finance, tax, treasury, pensions, risk management, audit services, corporate planning, human resources, health and safety, communications, investor relations, trustee, or public affairs..."<sup>1</sup> Shared Corporate Services are not required to satisfy a market test, but require a fully allocated cost calculation to be performed when apportioning these costs between the regulated utility and the affiliate.

### **Application of the ARC to GLPT**

All services that are considered in this report that are provided by Brookfield to GLPT fall into the category of Corporate Shared Services. Therefore, no market test is required.

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<sup>1</sup> Ontario Energy Board – Affiliate Relationships Code for Electricity Distributors and Transmitters, revised March 2010.

## 2. Electric Utility Group Budgets for 2013 and 2014

Navigant was provided the budget for the Electric Utility Group of Brookfield for the years 2013 and 2014. Table 1 below details this information.

**Table 1 - Electric Utility Group Corporate Budget**

Expense Category	2013 Budget	2014 Budget
Information Technology	\$18,558	\$19,133
Equity Resourcing	\$111,348	\$114,800
Tax	\$37,116	\$38,267
Human Resources	\$18,558	\$19,133
Finance	\$1,135,425	\$1,170,623
sub-total	\$1,321,005	\$1,361,956
Executive Oversight	\$1,485,706	\$1,531,763
Total	\$2,806,711	\$2,893,719

Navigant proposes to place the Electric Utility Group Corporate Budget into two categories on the basis of the allocation approach used as described in Section 3 and Section 4 below. The first category is Corporate Shared Services which includes the Information Technologies, Equity Resourcing, Tax, Human Resources and Finance budgets. A direct allocation, such as assets or revenues has been used for this category where a linkage can reasonably be made between the expense category and the allocator used. The second category is Executive Oversight which includes the costs of enterprise leadership of the firm and management of the various investments.



### 3. Approaches to Allocate Corporate Shared Service Expense to Great Lake Power Transmission

Navigant used a two-step approach to determining the allocation of costs to GLPT. The first step allocated Corporate Shared Services to each electric utility which Brookfield takes an active role in managing. In the second step, the costs associated with Executive Oversight were allocated to each investment.

Shared Services are comprised of several functions including: Human Resources; Information Technology; Finance; Tax; and Equity Resourcing. Unlike organizations embracing a centralized structure which provides services from a centralized service organization to various operating divisions, Brookfield essentially allows each entity to operate autonomously. Therefore, in many cases the support provided by the centralized functions falls into the category of policy and oversight. Furthermore, the investments making up the Electric Utility Group are located in different countries located throughout North and South America. The geographic diversity of the various investments would tend to favor an autonomous operating arrangement. Navigant has therefore chosen a variety of allocators commonly used in utility cost allocation to apportion the Shared Services costs to each member of the Electric Utility Group. The Shared Services cost apportionment also varies depending on the level to which Brookfield participates in the active day-to-day management. In the case of Transelec, Brookfield participates at a shareholder level, and does not manage day-to-day activities to the same extent as with other members of the Electric Utility Group. As such, no costs associated with Shared Services have been allocated to Transelec; however, there is an allocation for Executive Oversight as described in Section 4 below. Corporate Shared Services costs have been allocated to the other four Electric Utility Group members; GLPT, Cross Sound Cable, WETT and EBSA.

#### *Allocators*

In order to allocate the Brookfield Shared Services costs to each of the Electric Utility Group investments, three (3) allocators have been developed. The allocations are based on data supplied by GLPT and are summarized below:

**Table 2 - Description of Allocators**

Allocator	Description
Revenue Allocation	Gross Revenues
Asset Allocation	Assets
Employee Allocation	Number of Employees

In order to reflect Brookfield's level of involvement in the day-to-day management in the utility investments, each of the allocators includes an adjustment for Brookfield's ownership percentage as noted in Table 5 of Appendix A. This adjustment reduces the allocation in proportion to the ownership percentage for situations where Brookfield is actively involved in the management, but has less than a 100% ownership interest. In the case of Transelec where Brookfield has only shareholder responsibility, the allocation is zero.

#### *Allocation of Corporate Shared Service Costs*

The allocator used for each of the shared service functions is described below.

### Information Technology

Information Technology services include internet and other IT related issues which have been allocated to each investment based upon revenues, (calculated as GLPT specific revenue divided by total revenue of all companies within the Electric Utility Group), adjusted for ownership and management. The revenue allocator has been used for IT expenses because typically IT services and revenues tend to be highly correlated due to the complexity of financial reporting and the number of users supported. GLPT's percentage allocation is 13%, resulting in a shared services cost amount of \$2,354 in 2013 and \$ 2,427 in 2014.

### Equity Resourcing

This service includes shareholder communication for the purpose of securing and maintaining equity. As described above, revenues (adjusted for ownership and management) have been used to allocate this cost to each of the investments, with the allocation to GLPT being 13%. The resulting amount allocated to GLPT is \$14,124 in 2013 and \$14,562 in 2014.

### Tax

The Tax function includes assistance with rate applications and the preparation of partnership tax returns. The allocator used for the Tax function costs is assets adjusted for ownership and management (calculated as GLPT assets divided by total assets of all companies within the Electric Utility Group). This allocator is considered reasonable given that the investments in assets are related to both rate applications and partnerships agreements. On this basis, the allocation to GLPT is 16%, or \$ 5,875 and \$ 6,057 in 2013 and 2014 respectively.

### Human Resources

Expenses associated with Human Resource support, which includes access to specialty services related to pension and labour issues, has been allocated based upon the number of employees adjusted for ownership and management (calculated as GLPT employees divided by the total employees of all companies within the Electric Utility Group). Given that this expense is related to personnel and labour issues, the employee allocator has been used. The resulting allocation is 8% or \$1,445 in 2013 and \$ 1,520 in 2014.

### Finance

The Finance function includes assistance in specialty corporate accounting, financing activities and deed of trust management. Assets, adjusted for ownership and management by Brookfield, have been used to allocate this function to each of the investments given that the Finance Function activities are most typically related to investments in assets. The resulting allocation to GLPT is 16%, or \$179,730 in 2013 and \$ 185,302 in 2014.

### ***Resulting Allocation to GLPT***

Table 3 provides a summary of the allocator and percentage, as well as the resulting Shared Service allocation amount to GLPT by function for 2013 and 2014.

**Table 3 - Allocation of Shared Service Costs to GLPT**

Category	Allocator	Percentage Allocation to GLPT	2013 Allocated Corporate Shared Service Costs to GLPT	2014 Allocated Corporate Shared Service Costs to GLPT
Information Technology	Revenue	13	\$2,354	\$2,427
Equity Resourcing	Revenue	13	\$14,124	\$14,562
Tax	Assets	16	\$5,875	\$6,057
Human Resources	Employees	8	\$1,474	\$1,520
Finance	Assets	16	\$179,730	\$185,302
Total			\$203,558	\$209,868

#### 4. Approaches to Allocate Executive Oversight Expense to GLPT

Executive Oversight Expenses are associated with the enterprise leadership of the Electric Utility Group at Brookfield. The Electric Utility Group budgeted cost for this function for is \$1,485,706 in 2013 and \$1,531,763 in 2014.

Navigant has used a two-step process to allocate Executive Oversight Expenses to each member of the Electric Utility Group. Recognizing that a certain minimum level of effort is required by Brookfield regardless of the size of the investment, the first step is to allocate a portion of the total Executive Oversight Expenses to this category, labeled by Navigant as *Fixed Executive Oversight*. The balance of the Executive Oversight Expenses, labeled *Variable Executive Oversight*, is for costs driven by the size of the investment and whether or not Brookfield takes an active role in the day-to-day management or is relegated to the role of a shareholder. The second step in the process is to allocate these two expense categories to each member of the Electric Utility Group.

##### **Fixed Executive Oversight**

Fixed executive oversight includes activities such as quarterly reporting, monthly meetings, policy development and initiatives, equity market communications and other reporting related responsibilities. Navigant estimates that 50% of the Executive Oversight Expenses (\$742,853 in 2013, \$765,882 in 2014) are Fixed Executive Oversight based on discussions with Brookfield management. These expenses have been distributed equally across the 5 utilities as the reporting requirements are the same for each member of the Electric Utility Group. On this basis the allocation to GLPT is \$148,571 in 2013 and \$153,176 in 2014.

##### **Variable Executive Oversight**

Variable Executive Oversight Expense (\$742,853 in 2013, \$765,882 in 2014) was allocated to each member of the Electric Utility Group, which are actively managed by Brookfield, based upon assets and adjusted for ownership interest. Navigant proposes this allocator based on the logic that the level of investment is a representative measure of management's involvement. The Variable Oversight Expense was allocated to each enterprise in which Brookfield takes an active role in the management using the ratio of the each investment to the sum of all actively managed investments. The level of Variable Executive Oversight Expense allocated to GLPT is \$117,589 in 2013 and \$121,234 in 2014.

##### ***Resulting Allocation to GLPT***

The resulting allocation of Executive Oversight Expense to GLPT for 2013 is \$266,159 and for 2014 is \$274,410.

## 5. Benchmarking of Results to Other Ontario Utilities

Navigant benchmarked the Corporate Shared Services of other electric utilities in Ontario who are privately held. The utilities in the sample included:

1. Algoma Power Inc.;
2. CNPI - Eastern Ontario Power;
3. CNPI - Port Colborne;
4. CNPI - Fort Erie;
5. CNPI-Transmission.

The benchmarking analysis compared the level of Corporate Shared Services cost allocated to each utility to the total revenue requirement approved by the OEB in that utility's last rate request. Table 4 below summarizes our findings:

**Table 4 - Benchmarking of Corporate Shared Service Costs Transferred to Ontario Electric Utilities**

Utility	OEB Docket No.	Corporate Shared Service Costs	Total Revenue Requirement	Corporate Shared Service Costs as a Percentage of the Revenue Requirement
Algoma Power Inc.	EB-2009-0278	\$428,538	\$20,452,136	2.10%
CNPI – Eastern Ontario Power	EB-2008-0222	\$99,000	\$2,359,136	2.80%
CNPI – Port Colborne	EB-2008-0224	\$199,000	\$5,969,947	3.30%
CNPI – Fort Erie	EB-2008-0223	\$346,000	\$9,827,418	3.50%
CNPI - Transmission	EB-2011-2068	\$454,444	\$4,612,444	9.90%
Average of Peers		\$1,526,982	\$43,221,684	3.53%
Great Lakes Power Transmission	2013 Budget	\$469,717	\$35,247,807	1.33%

Great Lakes Power Transmission is requesting a level of Corporate Shared Service costs which is less than one-half the weighted average of the other utilities. Furthermore, the percentage level of Corporate Shared Service costs requested by GLPT is the lowest of the peer group.

## 6. Conclusions

Navigant has completed an evaluation of Shared Services functions and allocated those costs to each member of the Electric Utility Group based on three recognized metrics; gross revenues, assets, and number of employees. The allocations include an adjustment for the level of management activity and proportion of ownership. The result of this analysis is a shared services allocation to GLPT of \$ 203,588 in 2013, and \$209.868 in 2014.

The Executive Oversight allocation was classified as 50% fixed and 50% variable. The fixed proportion was allocated equally to each member of the Electric Utility Group, and the variable proportion was allocated on the basis of investment (i.e. asset allocation) adjusted for ownership interest. The total Executive Oversight allocation to GLPT is \$266,159 and \$274,410 in 2013 and 2014 respectively.

Lastly, the total affiliated costs allocated to GLPT appear reasonable given the results of the benchmarking analysis completed by Navigant which compares the proportionate share of Corporate Shared Service costs to revenue requirement. The proportionate share for GLPT is less than one-half the weighted average for the comparable peer group of utilities.

## Appendix A. Corporate Structure of Brookfield

### ***Brookfield Utility Investments***

The Brookfield Electric Utility Group is primarily comprised of investments by Brookfield Asset Management (BAM) through Brookfield Infrastructure Partners (BIP), which in turn has an ownership interest in a number of utility ventures identified as the Electric Utility Group. The Electric Utility Group investments include:

#### **Great Lakes Power Transmission**

Great Lakes Power Transmission (GLPT) is the largest privately owned transmitter in Ontario with 561 km of 44kV to 230 kV transmission lines in northern Ontario. The connection to southern Ontario provided by these assets is an integral component to the Ontario transmission system. GLPT has assets of approximately \$230M and revenues of approximately \$35M. GLPT is actively managed and is controlled 100% by Brookfield.

#### **Cross Sound Cable**

Cross-Sound Cable Company, LLC is a 24 mile (39km) long submarine cable high voltage direct current ("HVDC") electrical transmission company providing 330MW's of electrical transmission capacity to customers in New England and Long Island. The Cross Sound Cable is operated under a contract with the Long Island Power Authority and is regulated under the authority of the US Federal Energy Regulatory Commission. Cross Sound Cable has assets of \$198 million and revenues of \$23 million. Brookfield manages and owns 100% of the assets and is actively involved in the management of this Company.

#### **Transelec**

Transelec is the largest transmission system in Chile with approximately 8,200 km of transmission lines that serve 98% of the population. Transelec has assets of approximately \$5.0 billion and revenues \$398 million. Brookfield Infrastructure Partners holds an 18% interest in Transelec. The Brookfield ownership interest is best characterized as a shareholder only relationship with no active management responsibilities.

#### **Wind Energy Transmission of Texas**

Wind Energy Transmission of Texas (WETT) is a 600 km of 345 kV transmission lines and includes five substations. The \$750 million asset is currently under construction and is expected to be in service by 2013. Brookfield is a 50% partner in WETT and will jointly manage the operation of the company on this basis.

### **EBSA, Colombia**

EBSA is an electricity distribution franchise in the Boyacá and Santander provinces in Colombia, approximately 150 km north of Bogota. EBSA holds assets of \$650 million and earns revenues of \$175 million. Brookfield actively manages and controls 100% of EBSA.

### ***Differences in Ownership Structures and the Implications for Allocation of Corporate Costs***

Brookfield's ownership structures differ between the various Electric Utility Group investments. In some cases Brookfield actively participates in the management and oversight of day-to-day operations. Great Lakes Power Transmission is an example of such an investment where there is oversight of the day-to-day operations. Although many of the administrative services are delivered by internal staff at GLPT, policy oversight is established by Brookfield.

In contrast, Brookfield also takes passive interest in certain investments where there involvement is limited to being a shareholder with no active management responsibilities. Transelec is an example of a passive investment where Brookfield does not take an active role in the management of the asset, and thus does not devote resources to oversee their day-to-day operations.

Table 5 below provides a listing of each project and the ownership arrangement.

**Table 5 - Summary of Ownership Structures**

Investment	Ownership Percentage	Management Activity	Ownership
Transelec	18%	Shareholder Responsibility Only	Shareholder
Great Lakes Transmission	100%	Active Role in Management	Owner / Operator
Cross Sound Cable	100%	Active Role in Management	Owner / Operator
WETT	50%	Partner	Partnership
EBSA	100%	Active Role in Management	Owner / Operator



Exhibit 9, Tab 4, Schedule 1

Responses to VECC Interrogatories

**Vulnerable Energy Consumers Coalition (“VECC”) Interrogatories  
Great Lakes Power Transmission LP (“GLPT”)  
2015-2016 Cost of Service Revenue Requirement  
EB-2014-0238**

**1.0 ADMINISTRATION (EXHIBIT 1)**

**1.0-VECC-1**

**Reference:** ALL

**Question:**

- a) Please provide the results of any benchmarking reviews or studies undertaken by GLPT since 2012 and that are in addition to the 1QC benchmarking study.

**Response:**

- a) GLPT has not undertaken any benchmarking studies or reviews aside from the 1QC benchmarking study. However, GLPT has provided some comparisons to Hydro One Transmission in its responses to 2-Energy Probe-9 and 4.0-VECC-15 below.

## **2.0 RATE BASE (EXHIBIT 2)**

### **2.0-VECC-2**

**Reference:** 2/T1/S1/pg.7

**Question:**

- a) As part of the Wood Structure Replacement project, what is the incremental cost of replacing the four poles which are 20-30 years old?
- b) Why has GLPT chosen not to replace the conductor in the Hogg and Gartshore projects described at pages 6 and 7 of the above reference?

**Response:**

- a) GLPT estimates that the incremental cost (material, labour and equipment) of replacing the additional four poles is approximately \$80,000. These replacements would be in the best interest of the ratepayer.
- b) Through condition assessments and past experience, GLPT has determined that the conductor is in good condition and does not require replacement in the short term. As such, replacing the conductor is not a project that would be in the best interest of the ratepayer at this time.

It is also worth noting that there would be minimal cost savings realized by stringing a new conductor during a structure replacement program as the operation would require a stringing crew to follow in behind the structure replacement crew. GLPT will continue to monitor the condition of the conductor through its normal preventative maintenance cycles and will continuously review the need for replacement in its long term capital planning process.

## **2.0-VECC-3**

**Reference:** 2/T1/S1/pg.10

### **Question:**

- a) What are the expected cost savings in moving to stand-by (or other) rate from Algoma Power for the Highway 101 TS?
- b) What rate is currently charged to GLPT by API? What rate is expected after the completion of this project?

### **Response:**

- a) GLPT is anticipating that the installation of the new transformer would reduce its electricity consumption cost at Highway 101 TS by approximately \$900 per year.
- b) GLPT currently pays approximately \$1,200 on an annual basis. GLPT estimates that by eliminating its consumption and paying only the fixed monthly rate, it would reduce its cost to approximately \$300 annually.

While the cost savings are not significant, GLPT believes having redundant station service supply is good utility practice as it provides improved reliability in the event of a transformer failure.

## 2.0-VECC-4

**Reference:** 2/T1/S1/pg.21

**Question:**

- a) Please describe the Hydro One “supporting guarantees” including their current costs and the expected savings once the Watson TS project is completed.

**Response:**

- a) Due to the system configuration at GLPT’s Watson TS, isolation of GLPT’s Power Transformer (“T2”) requires coordination with Hydro One. In order for Hydro One to provide the supporting guarantee, they are required to isolate the GLPT circuit on the line-side of T2. Once Hydro One performs its action and provides the supporting guarantee, GLPT is able to remove T2 from service and create a safe work zone.

There are no costs charged to GLPT associated with Hydro One providing the necessary switching and supporting guarantee (industry practice). Any realization of cost savings by GLPT would be minimal and be a result of time saved by GLPT employees in executing the switching.

## 2.0-VECC-5

**Reference:** 2/T1/S1/pg.28

**Question:**

- a) Please provide a table which shows for each year the in-service forecast and actual in-service amounts for the capital projects presented in EB-2012-0300 for 2012 through 2014.

**Response:**

- a) Please refer to *Table 2-1-1 D* found on page 28 of Exhibit 2, Tab 1, Schedule 1 for a reconciliation of the forecast and actual in-service amounts for the capital projects presented in EB-2012-0300 for 2012 through 2014.

## **2.0-VECC-6**

**Reference:** 2/T1/S1/pg.28

**Question:**

- a) Please provide the inventory levels (values) used in the working capital calculation for 2013 and 2014 (i.e. in EB-2012-0300). Please compare and contrast these to the values being proposed for 2015 and 2016.

**Response:**

- a) In GLPT's 2013-2014 working capital calculation (EB-2012-0300), GLPT estimated that its inventory levels in the test years would be approximately \$350,000. For 2015-2016, GLPT is proposing to use \$250,000 as the inventory value in its working capital calculation, as GLPT is currently maintaining a lower inventory balance.

**2.0-VEC-7**

**Reference:** 2/T3/S1/pg.1-4

**Question:**

- a) What, if any, service quality metrics/targets does GLPT propose to use to assess the outcomes of its capital program?
- b) How are the Delivery Point Performance Standards integrated into the performance metrics of employees of GLPT?

**Response:**

- a) GLPT will continue to use its Customer Delivery Point Performance Standards (as described in Exhibit 2, Tab 3, Schedule 1) as the service quality metrics to assess the outcomes of its capital and maintenance programs.
- b) GLPT uses Customer Delivery Point Performance Standards as a part of its working group performance described in Appendix A of Exhibit 4, Tab 2, Schedule 2. These standards, combined with the other aspects of the working group performance (health and safety, OM&A costs, capital budget, etc.) make up 40% of each eligible salaried employee's incentive compensation.



## 2.0-VECC-8

**Reference:** 2/T3/S1/Appendix A

**Question:**

- Please provide the baseline for each delivery point as contemplated in section 4 of GLPL CDPPS.
- What, if any, service quality metrics/targets does GLPT propose to judge the outcomes of its capital program?

**Response:**

- Please see *Table 2.0-VECC-8 A* and *Table 2.0-VECC-8 B* below. For confidentiality reasons, GLPT has not specifically identified each delivery point by name but has organized the delivery points by load category.

*Table 2.0-VECC-8 A – CDPPS Baselines - Frequency*

Delivery Points	Load Category	Inlier Baseline for DP
DP1	(>80 MW)	1.03
DP2	(40-80 MW)	1.10
DP3	(15-40MW)	1.03
DP4	(15-40MW)	0.78
DP5	(0-15 MW)	1.89
DP6	(0-15 MW)	1.03
DP7	(0-15 MW)	1.59
DP8	(0-15 MW)	0.78
DP9	(0-15 MW)	1.78
DP10	(0-15 MW)	4.84
DP11	(0-15 MW)	4.40
DP12	(0-15 MW)	3.90
DP13	(0-15 MW)	1.86
DP14	(0-15 MW)	4.66
DP15	(0-15 MW)	2.91
DP16	(0-15 MW)	4.55
DP17	(0-15 MW)	7.28

DP18	(0-15 MW)	4.55
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*Table 2.0-VECC-8 A – CDPPS Baselines - Duration*

Delivery Points	Load Category	Inlier Baseline for DP
DP1	(>80 MW)	156
DP2	(40-80 MW)	140
DP3	(15-40MW)	157
DP4	(15-40MW)	140
DP5	(0-15 MW)	522
DP6	(0-15 MW)	157
DP7	(0-15 MW)	521
DP8	(0-15 MW)	508
DP9	(0-15 MW)	132
DP10	(0-15 MW)	349
DP11	(0-15 MW)	509
DP12	(0-15 MW)	406
DP13	(0-15 MW)	147
DP14	(0-15 MW)	188
DP15	(0-15 MW)	97
DP16	(0-15 MW)	496
DP17	(0-15 MW)	993
DP18	(0-15 MW)	767

- b) Please refer to GLPT's response to 2.0-VECC-7 part (a) above.

### 3.0 OPERATING REVENUE (EXHIBIT 3)

#### 3.0-VECC-9

**Reference:** 3/T1/S2/pg.2

**Question:**

- a) Please reconcile the statement on page 2 that “Consistent with the forecasting methodology used in EB-2012-0300, in calculating a 2014, 2015 and 2016 revenue forecast, GLPT assumed no changes in revenue requirement” with the results reported in Table 3-1-1 B and Table 3-1-1 C which show that the 2015 and 2016 revenue requirements are greater than the approved 2014 revenue requirement.

**Response:**

- a) GLPT’s statement on page 2 applies only to the revenue forecast figures presented in *Table 3-1-1 A*, where GLPT is forecasting revenue under the assumption that there is not an update to GLPT’s current revenue requirement. The purpose of presenting the figures in this fashion is to enable it to highlight the potential deficiency in *Table 3-1-1 B* and *Table 3-1-1 C*.

*Table 3-1-1 B* and *Table 3-1-1 C* illustrate that a deficiency will be incurred in each of 2015 and 2016 if revenue requirement is not updated.

### **3.0-VECC-10**

**Reference:** 3/T1/S1/pg. 2

**Preamble:**

The application states that “GLPT has assumed the actual provincial peak volumes will be equal to the approved provincial charge determinant forecast for each year, resulting in forecasted revenue for each year being equal to GLPT’s Board-Approved 2014 revenue requirement from EB-2012-0300”.

**Question:**

- a) Please clarify what GLPT is referring to as the “approved provincial charge determinant forecast for each year”. If they are the approved provincial forecast charge determinants for 2015 and 2016, please indicate the source of the values.

**Response:**

- a) GLPT is referring to the charge determinants that will be approved for each year by the Board through the UTR rate-setting process. The charge determinants have not yet been set for 2015 or 2016; however the assumption is that whatever is used as a forecast to calculate the rate is what actually comes to fruition for each year such that there are no volume variances in GLPT’s 2015-2016 revenue forecast.

### 3.0-VECC-11

**Reference:** 3/T1/S2/pg. 4 (filed September 18, 2014)

**Question:**

- a) Are the historical peaks reported by the IESO and used by GLPT in its analysis (per Table 3-1-2 A) the actual observed peaks or have they been weather corrected?
- b) If they are the actual observed peaks, has GLPT undertaken any analysis as to the weather sensitivity of its directly connected customers' loads and how this would impact the values reported?
- c) Please provide the year to date 2014 billing determinants for GLPT for each asset pool and the 2013 values for the comparable months.

**Response:**

- a) The peaks used by GLPT are the actual IESO observed peaks with no weather correction.
- b) GLPT has not undertaken an analysis on weather sensitivity and how it would impact its volume forecast. While weather does influence charge determinants year over year, GLPT believes that based on the size of GLPT and the size of its volume forecast in comparison to the total provincial UTR, undertaking a weather normalization exercise for GLPT's load forecast would not materially change the UTR.
- c) Please see *Table 3.0-VECC-11 A* below.

*Table 3.0-VECC-11 A – YTD Billing Determinants*

Billing Determinants	2013 Jan- Aug	2014 Jan- Aug
Network	2,092,218	2,285,947
Line Connection	1,682,625	1,703,496
Transformation Connection	282,434	299,094

### **3.0-VECC-12**

**Reference:** 3/T1/S2/pg. 7 (filed September 18, 2014)

**Question:**

- a) In Section 1.3 GLPT states that it “has applied the historical trend” and then made adjustments to account for forward-looking customer information. However, in Section 1.1 (page 5) GLPT states that it uses an historical average as the starting point before accounting for forward-looking customer information. Please reconcile whether the starting point is the historical average or trend.

**Response:**

- a) In preparing this evidence GLPT used the terms “historical trend” and “historical average” interchangeably. Therefore, the starting point is the historical average.

### 3.0-VECC-13

**Reference:** 3/T1/S3/pg. 2 – Footnote 1

**Question:**

- a) The first sentence indicates that GLPL bills GLPT for 41% of the OM&A costs related to the fibre optic network. Please explain the basis/rationale for this charge to GLPT.

**Response:**

- a) As described in Exhibit 4, Tab 2, Schedule 4 of EB-2009-0408, each GLPT transformer station and each GLPL generating station has a node of junglemux equipment. These nodes are the points at which the various types of data being communicated along the fibre optic cables are separated. The licence fee paid from GLPT to GLPL is based on the proportionate share of junglemux nodes dedicated to GLPT. With 12 of the 29 nodes being dedicated to GLPT, the licence fee represents approximately 41% of the total cost of the fibre network. This cost driver has not changed since 2010.

#### 4.0 OPERATING COSTS (EXHIBIT 4)

##### 4.0-VECC-14

**Reference:** 4/T2/S1/Table 4-2-1 D

**Question:**

- a) Please explain why USoA account 4916 – Maintenance of Transformer Station Equipment - is projected to increase significantly and notwithstanding the significant proposed investments in Transformer Stations that GLPT is making in 2016.
- b) Please explain the same for Maintenance of Overhead lines (account 4945) which has increased from \$87.4 million in 2012 to a projected \$153 million in 2016.
- c) Please explain why property insurance has increased by over \$100 million since 2012 (account 5635).

**Response:**

- a) The nature of the activities in accounts 4820 – Transformer Station Equipment – Labour, 4825 – Transformer Station Equipment – Supplies and Expenses, and 4916 – Maintenance of Transformer Station Equipment is quite similar. In the variance analyses provided by GLPT in EB-2009-0408, EB-2010-0291 and EB-2012-0300 GLPT had combined them and described the variances as though they were derived in a single account.

Upon combining the balances of the accounts, there is not a significant change in the total spending on Transformer Station Operations and Maintenance costs from 2012 actual to 2016 test year. The trend is demonstrated in the table below where the compound annual growth rate is 2.7% since ‘2012 Actual’ and only 0.2% since ‘2013 Actual’.

*Table 4.0-VECC-14*

	2012 Actual	2013 Actual	2014 Forecast	2015 Test Year	2016 Test Year
Accounts 4820, 4825 & 4916	\$1,037.3	\$1,176.2	\$1,193.6	\$1,161.4	\$1,184.6

- b) GLPT notes that the costs in the account are increasing from \$87,400.00 to \$150,000.00, not from \$87.4 million to \$150 million as indicated in the question.

GLPT uses Account 4945 to capture costs related to maintaining its roads and trails used to access its rights of way. GLPT’s transmission system is located in a rural area of dense vegetation and rugged terrain of the Canadian Shield. Access to the right of



way is important for reliability and emergency response purposes. Maintenance activities include vegetation management along the roadways and general road maintenance activities. The road maintenance program typically works in conjunction with GLPT's 6-year vegetation management cycle where the road maintenance activities ensure appropriate access for right of way clearing and brush control activities each year.

The costs in this account are projected to increase from 2012 actual primarily as a result of access requirements related to the vegetation management major maintenance program in 2015 and 2016. In these years the vegetation management maintenance program is moving to circuits with less favourable access. Therefore, additional road work is required to ensure access is available for the vegetation management program.

- c) GLPT notes that the costs are increasing by \$104,500, not by "over \$100 million" as indicated in the question.

The largest driver for the increase in costs is property insurance. GLPT's property insurance costs have increased as a result of industry-wide premium rate increases combined with an increase in GLPT's asset replacement value primarily driven by the completion of the Third Line Redevelopment Project.

#### 4.0-VECC-15

**Reference:** 4/T2/S1/Appendix A

**Question:**

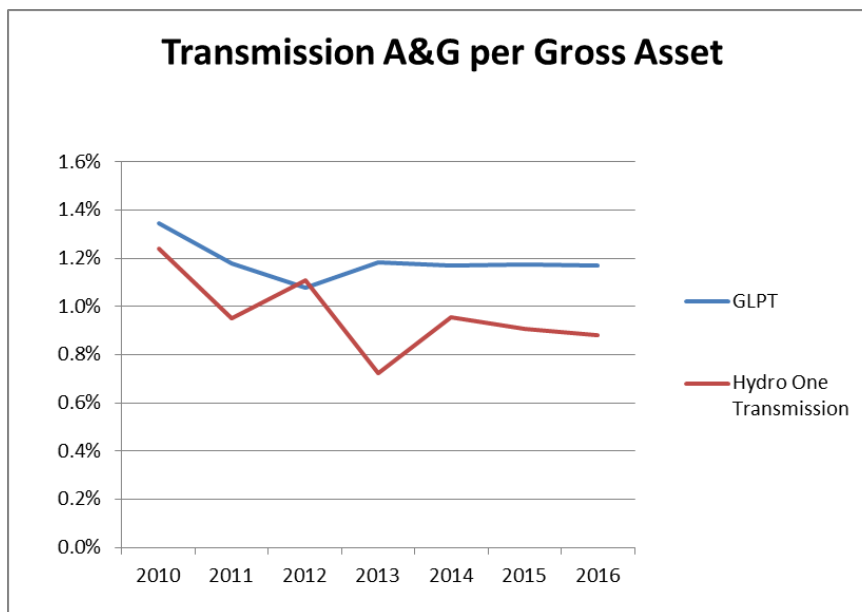
- a) Is Hydro One Transmission included in the cohort shown in the benchmarking study?
- b) For 2010 through 2016 please show the A&G per Gross Asset and the Transmission Lines & Substations OM&A plus A&G per Gross Asset of GLPT as compared to Hydro One Transmission (i.e. Figures 1 and 2 of Appendix A).

**Response:**

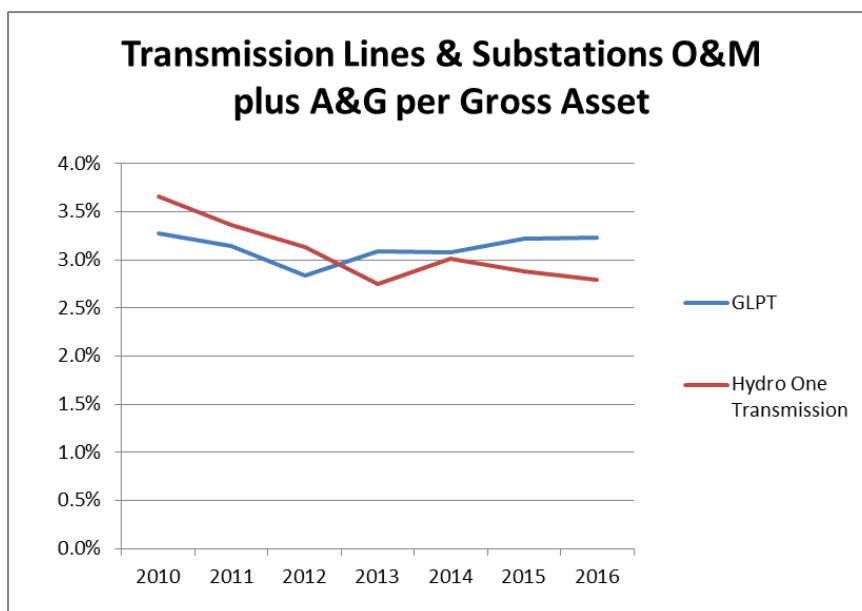
- a) Hydro One Transmission is not included in the benchmarking study.
- b) GLPT has prepared the following tables based on Hydro One Transmission information drawn from its 2013-2014 rate application (EB-2012-0031) and its 2015-2016 rate application (EB-2014-0140). GLPT assumed that Hydro One's A&G expenses would include Customer Care, Common Corporate, Property Tax and Rights Payments. All OM&A would include these groups plus Sustaining, Development and Operations OM&A. The results are provided in *Table 4.0-VECC-15 A* and *Table 4.0-VECC-15 B* below.

As demonstrated in the table, GLPT's costs on a per-gross asset basis are comparable to Hydro One Transmission.

*Table 4.0-VECC-15 A – A&G per Gross Asset*



*Table 4.0-VECC-15 B – OM&A per Gross Asset*



#### 4.0-VECC-16

**Reference:** 4/T2/S2/pg.4

**Question:**

- a) Using Table 4-2-2 A, please provide the incentive pay separately for each of the employment categories for the years 2012 through 2016.

**Response:**

- a) Please see the table below.

*Table 4.0-VECC-16*

All figures except FTE's shown in \$000's						2015	2016
	2012 Actual	2013 Appl.	2013 Actual	2014 Appl.	2014 Forecast	Test Year	Test Year
<b>Total Incentive Pay (\$000's)</b>							
Union	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Management & Executive	\$242.9	\$179.3	\$226.4	\$184.9	\$167.8	\$197.0	\$200.9
Non-Union	\$75.3	\$100.5	\$75.2	\$103.7	\$78.1	\$97.4	\$103.5
<b>Total</b>	<b>\$318.1</b>	<b>\$279.8</b>	<b>\$301.7</b>	<b>\$288.5</b>	<b>\$245.8</b>	<b>\$294.4</b>	<b>\$304.4</b>

#### 4.0-VECC-17

**Reference:** 4/T2/S3/pg.3-5

**Question:**

- a) Are there alternative third party suppliers of communication systems that meet GLPT needs? Please explain what steps GLPT took to investigating alternative communication suppliers.
- b) Does GLPL have any other customers using the network attached to GLPT's Transmission system? If yes, what rents does GLPT charge for use of its towers?
- c) Please explain how the \$70,000 in operating and maintenance costs for the shared radio system is derived.

**Response:**

- a) GLPT is not aware of any alternative third party suppliers that would be able to provide communication services comparable to those currently received from GLPL. GLPL's communication system runs fibre in and out of each of GLPT's transmission stations, and includes the nodes of junglemux equipment at each connection point. Due to the remoteness of its location, it would not make economic sense for any party to duplicate the existing network.
- b) GLPT only charges for utilization of its transmission structures based on the number of attachments which would not change in the event GLPL is providing services to other entities.
- c) The \$70,000 is derived from the following charges:

Radio authorization fee - \$10,000

Tower site regular maintenance (inspections, civil maintenance, vegetation management, etc.) - \$29,000

Utility costs at tower sites - \$22,000

Land leases at tower sites - \$9,000

#### 4.0-VECC-18

**Reference:** 4/T2/S3/pg.9 / EB-2012-0300 Exhibit 4/T2/S4/Appendix B

- a) Please explain the nature of the shareholder communications costs allocated to GLPL.
- b) Please explain the nature of the executive oversight services allocated to GLPL.
- c) At page 3 of the Navigant Corporate Overhead Cost Allocation Study the authors were provided in Table 1 the Electric Utility Group Corporate Budget (see copy below). Please provided the updated Corporate Budget for 2015 and 2016.

**Table 1 - Electric Utility Group Corporate Budget**

Expense Category	2013 Budget	2014 Budget
Information Technology	\$18,558	\$19,133
Equity Resourcing	\$111,348	\$114,800
Tax	\$37,116	\$38,267
Human Resources	\$18,558	\$19,133
Finance	\$1,135,425	\$1,170,623
sub-total	\$1,321,005	\$1,361,956
Executive Oversight	\$1,485,706	\$1,531,763
Total	\$2,806,711	\$2,893,719

**Response:**

- a) No shareholder communications costs are allocated to GLPL as it does not form a part of the Electric Utility Group.

The shareholder communications costs allocated to GLPT are related to communications with shareholders. This flow of communication is required for securing and maintaining investor relations in respect of the Electric Utility Group of which GLPT forms a part of.

- b) No executive oversight expenses are allocated to GLPL as it does not form a part of the Electric Utility Group.

Executive oversight expenses allocated to GLPT are associated with the enterprise leadership of the Electric Utility Group at Brookfield. This includes activities such as setting and monitoring strategic objectives, quarterly reporting, monthly meetings, policy development and initiatives and other reporting-related responsibilities.

- c) Please see the table below. The 2015 and 2016 figures in the table can also be found in *Table 4-2-3 B* and *Table 4-2-3 C*, respectively of the pre-filed evidence.

*Table 4.0-VECC-18 A*

Expense Category	2015 Budget	2016 Budget
Information Technology	\$25,499	\$26,007
Equity Resourcing	\$101,995	\$104,030
Tax	\$33,572	\$34,241
Human Resources	\$33,572	\$34,241
Finance	\$1,088,113	\$1,109,821
sub-total	\$1,282,750	\$1,308,341
Executive Oversight	\$1,379,013	\$1,406,525
Total	\$2,661,764	\$2,714,866

#### 4.0-VECC-19

**Reference:** 4/T4/S1&S3/

- a) Please confirm that none of the property tax amounts shown in Table 4-4-1 are for the leased offices at 2 Sackville Road.

**Response:**

- a) The property taxes associated with the leased offices at 2 Sackville Road are included in *Table 4-4-1*. The amount included is the net amount incurred by GLPT after passing on the appropriate share of costs to Algoma Power Inc., based on square footage of the office building.

As originally described in Exhibit 4, Tab 2, Schedule 4 of EB-2009-0408, the lease and sublease for the Sackville Road offices are governed by triple net leases, where the lessee is responsible to pay for net real estate taxes on the leased asset, net building insurance and net common area maintenance. The lease rate was determined through an independent appraisal and was based on triple net terms.



## **6.0 DEFERRAL AND VARIANCE ACCOUNTS (EXHIBIT 6)**

### **6.0-VECC-20**

**Reference:** 6/T1/S2/pgs.11-12

**Question:**

- a) Please provide details as to the nature of the \$274,963 and \$170,000 in costs incurred by senior employees on the East-West Tie Line.

**Response:**

- a) The \$274,963 and \$170,000 amounts represent the costs incurred by GLPT that were not charged to the EWT Line Initiative in 2013 or 2014, respectively. As described in EB-2012-0300, GLPT's 2013 and 2014 budgets contemplated a reduction in OM&A expenses (and a reduction in the OM&A collected from ratepayers) related to costs that were to be recovered from EWT LP. In the Board-approved settlement agreement in EB-2012-0300, the parties agreed that to the extent the costs that were removed from GLPT's OM&A budget were not billed to EWT LP, they would be accrued within this approved variance account.

As a result of EWT LP not being selected as the designated transmitter for the development of the project, the recovery from EWT LP did not take place to the extent contemplated in the budget. The costs recovered from EWT LP in 2013 are described in more detail in GLPT's response to 6-Staff-29 part (b). However, the full gross costs were still incurred in the year by GLPT as they are fixed costs related to senior employees of the company who were undertaking work for GLPT.

The costs are related to salary, benefits and incentive compensation for the senior employees, plus normal expenses associated with employment for each year.

**6.0-VECC-21**

**Reference:** 6/1/S4/pg.1

**Question:**

- a) Please explain why the Three Year Liability Repayment disposition should not continue such that it is returned as originally contemplated by year end 2015, by making the final adjustment to the 2015 revenue requirement?
- b) Please explain what is meant by “*In 2014, GLPT reduced its revenue requirement for UTR purposes by \$748,608, reflecting the return of funds to ratepayers for the year.*” (i.e. was this the expected normal adjustment or something different?)

**Response:**

- a) GLPT’s approach to regulatory account disposition is consistent with the approach used in prior applications where total regulatory asset and liability balances are aggregated for disbursal over a single timeframe.
- b) This reduction was the normal adjustment related to the Three Year Liability Repayment.

**6.0-VECC-22**

**Reference:** 6/T2/S1/pg.1 (see also 6-Staff-33)

**Question:**

- a) Please describe the nature of the “organic load growth in the Wawa area” and the reasons that GLPT has to believe there is a reasonable chance of new facilities needing to be built.
- b) Please describe generally the nature of the facilities that are being contemplated and the approximate costs that might be incurred.

**Response:**

- a) The organic growth is due to the upward economic trend in the Wawa area in the mining industry. Existing facilities have seen increases in production while other facilities have restarted after many years of shut down. GLPT is currently in the process of connecting a new registered market participant who has refurbished an existing wood products plant connected to the 44kV system to begin production late 2014. While the new facility is connecting to a previously occupied delivery point, the load of the new facility is approximately double that of the previous facility. GLPT is also coordinating a planning effort with a local LDC to provide options for a new mining connection.
- b) A new 115kV / 44kV transformer station is being contemplated; preliminary estimates are expected to be between \$9 million and \$15 million.

## **7.0 COST ALLOCATION TO RATE POOLS (EXHIBIT 7)**

### **7.0-VECC-23**

**Reference:** 7/T1/S1/pg. 1

**Question:**

- a) Has GLPT undertaken any analysis to determine, based on its assets and the use of its system, what portion of its revenue requirement should be considered Network versus Line Connection versus Transformation Connection? If so, please provide the results.

**Response:**

- a) GLPT has not undertaken this analysis. As stated in the pre-filed evidence, it is GLPT's intent to continue to allocate its revenue requirement to the UTR pools in accordance with Hydro One's cost allocation methodology.

Exhibit 9, Tab 5, Schedule 1

Responses to Energy Probe Interrogatories

**Energy Probe Interrogatories  
Great Lakes Power Transmission LP (“GLPT”)  
2015-2016 Cost of Service Revenue Requirement  
EB-2014-0238**

**CAPITAL**

**2-Energy Probe-1**

**Reference:** Exhibit 2, Tab 1, Schedule 1, pages 4- 8

This reference describes the Wood Structure Replacement Program approved by the Board in EB-2012-0300.

**Question:**

- a) Please provide a table showing the number of structures replaced in each year of the program and the actual or forecast cost for the year in question since the inception of the program.
- b) Are all of the poles to be replaced on high voltage structures or are 44 kV structures also planned for replacement under the program?

**Response:**

- a) GLPT has provided *Table 2-Energy Probe-1 A* demonstrating the number of wood structures and the actual/forecast cost for each year.

*Table 2-Energy Probe-1 A – Wood Structure Replacement Program*

	<b>Wood Structures Replaced</b>	<b>Project Actual/Forecast</b>
2012 Actual	8	\$1,345,400
2013 Actual	13	1,757,100
2014 Forecast	20	3,183,500
2015 Test Year	91	5,630,000
2016 Test Year	34	2,807,200

- b) All the poles to be replaced are for high voltage structures.

## **2-Energy Probe-2**

**Reference:** Exhibit 2, Tab 1, Schedule 1, page 10

This page describes the addition of a 44 kV Station Service Voltage Transformer at the Highway 101 TS. The existing transformer owned by Algoma Power is expected to be retained as backup and paid for on a usage basis.

### **Question:**

Please provide an explanation of the usage charges that GLPT will incur for this backup supply to station service.

### **Response:**

GLPT currently pays approximately \$1,200 on an annual basis. GLPT estimates that by eliminating its consumption and paying only the fixed monthly rate, it would reduce its cost to approximately \$300 annually.

While the cost savings are not significant, GLPT believes having redundant station service supply is good utility practice as it provides improved reliability in the event of a transformer failure.

## 2-Energy Probe-3

**Reference:** Exhibit 2, Tab 1, Schedule 2, page 12 &  
Exhibit 2, Tab 1, Schedule 2, pages 7-8

The first reference describes the Enterprise Resource Planning upgrades forecast to cost \$663,700. The second reference is the Asset Continuity Schedule for 2015 which shows the forecast cost in Account 1925 Computer Software.

### **Question:**

- a) Will this system require new computer hardware for it to work properly? If yes, please provide a description and cost for the required hardware.
- b) Is the computer hardware in Account 1920 for \$258,500 in 2015 and \$276,000 in 2016 related to the ERP system? If no, please provide a brief description of what those hardware expenditures are for.

### **Response:**

- a) GLPT is not anticipating that the project will require a significant hardware upgrade. If a hardware upgrade is required, it will be managed within the annual IT hardware capital program.
- b) The computer hardware additions in account 1920 are not related to the ERP system. GLPT has an annual computer hardware capital budget that is dedicated to cyclical upgrades of computer and IT equipment where each individual project is significantly lower than GLPT's materiality. Depending on the type of equipment GLPT typically runs equipment for a minimum of 5 years and sometimes as long as 7 or 8 years.

GLPT's current hardware expenditure budget for 2015 and 2016 (which is exclusive of the ERP system upgrade) is as follows:

2015 – Network core and communications equipment cyclical upgrade, regular server replacements, upgrade to backup capabilities and regular computer equipment refresh cycles (i.e., laptops, desktops, monitors, etc.).

2016 – Larger number of server replacements, storage capacity upgrades and regular computer equipment refresh cycles (i.e., laptops, desktops, monitors, etc.).



## **2-Energy Probe-4**

**Reference:** Exhibit 2, Tab 1, Schedule 2, pages 7-8

This reference shows asset continuity for 2015 and 2016. Account 1705 Land shows additions of \$380,000 in 2015 and \$580,000 in 2016.

### **Question:**

Please explain what these additions are for.

### **Response:**

The land additions are to secure permanent land rights along GLPT's rights of way and on the roads and trails that provide critical access to those rights of way to ensure timely maintenance and emergency servicing can be completed. GLPT is currently negotiating with a number of land owners in regards to right of way land as well as roads and trails required to access the K24G, Gartshore, Hogg and W23K transmission lines.

## **RATE BASE**

### **2-Energy Probe-5**

**Reference:** Exhibit 2, Tab 1, Schedule 1, page12: 3. Enterprise Resource Planning Upgrades - \$663,700

#### **Question:**

- a) In addition to the Business Plan requested by Board Staff, please provide the following:
  - Summary of RFP
  - Number of potential bidders
  - Schedule, including in-service date(s)
  - Benefits Realization Plan showing Capital and Operating savings by year
- b) Will any other Corporate Affiliates use the system(s)? If so, please provide information on how the costs/benefits will be allocated.

#### **Response:**

- a) GLPT's existing ERP system was installed in the early 1990's and has had no significant technological upgrades since that time. As such, the system is in need of replacement. GLPT has determined that continuing with its existing financial system while replacing the existing work management system with a version offered by the same vendor as the financial system is the preferred solution. Remaining with the same provider for the financial system will meet GLPT's needs and reduce the overall cost of the project as it will not require a transition for the financial module of the ERP. Therefore, an RFP has not been required.

GLPT is estimating that the conversion to the new work management system will take place in Q3 of 2015. Upon completion of the implementation in 2015, GLPT will continue to use existing staff to ensure a smooth transition of work flow and procedures. GLPT anticipates the implementation will create efficiencies; however short-term efficiencies are expected to increase productivity and quality of operational reporting and will not result in immediate cost savings.

Please refer to GLPT's response to 2-Staff-8 part (b) for additional benefits GLPT expects to realize in the medium- to long-term.

- b) No other corporate affiliates will use the system.

## 2-Energy Probe-6

**Reference:** Exhibit 2, Tab 1, Schedule 3, page 2

### Question:

- Please provide the WC Calculation Tables Approved/Accepted for 2013/14 corresponding to Tables 2-1-3 A, B and C.
- Please provide a Variance Report that highlights any material changes in assumptions and related outputs for 2015/16.

### Response:

- GLPT has provided *Tables 2-Energy Probe-6 A, B and C* which provide the WC calculation tables approved/accepted for 2013/2014 in EB-2012-0300.

*Table 2-Energy Probe-6 A – 2013 Working Capital Requirements*

(\$000's)	2013	2014
Lead Lag Working Capital	\$89.6	\$109.4
Materials and Supplies	350.0	350.0
<b>Total Working Capital Requirement</b>	<b>\$439.6</b>	<b>\$459.4</b>

*Table 2-Energy Probe-6 B – 2013 Working Capital Calculation*

Description	2013 Amounts \$s	Revenue Lag Time Days	Expense Lead Time Days	Net Lag Days	Working Capital Factor	Working Capital Requirements \$s	(Less) GST/HST	Net Working Capital Requirements \$s
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Payroll and Benefits	5,599,903	35.84	15.94	19.90	5.45%	305,282		
Rents and Leases	698,019	35.84	45.35	(9.51)	-2.61%	(18,195)		
Office Supplies	226,964	35.84	20.98	14.86	4.07%	9,240		
Outside Services	3,760,554	35.84	32.42	3.42	0.94%	35,191		
Property Insurance	257,750	35.84	(156.17)	192.01	52.61%	135,590		
Regulatory Expenses	170,061	35.84	(70.67)	106.50	29.18%	49,623		
Property Taxes	243,000	35.84	(107.41)	143.25	39.25%	95,367		
Total	10,956,251	35.84				612,099	(522,453)	<b>89,646</b>

*Table 2-Energy Probe-6 C – 2014 Working Capital Calculation*

Description	2014 Amounts \$s	Revenue Lag Time Days	Expense Lead Time Days	Net Lag Days	Working Capital Factor	Working Capital Requirements \$s	(Less) GST/HST	Net Working Capital Requirements \$s
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Payroll and Benefits	5,774,873	35.84	15.94	19.90	5.44%	313,961		
Rents and Leases	608,863	35.84	45.35	(9.51)	-2.60%	(15,827)		
Office Supplies	234,000	35.84	20.98	14.86	4.06%	9,501		
Outside Services	4,322,967	35.84	32.42	3.42	0.93%	40,343		
Property Insurance	265,740	35.84	(156.17)	192.01	52.46%	139,411		
Regulatory Expenses	175,333	35.84	(70.67)	106.50	29.10%	51,021		
Property Taxes	246,600	35.84	(107.41)	143.25	39.14%	96,516		
Total	11,628,377	35.84				634,926	(525,513)	<b>109,412</b>

- b) GLPT did not change any assumptions related to lead or lag days in the 2015-2016 calculations compared to the 2013-2014 calculations.

The primary variances in the tables include:

- There is a \$100,000 decrease in the Materials and Supplies in the 2015-2016 table compared to the 2013-2014 table as a result of lower inventory levels forecast to be held by GLPT in the test period,
- There is a change in the base working capital requirements as a result of changes in payroll and benefits and property insurance costs, both of which have increased between the 2013-2014 tables and the 2015-2016 tables, and
- There is a smaller reduction in the 2015-2016 working capital related to HST as a result of an increase in the cash outflows related to GLPT's capital program compared to 2013-2014.

All of the variances in GLPT's working capital are lower than GLPT's materiality threshold of approximately \$200,000.

## 2-Energy Probe-7

**Reference:** Exhibit 2, Tab 3, Schedule1, page 3, Table & Schedule 2, Tab 3, 1 B

### Question:

- Please provide a comparison Table in Format of Table 2-3-1-B and add Column with Applicable DPCC Standards from Table 1 in Appendix A.
- Please add Indicators showing DPCC standard minimum standard indicators (Appendix A) on Figure 2-3-1-B.
- Please provide DPCC Targets for 2015 and 2016 by category, or if not available, in aggregate.

### Response:

- The table below provides the applicable Delivery Point Standards from Table 1 in Appendix A. Each Standard of Performance has been multiplied by the number of delivery points that are included within each load category for comparability with the actual data. As an example, the Standard Average Performance for each delivery point in the 15-40MW load category is 22 minutes; therefore GLPT has multiplied this by 4 (based on the number of delivery points in that load block) so that the total Standard Average Performance of 88 is comparable to the actual data which is based on 4 metering points.

*Table 2-Energy Probe-7 A*

Customer Delivery Point	Interruption Duration (minutes)				Number of Delivery Points	Standard Average Performance	Minimum Standard Of Performance
	2013	2012	2011	2010			
(>80 MW)	-	16	356	-	1	5	25
(40-80 MW)	23	-	345	-	1	11	55
(15-40MW)	-	44	1,442	-	4	88	560
(0-15 MW)	16,338	3,652	4,088	3,165	16	1424	5760
<b>A -Total Interruption Duration (minutes)</b>	<b>16,361</b>	<b>3,712</b>	<b>6,231</b>	<b>3,165</b>			
B - Customers Served	19	21	21	21			
<b>SAIDI (A/B)</b>	<b>861</b>	<b>177</b>	<b>297</b>	<b>151</b>			

GLPT has explained the drivers for the increased durations in 2011 (15-40 MW, 40-80 MW & >80 MW load categories) and 2013 (0-15 MW load category) in Exhibit 2, Tab 3, Schedule 1 of the pre-filed evidence.

- Standard minimum indicators are set by delivery point load blocks. The 4 figures below provide the standard average and minimum standard indicators and GLPT actuals by the 4 load block categories

Figure 2-Energy Probe-7 A – >80MW Load Block

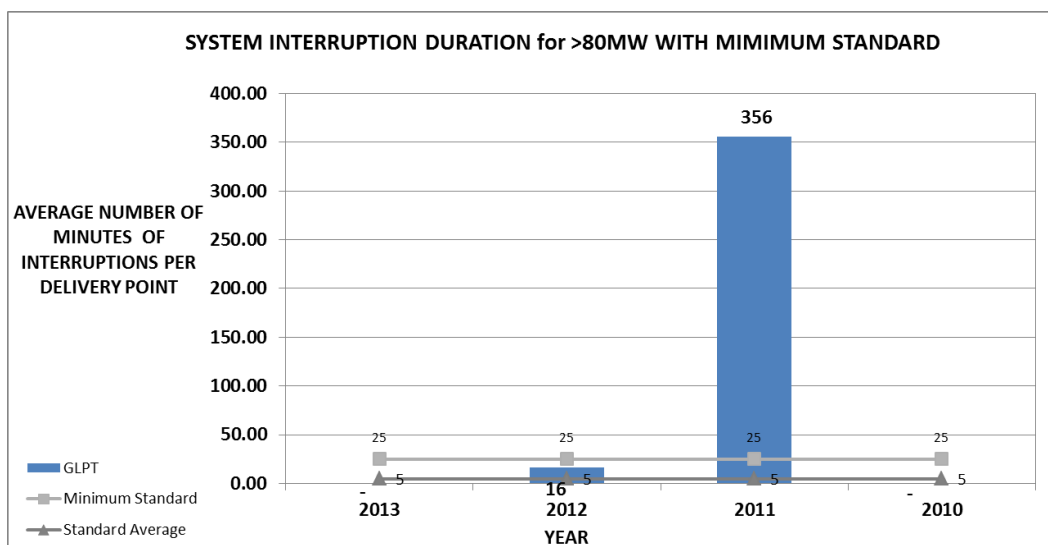


Figure 2-Energy Probe-7 B – 40-80 MW Load Block

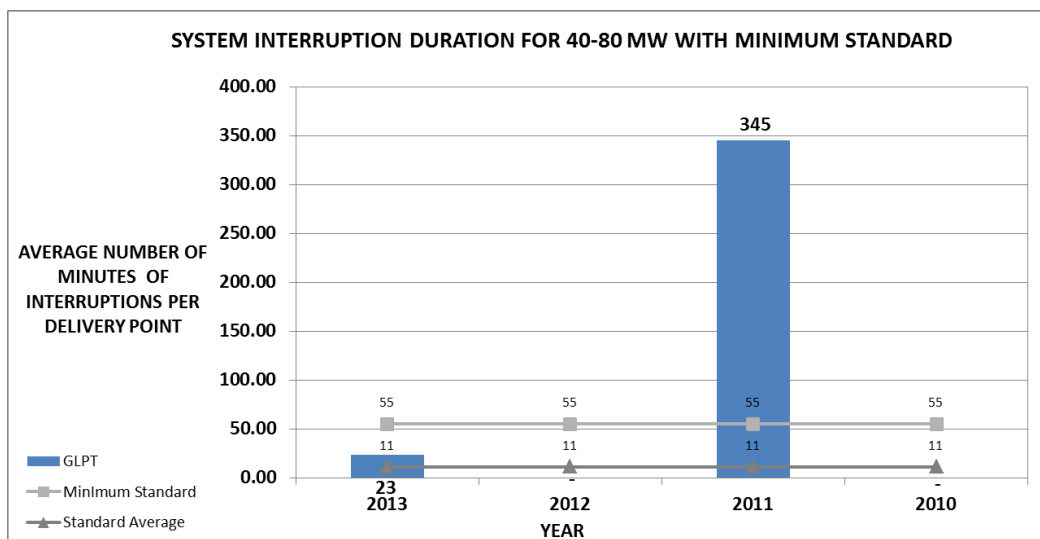


Figure 2-Energy Probe-7 C – 15-40 MW Load Block

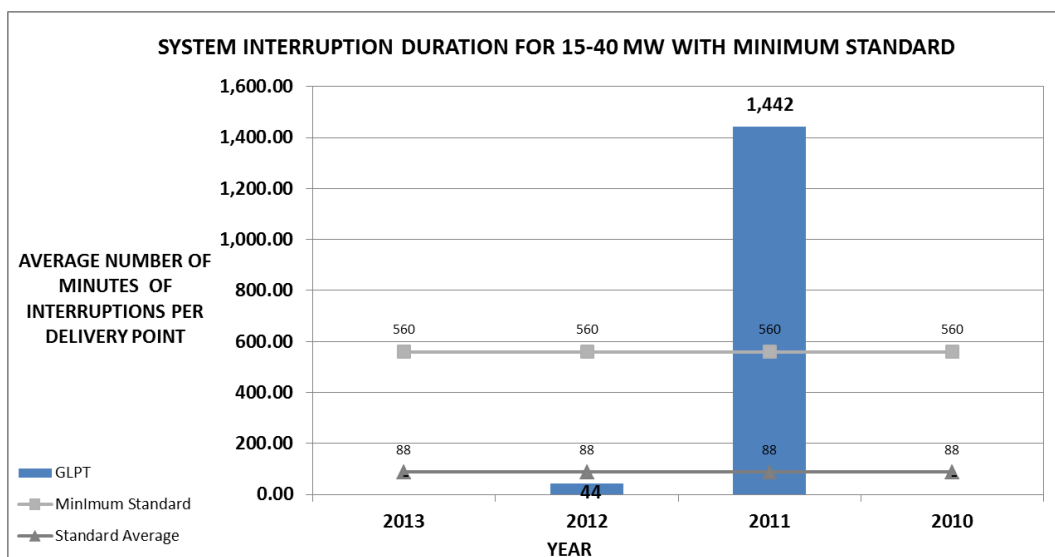
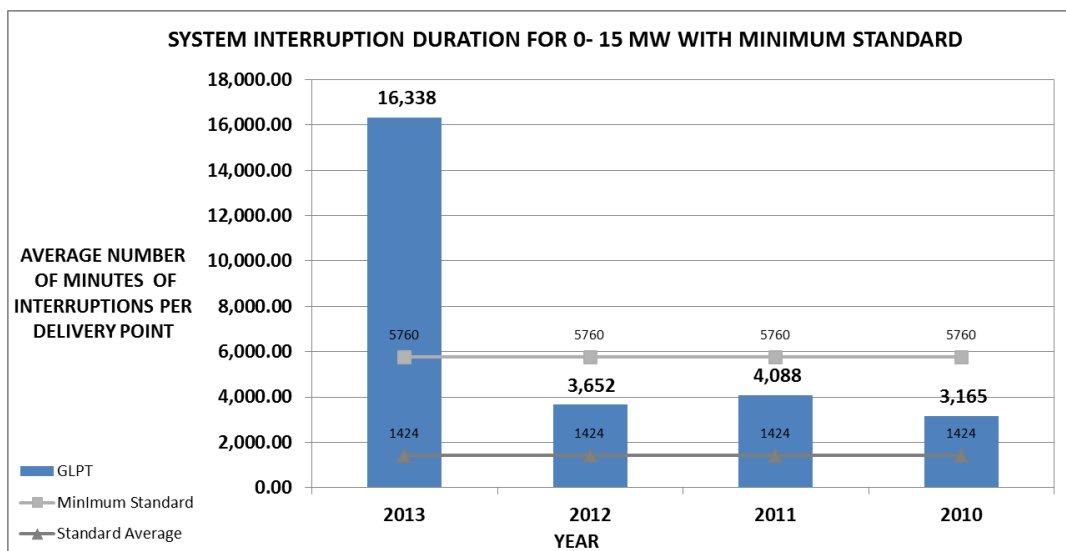


Figure 2-Energy Probe-7 D – 0-15 MW Load Block



GLPT has explained the drivers for the increased durations in 2011 (15-40 MW, 40-80 MW & >80 MW load categories) and 2013 (0-15 MW load category) in Exhibit 2, Tab 3, Schedule 1 of the pre-filed evidence.

- c) GLPT's Delivery Point Performance Targets for 2015 and 2016 are the standard (average performance) for each load category outlined in Table 1 of Appendix A to Exhibit 2, Tab 3, Schedule 1.





## **OPERATING REVENUE**

### **2-Energy Probe-8**

**Reference:** Exhibit 3, Tab1, Schedule 2, page 4: UTR Forecasts

**Question:**

- a) Please describe/discuss Weather Impacts on Charge Determinant Forecast.
- b) Please provide a Statistical Analysis of each of Charge determinants, if necessary use more historical data, and also show the aggregate Impact on Revenue Forecast

**Response:**

- a) GLPT has not adjusted its charge determinant forecast to account for weather impacts. While weather does influence charge determinants year over year, GLPT believes that based on the size of GLPT and the size of its volume forecast in comparison to the total provincial UTR, undertaking a weather normalization exercise for GLPT's load forecast would not materially change the UTR.
- b) In GLPT's 2010 rate application (EB-2009-0408), Board staff requested that GLPT perform a regression analysis on its historical load data to compare the results to the historical average method proposed in that application. GLPT engaged a consultant to perform this analysis and found that the results were not significantly different from the results produced by GLPT in its pre-filed evidence in that application. Any variations would have virtually no impact on the calculation of the Uniform Transmission Rates or the revenue forecast. In light of this, GLPT has not engaged the consultant to reproduce the statistical analysis as there would be minimal net benefit compared to the cost to the ratepayer.

## OM&A COSTS

### 2-Energy Probe-9

**Reference:** Exhibit 4, Tab 2, Schedule 1, page 1: OM&A Overview and First Quartile Report

**Question:**

- a) Please explain why no Canadian Transmitters are included in the First Quartile Report Peer Group?
- b) Confirm that there are/are not CEA Cost comparison/benchmarking studies for Transmission.
- c) Please provide a comparison based on up to 5 key Metrics selected by GPLT, (e.g. OM&A per customer/per km) for GPLT and Hydro One based on data from recent Regulatory Filings.

**Response:**

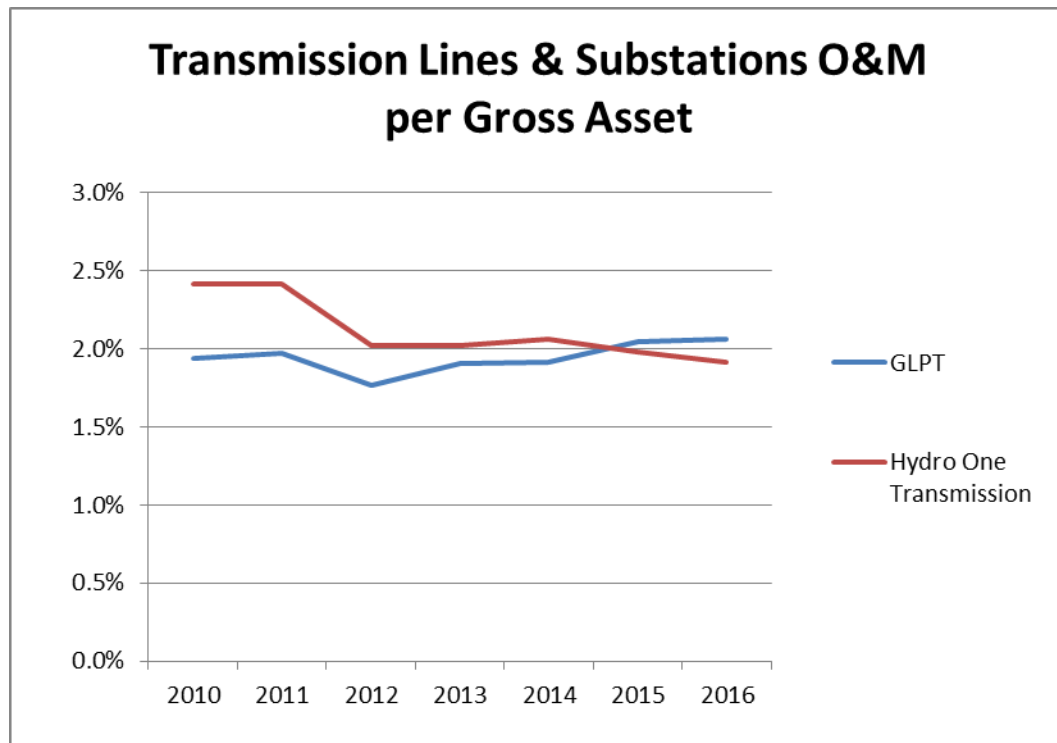
- a) While there are Canadian Transmitters in the First Quartile benchmarking community, the data required to compare OM&A needs to include the Administrative costs. 1QC doesn't have access to the Administrative cost data for the Canadian utilities, so they are not included in the comparison panel for this particular study.
- b) GLPT is not aware of any CEA Cost comparison/benchmarking studies for Transmission.
- c) GLPT has provided two comparisons to Hydro One in its response to 4.0-VECC-15, where it compared Transmission A&G per gross asset, and Transmission Lines and Substations O&M plus A&G per gross asset.

In addition to these, GLPT has provided the comparison of Transmission Lines and Substations O&M (not including A&G) per gross asset as well as two compensation metrics. GLPT prepared the table below based on Hydro One Transmission information drawn from its 2013-2014 rate application (EB-2012-0031) and its 2015-2016 rate application (EB-2014-0140).

*Transmission O&M per Gross Asset*

As demonstrated in *Table 2-Energy Probe-9 A*, GLPT compares favourably with Hydro One Transmission on O&M costs per gross asset.

Table 2-Energy Probe-9 A – Transmission O&M per Gross Asset



*Compensation comparisons:*

GLPT's 2012 base wage rate of a Line Trade Technician was \$35.94, while Hydro One Transmission's base wage rate for the Powerline Maintainer position (comparable trade) was \$38.75 which is approximately 8% higher than GLPT. Hydro One Transmission's information was found in Table 5 at page 16 of Exhibit I, Tab 3, Schedule 9 of EB-2014-0140. GLPT also notes that its Line Trade Technician wage rate is lower than all of the LDC comparators provided by Hydro One in the same Table 5.

Average Management Base Rate – For 2013-2016 GLPT's average base wage rate for a management/executive employee is \$130,900 (per Table 4-2-2 A of the pre-filed evidence). For the same comparison period Hydro One Transmission's average base wage rate for its MCP group of employees has been \$145,400 which is approximately 11% higher than GLPT's average management compensation. GLPT understands this category of Hydro One Transmission employees to be inclusive of management staff who are not classified as Society or PWU employees; however it is unclear to GLPT as to the level of executive employees included in the category. Hydro One Transmission's compensation information was gathered from Exhibit C1, Tab 5, Schedule 2, Attachment 2 of EB-2012-0031 and Exhibit I, Tab 4, Schedule 3, Attachment 1 of EB-2014-0140 where total

wages for the MCP Reg category were divided by the number of employees for each of 2012, 2013, 2014, 2015 and 2016, and an average for the five years was calculated.

## 2-Energy Probe-10

**Reference:** Exhibit 4, Tab 2, Schedule 2, page 33, Appendix C Actuarial Valuation – December 31, 2012

### **Question:**

- a) The Mercer Report indicates the next Valuation is scheduled following December 2013. Has this been done? If so please file a copy.
- b) Has GPLT considered using a Pension Cost Variance Account to deal with variations? Please discuss historic materiality of employer cost variations and merits of such an account.
- c) Confirm the DB pension plan contribution ratio is 3:1 employer: employee.
- d) Please provide data that positions this relative to the GPLT peer group.

### **Response:**

- a) GLPT has provided a copy of the December 31, 2013 valuation in its response to Board staff interrogatory 4-Staff-21 part (f).
- b) GLPT sought OEB approval to use a Pension Cost Variance Account in its 2010 rate application, EB-2009-0408. However, as a part of the Board-approved settlement agreement in that proceeding, GLPT was not authorized to establish the new variance account.

GLPT's pension and OPEB expenses have increased more rapidly than the increases in GLPT's overall OM&A envelope over the 2010-2016 time period. In spite of this, GLPT has mitigated the cost increases and held its overall costs reasonably close to its approved OM&A envelope in historical years.

GLPT would not be opposed to establishing a Pension Cost Variance Account to capture variances between pension and OPEB expenses included in revenue requirement and actual pension and OPEB expenses incurred in the 2015 and 2016 test years (on an accrual basis).

- c) GLPT calculates the ratio to be 2.28:1 (\$304,800 employer portion / \$133,400 member portion), not including the expense allowance. This can also be expressed as a percentage where the plan members contribute approximately 30% of the plan's current service cost (\$133,400 / \$438,200)

- d) Mercer has provided GLPT with high level information from its pension database in an effort to provide a comparison to a peer group. The analysis included plans in the Private Sector and plans in the Public Sector, with the highlights provided in the table below. GLPT notes that the peer group information only includes data on contributory DB pension plans, and does not include data related to non-contributory pension plans where employee contributions are 0%. Approximately half of the private sector plans are non-contributory, and if included in the statistics would significantly decrease the employee contribution percentages for the peer group.

*Table 2-Energy Probe-10 A – Peer Group Contribution Analysis*

	Private Sector	Public Sector	All Plans
Number of Plans	346	44	390
Median Employee Contributions	26%	37%	28%
GLPT Employee Contributions	30%	30%	30%
Variance from GLPT	4%	(7%)	2%

The information confirms that GLPT's employee contributions for its Defined Benefit Pension Plan are close to the median for both Private and Public sector entities.

## 2-Energy Probe-11

**Reference:** Exhibit 4, Tab 2, Schedule 3, pages 2- 8, Tables 4-2-3 A, B and D

### Question:

- Please provide gross costs and GPLT shares of each component of shared costs for 2012A-2016F (Table A).
- Please Provide equivalent CCA tables to Table B for 2013 and 2014 as agreed to in Settlement.
- Please provide a version of Table 4-2-3 D – Calculation of Cost Drivers for Corporate Cost Allocation showing last approved/accepted allocations.
- Please provide a variance discussion regarding any material changes that are reflected in the Current CCA Allocation Tables for 2015/16.

### Response:

- GLPT has provided a summary table below demonstrating gross costs and GLPT's share of each cost component. This information can also be found at Appendix "A" of Exhibit 4, Tab 2, Schedule 3.

*Table 2-Energy Probe-11 A – Gross/Net Costs of Shared Services*

(\$000's)	2012 Actual	2013 Actual	2014 Application	2014 Forecast	2015 Test Year	2016 Test Year
<b>Office Complex</b>						
Gross Rent	\$327.3	\$331.4	\$351.7	\$341.2	\$336.2	\$342.9
GLPT Share	169.0	171.2	178.2	179.1	174.5	177.9
Gross Operations & Maintenance	748.3	687.5	793.1	740.2	748.7	763.6
GLPT Share	367.0	347.7	414.2	374.9	378.7	386.2
<b>SCADA</b>						
Gross SCADA licence fee	561.3	561.3	-	-	-	-
GLPT Share	280.6	210.5	-	-	-	-
<b>Fibre Optic System</b>						
Gross Depreciation	154.1	154.1	337.2	337.1	337.1	343.8
GLPT Share	63.2	63.2	138.3	138.2	138.2	141.0
Gross Operations & Maintenance	201.3	201.3	219.3	201.3	251.9	257.0
GLPT Share	82.5	82.5	82.5	82.5	103.3	105.4
<b>Radio System</b>						
Gross Radio System costs	66.8	69.6	66.0	74.0	81.2	82.8
GLPT Share	33.4	34.8	33.0	37.0	40.6	41.4
<b>Total Shared</b>	<b>\$995.7</b>	<b>\$909.9</b>	<b>\$846.2</b>	<b>\$811.7</b>	<b>\$835.2</b>	<b>\$851.9</b>

b) GLPT has provided the tables requested:

*Table 2-Energy Probe-11 B – Calculation of 2013 Corporate Cost Allocation*

Shared Services	Allocation	2013					
		Transelec	GLPT	WETT	CSC	EBSA	Total
IT	Revenue	\$ -	\$ 2,354	\$ 3,270	\$ 1,491	\$ 11,443	\$ 18,558
Shareholder Comm.	Revenue	\$ -	\$ 14,124	\$ 19,617	\$ 8,946	\$ 68,661	\$ 111,348
Tax	Assets	\$ -	\$ 5,875	\$ 9,579	\$ 5,058	\$ 16,604	\$ 37,116
HR	Employees	\$ -	\$ 1,474	\$ 369	\$ 295	\$ 16,421	\$ 18,558
Finance	Assets	\$ -	\$ 179,730	\$ 293,038	\$ 154,724	\$ 507,933	\$ 1,135,425
<b>Shared Services Sub-total</b>		<b>\$ -</b>	<b>\$ 203,558</b>	<b>\$ 325,873</b>	<b>\$ 170,513</b>	<b>\$ 621,061</b>	<b>\$ 1,321,005</b>
<b>Executive Oversight - fixed to variable spl</b>							
Fixed	Equal	\$ 148,571	\$ 148,571	\$ 148,571	\$ 148,571	\$ 148,571	\$ 742,853
Variable	Assets	\$ -	\$ 117,589	\$ 191,721	\$ 101,228	\$ 332,316	\$ 742,853
<b>Executive Oversight Sub-total</b>		<b>\$ 148,571</b>	<b>\$ 266,159</b>	<b>\$ 340,291</b>	<b>\$ 249,799</b>	<b>\$ 480,886</b>	<b>\$ 1,485,706</b>
<b>Total Allocation</b>		<b>\$ 148,571</b>	<b>\$ 469,717</b>	<b>\$ 666,164</b>	<b>\$ 420,312</b>	<b>\$ 1,101,948</b>	<b>\$ 2,806,711</b>

*Table 2-Energy Probe-11 C – Calculation of 2014 Corporate Cost Allocation*

Shared Services	Allocation	2014					
		Transelec	GLPT	WETT	CSC	EBSA	Total
IT	Revenue	\$ -	\$ 2,427	\$ 3,371	\$ 1,537	\$ 11,798	\$ 19,133
Shareholder Comm.	Revenue	\$ -	\$ 14,562	\$ 20,225	\$ 9,223	\$ 70,789	\$ 114,800
Tax	Assets	\$ -	\$ 6,057	\$ 9,876	\$ 5,215	\$ 17,119	\$ 38,267
HR	Employees	\$ -	\$ 1,520	\$ 380	\$ 304	\$ 16,930	\$ 19,133
Finance	Assets	\$ -	\$ 185,302	\$ 302,122	\$ 159,521	\$ 523,679	\$ 1,170,623
<b>Shared Services Sub-total</b>		<b>\$ -</b>	<b>\$ 209,868</b>	<b>\$ 335,975</b>	<b>\$ 175,799</b>	<b>\$ 640,314</b>	<b>\$ 1,361,956</b>
<b>Executive Oversight - fixed to variable spl</b>							
Fixed	Equal	\$ 153,176	\$ 153,176	\$ 153,176	\$ 153,176	\$ 153,176	\$ 765,882
Variable	Assets	\$ -	\$ 121,234	\$ 197,664	\$ 104,367	\$ 342,617	\$ 765,882
<b>Executive Oversight Sub-total</b>		<b>\$ 153,176</b>	<b>\$ 274,410</b>	<b>\$ 350,840</b>	<b>\$ 257,543</b>	<b>\$ 495,794</b>	<b>\$ 1,531,763</b>
<b>Total Allocation</b>		<b>\$ 153,176</b>	<b>\$ 484,278</b>	<b>\$ 686,815</b>	<b>\$ 433,342</b>	<b>\$ 1,136,108</b>	<b>\$ 2,893,719</b>



- c) *Table 2-Energy Probe-11 D* below demonstrates the calculation of cost drivers used in EB-2012-0300 which was the first year that GLPT applied results of Navigant's corporate cost allocation report.

*Table 2-Energy Probe-11 D – Calculation of Cost Drivers – 2013/2014  
Corporate Cost Allocation*

Allocation Basis	Line	\$ Millions						Total
Ownership Percentage by Brookfield	A	18%	100%	50%	100%	100%		
Management Oversight(1), or Board only (0)	B	0	1	1	1	1		
<b>Revenue</b>								
Total Gross Revenue	C	\$ 398	\$ 36	\$ 100	\$ 23	\$ 175	\$	732
Adjusted for Ownership and Management	= A x B x C	\$ -	\$ 36	\$ 50	\$ 23	\$ 175	\$	284
<b>Revenue Allocator</b>		0%	13%	18%	8%	62%		100%
<b>Assets</b>								
Total Gross Assets	D	\$ 4,998	\$ 230	\$ 750	\$ 198	\$ 650	\$	6,826
Adjusted for Ownership and Management	= A x B x D	\$ -	\$ 230	\$ 375	\$ 198	\$ 650	\$	1,453
<b>Asset Allocator</b>		0%	16%	26%	14%	45%		100%
<b>Employees</b>								
Total Employees	E	\$ 475	\$ 50	\$ 25	\$ 10	\$ 557	\$	1,117
Adjusted for Ownership and Management	= A x B x E	\$ -	\$ 50	\$ 13	\$ 10	\$ 557	\$	630
<b>Employee Allocator</b>		0%	8%	2%	2%	88%		100%

- d) *Table 2-Energy Probe-11 E* below highlights GLPT's allocators for each of 2013/2014 and 2015/2016.

*Table 2-Energy Probe-11 E – GLPT Allocators*

Allocator	2013/2014	2015/2016	Variance
Revenue	13%	13%	0%
Asset	16%	14%	(2%)
Employee	8%	8%	0%

As demonstrated in the table, the single variance in GLPT's allocators is a reduction in the asset allocator. This reduction to GLPT's allocator is a result of an increase in assets related to other entities in the Electric Utility Group, particularly EBSA and WETT. There were no other material changes in the overall cost drivers.

## 2-Energy Probe-12

**Reference:** Exhibit 4, Tab 4, Schedule 5, page 4: CCA Calculations

### **Question:**

- a) Please provide information regarding the CCA to be claimed for the new EWS.
- b) Please reconcile to the amount of CCA shown in the CCA Tax Calculation Tables for 2015 and 2016.

### **Response:**

- a) GLPT is unclear as to what the new EWS is. For the purposes of responding to the interrogatory, GLPT is assuming that Energy Probe was referring to GLPT's new ERP.

The ERP project was added to CCA Class 50 for computer equipment and/or systems software in 2015 and forms part of the \$922,197 additions for that year (which are subject to the half year rule). This class has a CCA rate of 55%, and the capital cost allowance taken on the addition forms a part of the \$506,707 in total capital cost allowance to be claimed related to that account in 2015. The remaining class balance of \$875,677 (for all assets in this class) carries forward to be claimed at the rate of 55% in 2016.

- b) The \$506,707 in CCA claimed in CCA Class 50 in 2015 forms a part of the \$12,024,324 in total CCA claimed in the 2015 column of *Table 4-4-2 E* of the pre-filed evidence where GLPT calculates its tax provision.

The \$557,522 in CCA claimed in CCA Class 50 in 2016 forms a part of the \$11,886,338 in total CCA claimed in the 2016 column of *Table 4-4-2 E* of the pre-filed evidence where GLPT calculates its tax provision.

## **RATE DESIGN**

### **2-Energy Probe-13**

**Reference:** Exhibit 8, Tab 1,-S2 page 1 Table 8-1-2 A and Table 8-1-2 B: ETS Rate

**Question:**

Has the 2014 Settlement on the ETS rate been reflected in the Revenue and Reconciliations?

If not, please provide an estimate of the impact of the change from \$2.00/Mwh to \$1.70/Mwh

**Response:**

GLPT has not reflected the ETS rate change in its evidence. GLPT has not included any information regarding the ETS rate in its evidence as it will have no impact on GLPT's revenue or reconciliations.

## OM&A

### 4-Energy Probe-14

**Reference:** Exh4, Tab 2, Schedule 1, page 13

This page discusses the prospect of increased compliance costs to meet NERC standards and requirements.

#### **Question:**

- a) Lines 6-12 refer to the expectation that NERC's definition of the BES will change and be adopted by the IESO in the test period affecting GLPT's compliance obligations. Please provide any reports or correspondence from the IESO on this subject.
- b) What time period will the IESO and NERC allow for GLPT to become compliant with the requirements under the new BES definition.
- c) What parts of GLPT's system are considered part of the BES under the current NERC definition and what parts are expected to become part of the BES under the new definition?
- d) Please provide some examples of the kinds of compliance issues that will have to be resolved under the new BES definition.
- e) Are the "new security and other measures" referred to in Line 11 and 12 different than the "Critical Infrastructure Program Standards" referred to in lines 4-5? If so, please explain the differences.
- f) Please indicate where the increased compliance costs are budgeted for in the Uniform System of Accounts Table 4-2-1 D on page 9.
- g) If the BES definition eventually adopted by the IESO does not change in a way that affects GLPT's compliance requirements, will the Compliance Program Development planned for 2015 still be necessary? Will the Compliance Analyst position still be necessary?

#### **Response:**

- a) In May 2014 GLPT received an e-mail correspondence from the IESO confirming the BES details. This e-mail correspondence is attached as Appendix 4-EP-14(a).

Based on the correspondence, GLPT will have defined BES assets and as a result they will have additional NERC standards (incremental to current CIP standards that apply to GLPT) that will apply to them as Transmission Owner and Transmission Operator. As a Transmission Owner, GLPT is subject to 23 incremental standards. The IESO has not finalized the Transmission Operator requirements for GLPT; however it is likely that an additional 21 incremental standards will apply to GLPT as Transmission Operator.

- b) As indicated in the e-mail correspondence received from the IESO (attached in response to part (a) above), the standard is effective July 1, 2014. Based on GLPT's elements being newly identified elements, GLPT has until July 1, 2016 to comply.
- c) None of GLPT's assets are included in the previous definition of the BES. With the new definition of BES all of GLPT's 230 kV assets and the majority of GLPT's 115 kV assets will be defined as BES assets.
- d) Compliance issues that will need to be resolved under the new definition of BES include items such as:
  - i. GLPT, as Transmission Operator, shall staff its real-time operating positions performing transmission operator reliability-related tasks with system operators who have NERC certification (including a significant number of hours of NERC certified training per operator per year),
  - ii. Using a systematic approach to training, GLPT, as Transmission Operator, shall establish and implement a training program for the reliability-related tasks performed,
  - iii. Each GLPT System Control Operator will require 32 hours of GLPT-specific emergency operations training every year,
  - iv. GLPT will be required to develop a framework for emergency preparedness and operations standards applicable to Transmission Owners and Transmission Operators, and
  - v. GLPT will be required to develop a framework for protection and control standards applicable to Transmission Owners and Transmission Operators.
- e) The new security measures referred to in lines 11 and 12 are the same as the CIP measures referred to in lines 4 and 5. The definitional change related to BES will have more of an impact to GLPT's operations, with various examples of compliance issues identified in GLPT's response to part (d) of this question, above.
- f) The costs related to the compliance program are included in USofA account 4810 – Load Dispatching.

- g) The change to the BES definition has already been implemented with the IESO as of July 1, 2014, although as mentioned above GLPT has until July 1, 2016 to become compliant. GLPT has reviewed the requirements and identified a number of areas that will require change and as a result there will be an impact on GLPT's compliance requirements.

In addition, the compliance program and Compliance Analyst will still be necessary to aid with changing CIP standards including the transition from CIP version 3 to CIP version 5, and the maintenance of the program thereafter.

#### **4-Energy Probe-15**

**Reference:** Exhibit 4, Tab 2, Schedule 1, pages 14-15 &  
EB-2012-0300, Exhibit 4, Tab 2, Schedule 2, page 7

Pages 14-15 in the first reference describe the need to spend “\$205,000 to engage a third party consultant in 2015 to “complete a review of all existing and upcoming standards including the BES definitional change and further develop a comprehensive compliance program”.

Page 7 of the second reference describes the need to engage a third party consultant in 2013 to “complete a review of all existing and upcoming standards (with the exception of the Bulk Electric System definitional change, described in Exhibit 9, Tab 2, Schedule 1) and further develop a comprehensive compliance program”.

#### **Question:**

- a) Was the 2013 standards review and compliance development program carried out? If yes, please provide a copy of the review and the compliance program that was developed along with the actual cost. If no, please explain why the project was not carried out and indicate what the budgeted cost was.
- b) Do the words “complete a review...” and “further develop ...” (emphasis added) mean that the consultant was doing work on a project that had already been started but needed completing? If so, please provide a brief history of the standards review and compliance program including when it originally started, what the work involved was and how much has been spent on it to date.
- c) Lines 17-18 of the second reference reads “Costs in 2014 will only be related to maintenance of the new program and fees related to compliance audits.” Please indicate what the costs were in 2014 for this program.
- d) Please describe in more detail what the 2015 standards review and further development of the compliance program will involve and how it relates to the 2013 project.
- e) Lines 13-14 on page 15 of the first reference note that Hydro One described a similar compliance program in Exhibit C1 of EB-2012-0031. Please provide the Tab, Schedule and page numbers for the reference.

**Response:**

- a) In 2013 GLPT completed a review of its existing Critical Infrastructure Protection (“CIP”) program (based on CIP version 3) to identify areas requiring improvement at a cost of approximately \$45,000. As a result of the review, GLPT implemented the use of a collaborative software tool to manage its compliance with CIP version 3, however there was not a review report prepared.
- b) The words “complete a review” and “further develop” do not mean that the consultant was doing work on a project that had already been started but needed completing.

As indicated in response to part (a) above, at a cost of approximately \$45,000 in 2013, GLPT undertook and completed a review of its existing CIP v3 compliance program (with no focus on future changes to CIP) to ensure continued compliance with existing standards.

As described in response to part (d) of this question, the activity in 2015 will be related to transitioning the CIP program from version 3 to version 5, as well as creating a sustainable compliance program for the new standards to be adopted by GLPT as a result of the BES definitional change.

- c) The costs incurred to date in 2014 have been minimal. The review completed in 2013 provided an informal mock audit which identified and corrected gaps that existed in the program at the time. GLPT is not anticipating material additional costs will be incurred until it undertakes the complete compliance review in 2015.
- d) As indicated in response to part (a) above, in 2013 GLPT undertook and completed a review of its existing CIP program to ensure compliance with existing standards (i.e., CIP version 3). The review in 2013 did not focus on the transition to CIP version 5 or to upcoming impacts of the BES definitional change. To the extent possible, GLPT will leverage the 2013 project for its comprehensive compliance program it will prepare in 2015.

As indicated in response to part (b) above, the 2015 project will include a transition plan and sustainable compliance program for CIP version 5, as well as a sustainable compliance program related to an entirely new set of standards as a result of GLPT assets being defined as BES elements. These new standards include but are not limited to:

- FAC – related to facility design, connections and maintenance;
- PER – related to personnel performance, training and qualifications;
- TOP – related to transmission operations;
- PRC – related to protection and control; and



- EOP – related to emergency preparedness and operations, among others

Examples of specific compliance requirements related to these standards have been provided in GLPT's response to 4-Energy Probe-14 part (d).

The program to be developed in 2015 will be far more comprehensive and will be developed so that it remains sustainable over a long period of time with the oversight of a Compliance Analyst.

- e) GLPT was referring to Hydro One's comment on page 33 of Exhibit C1, Tab 3, Schedule 2 of EB-2012-0031 where it stated: "an additional program was started in 2012 for audit readiness and establishing an Internal Compliance Program in Hydro One for all NERC and NPCC Reliability Standards. The ongoing cost for this program is planned to be \$2 million per year."

#### **4-Energy Probe-16**

**Reference:** Exhibit 4, Tab 2, Schedule 1, page 14 &  
EB-2012-0300, Exhibit 4, Tab 2, Schedule 2, page 7

Lines 1-5 of the first reference discuss the need for the new position of Compliance Analyst. In addition to Board Staff's IR 15, please answer the following questions:

**Question:**

- a) Does GLPT have a position description and qualifications needed for this position? If so, please provide a copy. If not, please describe the qualifications GLPT anticipates will be necessary in candidates for the position.
- b) Can any of GLPT's current employees qualify for this position? If so, can that individual's old position be eliminated through reassignment of duties or other efficiencies?
- c) Please indicate where the costs of the Compliance Analyst are budgeted for in the Uniform system of Accounts Table 4-2-1 D on page 9.
- d) Lines 14-16 of the second reference reads "It is anticipated that GLPT will have the program completed in 2013, at which point GLPT's management team and existing staff will take ownership of the program and be responsible for its execution." Please explain what has changed since 2013 that requires a dedicated analyst position to manage the compliance program.

**Response:**

- a) GLPT's Compliance Analyst position will support GLPT with the following, among other things:
  - Assist with implementing a premier culture and record of compliance with NERC reliability standards and IESO standards,
  - Provide project management in support of GLPT's internal compliance program,
  - Maintain supporting compliance strategies, processes, procedures and documentation evidence that meet the requirements established for internal and external audits,
  - Maintain and recommend improvements on GLPT's NERC compliance program,
  - Consult with subject matter experts to provide direction to GLPT field personnel and management to address NERC/IESO Standards requirements and measurements and maintain compliance,

- Promote an environment of continuous improvement in the NERC/IESO Standards compliance program and help develop methodologies to promote a culture of compliance and reliability,
- Assist in the development, implementation and execution of reliability compliance policies and procedures,
- Assist in coordination with GLPT's regional operations staff as well as the IESO or MACD,
- Maintain the storage of documentation and evidence required to demonstrate compliance and ensure that the retention of all documentation meets regulatory requirements,
- Coordinate the preparation of MACD audits and spot checks,
- Assist in the development and tracking of mitigation plans associated with confirmed violations,
- Track NERC and Regional standards under development and advise GLPT in the development of policies, procedures, and implementation plans, and
- Perform other duties and responsibilities as assigned.

GLPT does not have specific qualification requirements laid out for the position but it will seek a candidate possessing the following skills specific to the position:

- Bachelor of Science degree in Engineering (preferably Electrical), Business Administration or related field,
  - Regulatory experience in an electric utility, with experience and proficiency in reliability compliance,
  - Understanding of the MACD Compliance Monitoring and Enforcement Program and NERC reliability standards,
  - Basic knowledge of electrical transmission systems,
  - Experience managing a NERC CIP program would be considered an asset, and
  - Compliance experience with Transmission Owner / Transmission Operator functions would be considered an asset.
- b) GLPT will consider the qualifications of any internal applicants related to the position. If an internal applicant is successful GLPT will review the vacancy created and the resulting organizational structure to ensure the best use of resources, however GLPT does not anticipate the elimination of any position.
- c) The costs related to the Compliance Analyst are included in USofA account 4810 – Load Dispatching.
- d) As described in GLPT's response to 4-Energy Probe-15 part (a), in 2013 GLPT undertook and completed a review of its existing Critical Infrastructure Protection ("CIP") program (based on CIP version 3) to identify areas requiring

improvement. As a result of the review, GLPT implemented the use of a collaborative software tool to manage its compliance with CIP version 3.

However, as indicated in GLPT's response to 4-Energy Probe-15 part (b), the 2015 project will include a transition plan and sustainable compliance program for CIP version 5, as well as a sustainable compliance program related to an entirely new set of standards as a result of GLPT assets being defined as BES elements.

The additional regulatory compliance requirements resulting from the BES definitional change were not contemplated in the 2013 exercise (as noted on page 7 of Exhibit 4, Tab 2, Schedule 2 of EB-2012-0300). Given the change in magnitude of compliance requirements, continuing to manage the expanded compliance program within the existing management team is not feasible.

#### **4-Energy Probe-17**

**Reference:** Exhibit 4, Tab 2, Schedule 1, page 16 &  
EB-2012-0300, Exhibit 4, Tab 2, Schedule 2, page 8

#### **Question:**

Increased costs in 2015 and 2016 OM&A include succession planning costs for expected retirement of three system operators in the test years. In addition to the questions asked in Board Staff IR 16 please answer the following:

- a) Has GLPT received requests for retirement from the three operators that will qualify for it in the test years? If not, how is GLPT hedging the risk that one or more will not retire as expected leaving it with more staff than needed?
- b) Is GLPT intending to hire only fully qualified first operators? If so, please elaborate on why operators trained and experienced on other transmission systems would need 12-18 months of training and on the job experience on GLPT's system to qualify them to operate it.
- c) Please indicate where the costs of the new operator hires are budgeted for in the Uniform system of Accounts Table 4-2-1 D on page 9.
- d) Lines 4-5 of the second reference read "GLPT is forecasting that it will hire one new Second Operator in 2014 as the start of this succession plan". Was that second operator hired in 2014 as planned? If yes, how long has it taken for that individual to become familiar with GLPT's system? If not, please explain what changed to make the hire unnecessary.

#### **Response:**

- a) GLPT has not received any formal communication indicating a retirement is pending. This formal communication typically comes between 3 and 6 months prior to retirement.

As noted in Exhibit 4, Tab 2, Schedule 2, due to the nature of the position it will take a significant amount of time for new employees to learn GLPT's system, attain NERC Transmission System Operator certification and for management to deem the individual competent to work alone in the role. Therefore, an overlap period of 12-18 months will be required for new hires to replace retirements. Therefore, GLPT must begin its replacement process before receiving formal notification regarding retirements.

GLPT has weighed the risk of having more qualified staff than required vs. having less qualified staff than required and has determined that the risk of being under-staffed is greater than that of being over-staffed. In addition, when you take into consideration the fact that there are current employees who are not NERC certified; GLPT believes that hiring for succession planning as outlined in the pre-filed evidence is prudent.

- b) GLPT is planning on hiring competent individuals who have the ability to become fully qualified First Operators, and will advertise the position externally. However, given the extensive knowledge of GLPT's system that is required to be considered a fully qualified First Operator, GLPT does not believe there are fully qualified individuals available to hire.
- c) The costs of the new operators are found in USofA account 4810 – Load Dispatching. GLPT notes that this is also the account that includes the \$205,000 in one-time incremental costs associated with the completion of a compliance program which are removed in 2016. As a result, the account movement between 2015 and 2016 is as follows:

*Table 4-Energy Probe-17 A – Account 4810 2015-2016 Movement*

2015 Balance	\$1,766.9
Less: Compliance Program	(205.0)
Add: Inflation (1.995%)	31.1
Add: Succession Planning (2 First Operators)	300.0
2016 Balance	\$1,893.0

- d) GLPT hired a First Operator in January of 2014 as a start of the succession plan. GLPT was able to hire a First Operator who, while not NERC certified, was a former SCADA Operator with real time operations experience with a local third party utility. However even with these qualifications the training for this individual is expected to take approximately 12 months to be considered fully qualified. Given GLPT's knowledge of the potential candidate pool (based on the recent posting), GLPT does not believe there is a high probability of attracting an individual with similar qualifications. GLPT's experience validates the reasonableness of the 12-18 month training requirement.

#### **4-Energy Probe-18**

**Reference:** Exhibit 4, Tab 2, Schedule 1, page 16

**Question:**

GLPT is asking for \$30,000 annually for the incremental cost of training 4 operators to meet NERC standards. According to the evidence, 5 other operators have already achieved the required standard and are maintaining it.

- a) Please describe what activities are being funded by the \$30,000 annual cost.
- b) If 5 operators have previously been trained to meet the NERC standard it would appear that sufficient resources were embedded in prior year OM&A budgets and therefore revenue requirements in those years to finance that training. Please explain why incremental funding is needed for the final 4 operators.

**Response:**

- a) The \$30,000 will cover all out-of-pocket and incremental labour costs associated with:
  - i. Providing 70 hours of NERC certified annual training to the operators who are not currently NERC certified, and
  - ii. Providing 32 hours of emergency operations training for all operators annually, as a result of the adoption of the new BES definition.

Incremental labour is related to overtime that will be required in order to ensure the operations are appropriately staffed while the required training is completed in each year.

- b) As described above, once certification is achieved, an incremental amount of continuing education is required to maintain the NERC certification. Therefore, GLPT is continuing to incur the costs related to maintaining certification of the existing 5 employees, and will also incur the incremental NERC training costs for continuing education of the other 4 employees in future years.

#### 4-Energy Probe-19

**Reference:** Exhibit 4, Tab 2, Schedule1, pages 9-10 &  
EB-2012-0300 Exhibit 4, Tab 2, Schedule1, Page 6 &  
EB-2012-0300 Exhibit 2, Tab 2, Schedule1, Appendix A, Pages 4-5 &  
Board Staff IR 2-Staff-3

Lines 6-17 on page 10 of the first reference describe the reallocation of approximately \$500,000 from internal labour capitalization to OM&A in 2013 as a result of a decline in the level of capital expenditures.

Using the above referenced exhibits and Staff IR 3, Energy Probe has constructed the following table that compares capital expenditures to Operations, Maintenance and total O&M costs for the period 2010-2016.

Comparison of Capital Costs to O&M Costs K\$

	2010	2011	2012	2013	2014	2015	2016
Operating	3446.9	3821.7	4026.7	4406.6	4283.0	4941.4	5130.9
Mtce	2153.3	2014.9	1729.6	1899.5	2113.6	2058.2	2099.3
Total O&M	5600.2	5836.6	5756.3	6306.1	6396.6	6999.6	7230.2
Capital	4868.7	7227.5	33216.8	4557.1	4393.4	9460.0	9768.6

Notes:

1. O&M numbers for 2010 and 2011 were taken from Table 4-2-1 C in reference 2
2. Capital numbers for 2010 and 2011 were taken from continuity schedules in reference 3
3. O&M numbers for 2012-2016 were taken from Table 4-2-1 D in Reference 1
4. Capital numbers for 2012-2016 were taken from 2-Staff-3 in reference 4

#### **Question:**

- Please confirm that the numbers appearing in this table are correct.
- If internal labour capitalization was a major factor in O&M costs, one would expect O&M costs to be lower in high capitalization years. However, total O&M costs in the years 2010-2012 did not vary significantly despite a very large variation in capital expenditures. Please explain why internal labour capitalization does not appear to have caused a decrease in O&M costs in 2011 and 2012 despite their comparatively higher capital programs.
- Capital expenditures in 2013 are not significantly different that those in 2010. However, O&M costs were about \$700 K higher in 2013 than 2010. If **internal** labour capitalization were the reason for the higher O&M costs in 2013 one



would expect a comparable O&M cost in 2010 when capital expenditures were about the same. Please explain.

- d) O&M costs in 2015 and 2016 are about \$700 K and \$900 K respectively more than in 2013. Capital expenditures in 2015 and 2016 are more than double those in 2013. Even allowing for the incremental O&M costs in 2015 and 2016 associated with additional operators, the new compliance analyst and the standards study 2015 and 2016 O&M costs are still \$200 K to \$300 K higher than 2013. If internal labour capitalization was a factor in O&M costs, one would expect lower O&M in 2015 and 2016 compared to 2013. Please explain.

**Response:**

- a) The numbers are correct with the following exception: GLPT's 2013 Rate Base additions were \$4,457.1, not \$4,557.1.
- b) The "Capital" figures quoted in the table are the total Rate Base additions (i.e., capital projects completed and put into service) for each year. This is not reflective of actual capital costs incurred in each year, as there were multi-year projects underway during those years.

In the years 2010, 2011 and 2012 GLPT's internal labour force was doing a considerable amount of work related to the Third Line Redevelopment Project and the SCADA replacement project, both of which were completed and placed into service in 2012. As a result, the internal labour costs that were ultimately included in the \$33 million in 2012 rate base additions were initially charged to capital throughout 2010, 2011 and 2012, putting downward pressure on OM&A in each of those years. As a result, there is not a direct correlation between the size of rate base additions in a year and the internal labour capitalized in that year.

With that said, GLPT was able to capitalize additional labour in 2010, 2011 and 2012 due to the nature of the capital projects underway. However, not all capital projects require equal proportions of internal labour, and therefore total capital expenditures in a year are not directly correlated with internal labour capitalization or OM&A.

- c) GLPT notes that there were a number of other changes in GLPT's O&M cost base between 2010 and 2013 actual that, exclusive of changes in labour capitalization, have put upward pressure on total spending. These include, among things:
- Overall increases in labour and particularly benefit costs,
  - Increases in engineering and asset management support costs (drafting of operating procedures, regulatory activities, records management, etc),
  - Increase in compliance costs (CIP v3 compliance), and

- Increases in external costs related to station maintenance activities.

As a result, there is not a direct correlation between rate base additions, O&M spending and labour capitalization.

- d) GLPT does not have capital projects in 2015 or 2016 that require a significant amount of involvement from internal staff. As such, even though there is an increase in GLPT's capital program in 2015 and 2016, there is not a corresponding increase in the capitalization of internal labour to decrease O&M costs. In addition, GLPT does not capitalize labour at a fixed percentage of capital, as IFRS requires that the cost of an asset include only the directly attributable costs of putting an asset into service.

GLPT has prepared the following table to reconcile its O&M changes from 2013 Actual to 2015-2016 test years, inclusive of inflationary increases (which are lower than 2% for 2013-2014 and 2014-2015 due to cost management).

<b>2013 Actual O&amp;M</b>	<b>\$6,304.0</b>	
Add: Inflation	93.0	
<b>2014 Forecast O&amp;M</b>	<b>6,397.0</b>	
Add: Inflation	92.6	
Add: Compliance Costs	360.0	
Add: Succession Planning	150.0	
<b>2015 Test Year O&amp;M</b>	<b>6,999.6</b>	\$700k > 2013A
Add: Inflation	135.6	
Less: Compliance Costs	(205.0)	
Add: Succession Planning	300.0	
<b>2016 Test Year O&amp;M</b>	<b>\$7,230.2</b>	\$900k > 2013A

#### **4-Energy Probe-20**

**Reference:** Exhibit 4, Tab 2, Schedule 1, page 9 &  
EB-2012-0300 Exhibit 4, Tab 2, Schedule 1, page 6

OM&A costs for 2012-2016 are set out in the current application in Table 4-2-1 D of the first reference while OM&A costs for 2010-2014 were set out EB-2012-0300 in Table 4-2-1 C of second reference.

In the EB-2012-0300 application, Account 4830 Overhead Line Expenses were generally in the \$220 K range with the highest being the 2014 forecast of \$229.8 K. In the current application, overhead line costs are significantly higher in some cases double what was in the previous application.

#### **Question:**

- a) Please explain the drivers for overhead line costs that have caused this significant increase from the last application.
- b) Are these costs expected to continue at the higher levels into the future?
- c) When does GLPT expect the Wood Structure Replacement program to result in lower maintenance costs for overhead lines?

#### **Response:**

- a) The nature of the activities in accounts 4830 – Overhead Line Expense, 4930 – Maintenance of Poles, Towers and Fixtures, and 4935 – Maintenance of Overhead Conductors and Devices is quite similar. In the variance analyses provided by GLPT in EB-2009-0408, EB-2010-0291 and EB-2012-0300 GLPT had combined them and described the variances as though they were derived in a single account.

Upon combining the account balances, the differences between the applications are less significant. In EB-2012-0300 the expenses are generally in the \$300k - \$400k range, while in the current application the expenses are generally in the \$500k range.

Since 2013 there has been an increase in labour costs being charged to the lines program. However, this change also resulted in downward pressure in other account balances, particularly account 4840, Right of Way maintenance activities and does not reflect a net increase in OM&A.

- b) GLPT believes the costs will continue to be in the range identified in the current application, inclusive of the additional labour costs.

- c) As described in GLPT's response to 4-SEC-10 part (c), GLPT is finding efficiencies in its lines and forestry patrolling. In addition, GLPT will be conducting a detailed review of its Lines and Forestry preventative maintenance programs to ensure best use of resources in the field. This review will consider the results of the wood structure replacement program.

#### **4-Energy Probe-21**

**Reference:** Exhibit 4, Tab 2, Schedule 1, page 9

Table 4-2-1-D in this reference shows OM&A expenses by account.

**Question:**

- a) Account 4845 Miscellaneous Transmission Expenses for 2014 are \$662.0. The forecasts for 2015 and 2016 are 723.1 and 737.5 respectively which is about 10% higher than the 2014 cost. Please explain the increase for 2015 and 2016.
- b) Account 5615 General Administrative Salaries and Expenses for 2014 are \$1457.5, for 2015 are \$1768.2 and for 2016 are \$1803.5. Please explain the increase in costs for 2015 and 2016.

**Response:**

- a) The increase in Account 4845 - Miscellaneous Transmission Expenses is a result of two primary drivers (aside from inflationary impacts):
  - i. As described at Exhibit 3, Tab 1, Schedule 3, GLPT has simplified the accounting for the net rent received related to fibre optic attachments beginning in 2015 where the full rental amount is captured within “Other revenue” and the full costs associated with the fibre lease are captured within OM&A. As a result, there is an increase in the forecasted 2015 costs related to Account 4845, and
  - ii. GLPT’s SCADA licence fees have increased marginally starting in 2015 (the fees were at a reduced rate for 2013 and 2014), thus increasing the forecast costs in this account for 2015-2016 by approximately \$20k.

GLPT notes that these cost increases were absorbed within the OEB-approved OM&A envelope inclusive of inflation for 2015.

- b) The 2014-2015 increase in Account 5615 – General Administrative Salaries and Expenses is a result of a one-time credit of approximately \$300k that GLPT is recognizing in account 5615 in 2014. The credit is related to a change in eligibility criteria related to GLPT’s OPEB plan, which was a cost saving initiative instituted by GLPT in 2014. This benefit to be realized by GLPT in 2014 is expected to be offset by other incremental costs, particularly those associated with this 2015-2016 rate proceeding. The 2014 costs associated with the rate proceeding are reflected in account 5630 – Outside Services Employed (note the 2014-2015 expense decrease from \$625.0k to \$398.7k in account 5630).

GLPT would also like to note that the 2015-2016 costs in Account 5615 are comparable to the costs incurred in 2013 as well as the forecasted costs for 2014 (after adjusting for the one-time variance in 2014).

## DEFERRAL ACCOUNTS

### 6-Energy Probe-22

**Reference:** Exhibit 6, Tab 1, Schedule 2, pages 2-6

This reference describes the Comstock claim and requests permission from the Board to clear accumulated costs of defending this claim. In addition to the questions posed in 6-Staff-28 please answer the following one.

**Question:**

- a) Did GLPT make a motion at the outset of this action or at any time subsequent to the action being initiated asking the Court to require security from Comstock against litigation expenses that might be awarded to GLPT if it successfully defended the action?
- b) If yes, please provide documentation of the motion and the Court's decision on it. If no, please explain why this would not have been a prudent action to have taken to protect itself and its ratepayers.

**Response:**

- a) No, GLPT did not make such a motion.
- b) It is GLPT's understanding that security for costs is not frequently awarded. According to the section 56.01 of the Ontario Rules of Civil Procedure, a court may only award security for costs when:
  - the Plaintiff is ordinarily a resident outside of Canada,
  - it appears that the Plaintiff has another proceeding for the same relief pending elsewhere,
  - the Plaintiff has an order against it for costs in the same or another proceeding that remain unpaid in whole or in part,
  - the Plaintiff is a corporation or a nominal Plaintiff, and there is good reason to believe the Plaintiff has insufficient assets in the jurisdiction to pay costs awarded against it,
  - there is good reason to believe that the action is frivolous and vexatious and that the Plaintiff has insufficient assets in the jurisdiction to pay costs awarded against it, or
  - a statute entitles the defendant to security for costs.

Even if the defendant can establish that one of the above categories applies, it will only trigger the court's inquiry into whether security for costs is appropriate. In

the Comstock claim, GLPT was not aware that any of the categories applied at the outset of the proceeding when it made its decision not to incur the expenses necessary to bring a motion for security. It was not until 2013 when Comstock filed for CCAA protection that GLPT became aware that Comstock may have insufficient assets to pay costs awarded against it. At that point in time, it quickly became apparent that Comstock had insufficient assets to pay secured creditors, let alone to post additional security in the context of pending civil litigation. Therefore, GLPT decided that incurring additional costs related to seeking security (that it would be unlikely to obtain) would not have been to the benefit of the ratepayer.



## **6-Energy Probe-23**

**Reference:** Exhibit 6, Tab 2, Schedule 1, page 1-2

This page describes GLPT's request for a new deferral account to record costs associated with prospective new customer connections. In addition to the questions posed in 6-Staff-33 please answer the following:

### **Question:**

Lines 1-2 state that GLPT does not have a capital or OM&A budget built into revenue requirement to fund new customer connections. Line 6 states that only those costs not already provided for in revenue requirement will be charged to the new deferral account.

Please describe the kinds of costs that GLPT might incur for new customer connections that are already built into revenue requirement.

### **Response:**

The costs GLPT is referring to are internal labour costs that GLPT already has a provision for within its base revenue requirement. If internal labour costs (that are not incremental) are also charged into a deferral account it would result in GLPT recovering the amounts twice, which would be unfair.

Exhibit 9, Tab 5, Schedule 1

Appendices to Responses to Energy Probe Interrogatories

**From:** IESO Customer Relations  
**Sent:** May 27, 2014 10:31 AM  
**To:** jgartshore@glp.ca; ggazankas@glp.ca  
**Cc:** IESO Customer Relations  
**Subject:** Assessment of Facilities falling within the Bulk Electricity System (BES) Completed

Compliance Contact,

As a result of NERC's definition of the Bulk Electricity System (BES) Phase 2 work, the IESO has assessed the facilities registered in the IESO-administered market to determine the elements that fall within the new definition of the BES. We have determined that your organization owns elements that fall within the revised BES definition. The attached tables list both the elements that are included and the elements that are excluded from the BES definition.

Because elements you own fall within the revised definition, they are subject to compliance with all applicable NERC reliability standards. You will need to bring any newly identified BES elements (incremental to your current list of BES elements) into compliance with applicable NERC reliability standards by July 1<sup>st</sup>, 2016 (within two years from the July 1<sup>st</sup>, 2014 effective date of the revised NERC BES definition). The revised definition (FERC approved date 07/01/2013) can be found in the [NERC glossary](#).

Changes to the NERC BES definition have been discussed at the Reliability Standards Standing Committee (RSSC) and the Bulk Electric System Exception Procedure stakeholder engagement (SE-100). You can find details from these consultations at:  
SE-100 - <http://www.ieso.ca/Pages/Participate/Stakeholder-Engagement/SE-100.aspx> and  
RSSC - <http://www.ieso.ca/Pages/Participate/Stakeholder-Engagement/Standing-Committee/Reliability-Standards-Standing-Committee.aspx>

The IESO will be organizing a workshop in June of 2014 to assist participants in understanding the applicability and implications of the revised NERC BES definition. More information on the workshop will be rolled out shortly through the IESO Bulletin.

Background:

NERC's definition of BES was revised during Phase 2 and comes into effect on July 1<sup>st</sup>, 2014 (FERC Order 773 can be found at <http://www.ferc.gov/whats-new/comm-meet/2012/122012/E-5.pdf>). The IESO applied the new definition and NERC's Bulk Electric System Guidance Document: ([http://www.nerc.com/pa/RAPA/BES%20DL/bes\\_phase2\\_reference\\_document\\_20140325\\_final\\_clean.pdf](http://www.nerc.com/pa/RAPA/BES%20DL/bes_phase2_reference_document_20140325_final_clean.pdf)) to determine those elements and facilities, and the affected market participants, that meet the revised BES definition. Compliance with NERC standards for the newly-identified BES elements will begin July 1<sup>st</sup>, 2016. Any elements and/or facilities you own that were previously identified as part of the BES will continue to be subject to compliance with NERC standards.

The IESO's criteria for determining the applicability of NERC reliability standards can be found in Market Manual 11.1: "[Applicability Criteria for Compliance with NERC Reliability Standards and NPCC Criteria](http://www.ieso.ca/imoweb/pubs/ircp/IESO_Applicability_Criteria_for_Compliance_with_NERC_Standards_and_NPCC_Criteria.pdf)" ([http://www.ieso.ca/imoweb/pubs/ircp/IESO\\_Applicability\\_Criteria\\_for\\_Compliance\\_with\\_NERC\\_Standards\\_and\\_NPCC\\_Criteria.pdf](http://www.ieso.ca/imoweb/pubs/ircp/IESO_Applicability_Criteria_for_Compliance_with_NERC_Standards_and_NPCC_Criteria.pdf)).

Compliance with NERC reliability standards is mandatory for those market participants that meet the criteria set out in the above-mentioned market manual. The IESO provides a spreadsheet-based mapping tool with multiple sorting options to help market participants obtain the list of the NERC standard requirements that apply to them based on the facilities they own or operate, the functions they perform, and other key attributes. This tool is titled “NERC Reliability Standard Mapping Tool/Spreadsheet” and can be accessed at <http://www.ieso.ca/Pages/Participate/Reliability-Requirements/Reliability-Standards-Compliance.aspx> under the “Applicability Criteria for NERC Standards and NPCC Criteria and Mapping Tools” section.

***Note: The new BES definition does not change market participant obligations to comply with the requirements of the IESO Market Rules. All market participants who own or operate elements and facilities that connect to or form part of the IESO-controlled grid are subject to compliance with the IESO Market Rules.***

Exceptions from the application of the NERC definition of Bulk Electricity System:

You may request an exception to the application of the BES definition, to exclude or include an element from the definition. Should you desire to submit an application for exception, the procedure can be found in Market Manual 11.4: Ontario Bulk Electric System (BES) Exception at [http://www.ieso.ca/Documents/ircp/rc\\_OntarioBESException.pdf](http://www.ieso.ca/Documents/ircp/rc_OntarioBESException.pdf).

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