EMMA BLANCHARD T 613.369.4755 eblanchard@blg.com Borden Ladner Gervais LLP World Exchange Plaza 100 Queen St, Suite 1300 Ottawa, ON, Canada K1P 1J9 T 613.237.5160 F 613.230.8842 blg.com



Our File # 339583-000237

February 1, 2017

By electronic filing

Kirsten Walli Board Secretary Ontario Energy Board 2300 Yonge Street, 27th floor Toronto, ON M4P 1E4

Dear Ms. Walli

Re:Hydro One Networks Inc. ("Hydro One") 2017-2018 Transmission Rates ApplicationBoard File #:EB-2016-0160

Please find enclosed the submissions of Canadian Manufacturers & Exporters ("CME") in the abovenoted proceeding.

Yours very truly

Emma Blanchard

Erin Henderson and Oded Hubert (Hydro One) Intervenors EB-2016-0160 Paul Clipsham and Ian Shaw

OTT01: 8081837: v1

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

AND IN THE MATTER OF an application filed Hydro One Networks Inc. for an Order or Orders approving or fixing just and reasonable rates and other service charges for the transmission of electricity as of January 1, 2017 and January 1, 2018

SUBMISSIONS CANADIAN MANUFACTURERS & EXPORTERS ("CME")

February 1, 2017

Emma Blanchard Vincent J. DeRose

Borden Ladner Gervais LLP

World Exchange Plaza 100 Queen Street Suite 1300 Ottawa, ON K1P 1J9

Counsel for CME

A. INTRODUCTION

1. Hydro One's 2017-2018 Rates Application (the "**Application**") is the first rate application which the company has filed following the initial public offering of shares in Hydro One Limited, the parent company and sole shareholder of Hydro One Networks Inc. which resulted in the sale of approximately 29% of the company's common shares to private investors.¹

2. The privatization of Hydro One represents a sea change for a company which has been publicly owned for over 100 years and which was established, in 1906, in response to a perception that the profits of privately owned electric utilities ...were far too high and that publicly owned electric utilities could deliver electricity to users at a much lower cost.²

3. At a time when manufacturers throughout Ontario are facing dramatic increases in their energy costs, CME on behalf of its members is seeking assurances that the privatization of Hydro One and its transformation into what Hydro One describes as a "more commercially oriented"³ company will achieve an appropriate balance between the interests of shareholders and the interests of ratepayers.

4. It is with this question in mind that CME has considered the Application and the issues contained in the Board's approved Issues List. As described in more detail in these submissions, CME's primary areas of concern with respect to the Application are as follows:

- i. The dramatic increase in capital expenditures proposed for the 2017 and 2018 relative to the amounts projected for the same years in Hydro One's previous rate application;
- ii. The absence of a transparent business and investment planning process emphasizing value to ratepayers; and,
- iii. The emphasis on reliability risk modelling, to the exclusion of actual reliability performance metrics, in customer consultations and in evidence filed in support of this Application which emphasized potential threats to reliability and exaggerated the benefits of capital investments.

¹ Transcript Vol 1, pages 43-44.

² "Why the Province of Ontario Should Not Sell Part of Hydro One" by Dr. David W. Peters and Dr. Douglas D. Peters, May 2016. <u>http://cupe.on.ca/wp-content/uploads/2015/05/Why-the-Province-of-Ontario-should-not-sell-Hydro-One-11-May-2015.pdf</u>

³ Argument in Chief at page 4 line 3.

5. CME has benefitted from a review of the submissions of Board Staff as well as draft submissions shared by the School Energy Coalition (SEC) and the Association of Major Power Producers of Ontario (AMPCO).

i. Bill Impacts and the Revenue Requirement

6. As discussed in more detail further in these submissions, CME's position is that certain elements of Hydro One's proposed 2017 and 2018 revenue requirement are not reasonable and should be reduced by the Board.

7. In evidence and argument, Hydro One seeks to emphasize that the total bill impact of its proposed revenue requirement is relatively small. CME acknowledges that, as is always the case in Hydro One's transmission applications, on average, the total bill impacts described in the Application are smaller than the bill impacts produced by electricity generation or distribution rates.

8. It is not the case, however, that a revenue requirement which produces relatively low bill impacts (for most customers) equates to just and reasonable rates. To the contrary, we submit that, in the electricity transmission context, an emphasis on bill impact may serve to discourage a rigorous assessment of elements of a revenue requirement which, in another context, might generate significant controversy.

B. INVESTMENT PLANNING AND PROPOSED CAPITAL EXPENDITURES

i. Lack of Transparency in Business Planning

9. In the normal course, Hydro One's investment planning process is initiated at the beginning of each year with a review of candidate investments, followed by an optimization process and ultimately the delivery of a draft business plan for approval by Hydro One's Board of Directors in November or December of every calendar year.

10. It appears, however, that in 2015, the year that Hydro One conducted its IPO, Hydro One's business planning process followed a different trajectory.

11. The planning process commenced as usual in February of 2015⁴ and ultimately produced a total capital plan of \$920 Million in 2017 increasing to \$978 Million in 2018. This plan

⁴ J8.1.

was reviewed on November 2 and 4 by the CEO and the CFO; however, Hydro One's Board was not prepared to approve the plan⁵ and approval was deferred until the CFO and CEO of Hydro One were satisfied with the contents.⁶

12. Adding to the confusion is the fact that, just four days prior to the review of the November 2015 draft business plan, Hydro One Limited published a prospectus in connection with its IPO projecting a gradual decline in projected capital expenditures in its transmission business in 2017 and 2018⁷:



13. The prospectus emphasizes that rate base growth represents the greatest near term opportunity and notes that all capital expenditures are included in rate base, highlighting the potential tension between the expectations of new shareholders and those of ratepayers who are already burdened by the significant increases in energy costs in Ontario over the past decade.

14. Ultimately, Hydro One elected not to approve a business plan extending to 2017 and 2018 and instead focused its attention on investment planning in support of this Application. The capital budget filed as part of the Application 7 months later included an additional \$300 Million

⁵ Transcript Vol 7 at page 73, lines 14-15.

⁶ Transcript Vol 11 at page 110-111.

⁷ Ex. I-09-002, Attachment 1 at page 3 of 335. (Hydro One Prospectus "Investment Highlights" Document).

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over and above the amount which had been proposed for the test period in the November 2015 draft business plan. The total capital budget now proposed is as follows⁸:

Including Capitalized Overheads and Interest Capitalized*	Historic				Bridge Year	Test Years		Forecast		
Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Sustaining	389.3	480.0	621.3	694.3	724.3	776.8	842.1	825.7	915.2	1118.1
Development	329.4	171.7	131.6	166.0	166.0	196.4	170.2	244.0	254.0	258.3
Operations	15.2	17.7	28.4	15.6	30.1	25,4	30.8	58.8	21.1	24.7
Common Corporate Costs Capital	42.1	49.1	63.4	67.1	83.5	77.6	79.1	79.1	78.2	73.8
Total	776.0	718.5	844.6	943.0	1003.8	1076.1	1122.2	1207.5	1268.6	1474.9

[Table 5: Summary of Transmission Capital Budget (\$ Millions)

9 *Includes Allowed Funds Used During Construction.

15. The business planning process in the year preceding the filing of the Application and in the first year after the IPO lacks transparency and appears to have resulted in significant increases in proposed capital spending over relatively short periods of time.

ii. Significant Increases in Capital Expenditures

16. In this Application Hydro One is seeking approval for a dramatic increase in capital spending over the test period when compared with the level of capital investment forecast for the same period by Hydro One in their last application (EB-2014-0140), as demonstrated in the attached chart prepared by Board Staff⁹:

Investment Category	EB-201	4-0140	EB-201	6-0160	Comparison between Filings		
	2017	2018	2017	2018	2017 Increase	2018 Increase	
Sustaining	597,4	636.7	776.8	842.1	30.0%	32.3%	
Development	148	116.4	196.4	170.2	32.7%	46.2%	
Operations	44.4	25.2	25.4	30.8	-42.8%	22.2%	
Common Corp Costs	58	60.4	77.6	79.1	33.8%	31.0%	
Total Capital	847.8	838.7	1076.1	1122.2	26.9%	33.8%	

17. The total <u>increase</u> in capital spending over the test period totals \$511.8 Million with increases ranging from 30% to more than 40% in each investment category.

Exhibit A, Tab 3, Schedule 1 at page 13.

⁹ IR-1-106 page 1.

18. A request for increases of this magnitude should be supported by evidence of a material change in circumstance. In fact, based on the evidence, the only significant change in Hydro One's circumstances appears to be the sale of part of the company.

19. CME agrees with Board Staff and the majority of other intervenors in this case, including SEC and AMPCO, that Hydro One has failed to justify the level of spending proposed in the Application for the test years and that significant reductions in Hydro One's proposed capital budget as set out in the Application are warranted.

20. In developing a position on appropriate quantum of disallowances, CME has benefitted from the detailed review of Hydro One's capital program which has been undertaken by SEC and AMPCO. CME's submissions in this regard follow.

a. Significant Increases in Sustainment Capital

21. Seventy-five percent¹⁰ of the increase in capital spending contained in the Application is attributable to escalations in Hydro One's sustainment capital programs.

22. The Application contains the following explanation of "Sustainment" investment:

Sustainment work involves investing in the existing infrastructure to enable equipment to continue to perform to its design standards, manage reliability risk and deliver the desired level of reliability system-wide, while meeting all legislative, regulatory, safety and environmental requirements... The capital component of the Sustainment work deals with replacement of assets which have reached their end of life.[emphasis added]¹¹

23. This explanation, in and of itself, illustrates the ambiguity which characterizes much of the evidence presented by Hydro One in support of their sustainment capital investment plan for the test period. In the first place, not all sustainment capital investments described in the Application involve the replacement of assets which have reached "end of life." The use of the term "end of life" is intended to signify that, the actual condition of a piece of equipment has enabled Hydro One to make a determination that there is a significant risk that the equipment will fail.

¹⁰ \$384.8 M / \$511.8 M = 75%

¹¹ Exhibit B1-1-2 pg. 11-12.

24. As described by Mr. Penstone at the Technical Conference assets which are at "end of life" are assets which "don't have a pulse."¹²

25. Sustainment investments including the significant tower coating program described in the Application as well as many of the proposed stations investments are not driven by a determination that these assets have reached "end of life" but rather on other considerations, such as anticipated future cost savings which, as discussed by Board Staff in their submissions, are uncertain.¹³

26. In addition, as discussed above, the nexus between reliability risk (which is purely theoretical) and performance reliability is not clearly understood.

27. A significant focus of the written interrogatories filed in these proceedings was the lack of clarity surrounding the drivers for the proposed increase in sustainment capital spending. In response to an interrogatory from Board Staff, Hydro One initially provided four explanations for the increase¹⁴:

i. New information regarding customer needs and preferences;

ii. Reliability risk;

iii. The schedule of nuclear generation retirement; and,

iv. Emerging asset condition data.

28. On cross examination, however, Mr. Penstone confirmed that neither reliability risk nor nuclear generation retirement are increasing planned capital expenditures and that the net increase in sustainment capital investment attributable to the customer consultation process is \$24 Million.¹⁵

29. Leaving aside the fact that Hydro One's filed evidence and responses to interrogatories now appear to have been misleading in terms of the extent to which customer consultation, reliability risk and nuclear retirement are driving the increases in Hydro One's proposed capital investment plan, based on evidence provided during the oral hearing, it now appears the proposed significant increase in sustainment capital spending must be almost entirely justified on the basis of new information about Hydro One's transmission asset condition.

¹² TC, September 23, 2016, Transcript at page 139-140.

¹³ Board Staff Submissions at pages 8-9.

¹⁴ Exhibit I-1-106 at page 2- 3.

¹⁵ Transcript Vol 7, page 56-57.

30. CME submits that the evidence which has been provided about the information available to Hydro one with respect to the condition of its transmission assets does not support this conclusion as demonstrated by a review of the evidence in relation to proposed investments.

31. Both SEC and AMPCO have undertaken very detailed reviews of the various classes of capital investment proposed by Hydro One in this Application. In general, we submit that this review demonstrates that:

- i. in almost every asset class, Hydro One is proposing an increase in sustaining capital investment over and above what was projected in Hydro One's last rates application for the same period or compared with historical investment;
- ii. Hydro One has obtained very little new data or information relating to asset condition since its last rates application; and,
- iii. In many cases, investments appear to be predicated on anticipated cost savings for which little or no support is provided.
- 32. In the sections that follow, we provide some examples of the above described issues.

(1) Insulators

33. In March of 2015, Hydro One experienced an insulator failure on its V76R circuit which caused the conductor to fall to the ground in a commercial parking lot in Etobicoke.¹⁶ The failure was the result of a defect which exists in insulators manufactured by Canadian Ohio Brass (COB) and Canadian Porcelain (CP) between 1965 and 1982. Such insulators are present at approximately 34,000 structures within Hydro One's system, approximately 15,000 of which have been identified as "high risk."

34. Hydro One has been aware of the existence of the defect in COB and CP insulators since the 1980s.¹⁷ In fact, during the oral hearing, Hydro One confirmed that there is a history of line-drop incidents relating to these defective insulators¹⁸ but that, historically, Hydro One elected to simply monitor the insulators and defer their replacement.¹⁹

35. Following the March 2015 line-drop incident, Hydro One undertook some additional testing of certain COB and CP insulators and determined that its longstanding approach to

¹⁶ B1-03-11 Ref S79 at page 1.

¹⁷ Transcript Vol 8 at page 60.

¹⁸ Transcript Vol 8 at page 64.

¹⁹ Transcript Vol 8 at page 61.

monitoring and slowly replacing the insulators over time should be abandoned in favour of an aggressive new insulator replacement strategy which will result in the replacement of 4,030 circuit structures in 2017 and 3,880 in 2018²⁰ compared with 233 in 2014 and 155 in 2015.²¹

36. CME submits that Hydro One bears some responsibility for the decision not to take more decisive action with respect to the insulators when the defect was first discovered in 1980, including possibly pursuing compensation from the manufacturers at the time. This is particularly true in light of the fact that it now appears that replacing the insulators during the test period will be more costly than it would have been had Hydro One undertaken this work at a more gradual pace over the 34 year period commencing when it first learned of the defect.

37. Based on unit costs calculated by AMPCO with reference to costs in Hydro One's investment proposal for insulators in EB-2014-0140, it appears that Hydro One is forecasting a 28% increase in the cost to replace insulators in 2017 and a 27% increase in 2018. No explanation is provided for the increase, and given the dramatic increase in insulator replacements during this period, far from seeing an increase in unit costs, we submit that it is reasonable to expect some economies of scale.

38. At a minimum we submit that the portion of the sustainment capital budget attributed to insulator replacements should be reduced by 28% in 2017 and 27% in 2018 for a total reduction of \$27 Million.

(2) Protection Systems

39. Protection systems or relays are connected throughout the transmission network to detect abnormal system conditions.

40. With respect to protection systems, during cross examination, Hydro One acknowledged that the condition of this equipment is essentially unchanged since Hydro One's last rates application and the performance of Hydro One's protection system equipment is stable or improving.²²

²⁰ B1-03-11 Ref S79 at page 2.

²¹ We assume that the bulk of the 7910 structures proposed to be replaced during the test period contain COB or CP insulators, though exact numbers have not been provided by Hydro One.

²² Transcript Vol 6 at pages 105-106.

41. Hydro One nevertheless proposes to double the amount of capital investment in protection systems by 2018.²³

42. The explanation for the increased expenditure appears to be that it is more efficient to replace this equipment as part of an integrated investment which includes investments in new microprocessors and automated systems; however, when asked, Hydro One's witness was unable to point to any evidence that a detailed analysis quantifying the anticipated economic benefit flowing from such accelerated investments.²⁴

43. Given the foregoing we believe that it would be reasonable to hold the capital investments proposed for the test period to the levels projected for such expenditures in Hydro One's previous rates application.

(3) Steel Towers

44. Hydro One's transmission system includes approximately 52,000 steel structures. The structures are manufactured with a zinc-based galvanized coating which protects them from corrosion. One approach to sustainment which Hydro One has pursued for many years is to extend the life of its steel structures by applying a new galvanized coating to towers which have suffered a loss of galvanized coating.

45. In its Application, Hydro One proposes a seven fold increase in the level of capital investment to be directed towards steel tower coating²⁵.

46. There is no new data about the condition of Hydro One's steel towers²⁶ and the condition of the towers does not pose any short or medium-term threat to reliability.

47. Hydro One justifies the increased expenditure on the basis that a new technology has been developed which will allow Hydro One to complete steel tower coating operations much more quickly. In other words, the justification for the increased expenditure is based on the proposition that the investment represents an economic opportunity for ratepayers.

48. Aside from issues relating to intergenerational equity which could arise in connection with a plan which requires today's ratepayers to significant costs up front in order to benefit ratepayers in the (possibly distant) future, CME submits that Hydro One's Application provides

²³ Transcript Vol 6 at page 108.

²⁴ Transcript Vol 6 at page 108.

²⁵ \$96.9 Million v. \$13.4 Million.

²⁶ Transcript Vol 7 at page 66.

insufficient support for its economic opportunity proposition. The primary support for this proposition appears to be net present value calculations filed in response to a request from Board Staff which rely on assumptions about future economics which may not be accurate.²⁷

(4) Stations

49. As discussed by Board Staff in their submissions, station projects account for the majority of proposed capital spending over the test period, namely \$537 Million in 2017 and \$496.2 Million in 2018 representing an increase of approximately 65% over the station investments undertaken by Hydro One in 2012.

50. CME agrees with Board Staff that the evidence does not support the pace of investment in stations proposed by Hydro One. There is insufficient evidence to demonstrate that cost savings justifying the extent of the proposed investments will be achieved through the implementation of an integrated stations approach.

b. Summary of Recommended Capital Disallowances

51. Board Staff have proposed a 50% reduction in the overall proposed sustainment capital expenditure over the test period on the grounds that Hydro One has not demonstrated that all proposed sustainment work must be completed in the test years and that evidence did not demonstrate a robust investment planning process. In addition, Board staff recommend an additional disallowance of \$22.76 Million in each test year to signal to Hydro One that the quality of its planning evidence and customer engagement activity was below the standard that the OEB expects from a large, sophisticated utility.²⁸

52. CME supports Board Staff's recommendations in this case and submits that the above described disallowances are the minimum that the OEB should consider in this case.

53. SEC and AMPCO have developed more specific recommendations with respect to disallowances, which CME also believes are worthy of consideration.

c. Reporting on Status of Capital Projects

54. CME is also in support of Board Staff's recommendation that Hydro One be required, in any future rate application, to report on the status of projects or programs, exceeding \$3 Million

²⁷ Board Staff Submissions at page 7.

²⁸ Board Staff Submissions at page 17.

over the test years, that appeared in previous applications and to provide detailed explanations if projects or programs are not completed together or if money is redirected to a different project.

55. Such reporting will provide improved transparency to ratepayers with respect to the delivery of Hydro One's capital projects.

iii. Niagara Reinforcement Project

56. CME adopts the submissions of Board Staff with respect to the proposed recovery of \$9.2 Million over the test period in respect of debt associated with the Niagara Reinforcement Project (the "**NRP**"). Hydro One first sought relief with respect to such costs in its 2007-2008 rates case (EB-2006-0501) when it became apparent that the NRP would not be put into service as a result of continuing land claim disputes in Caledonia Ontario.

57. Hydro One has now been recovering costs associated with the NRP in rates for ten years and does not appear to have made any progress with respect to the project in that time. CME concurs with Board Staff that Hydro One should not be entirely indemnified from the risks associated with its investments and that no further costs should be borne by ratepayers with respect to the NRP until such time as this asset goes into service.

C. Performance and Outcome Measures, Customer Consultation and Benchmarking

i. Reliability Risk Model

58. In February of 2016, Hydro One initiated discussions on A Reliability Risk Model concept/structure to link hazard curves, asset demographics and asset contributions to reliability.²⁹ The Reliability Risk Model concept was intended to assist Hydro One in measuring the effect of capital investment on reliability and to communicate the implications of different levels of investment to customers.³⁰ We concur with Board Staff that the reliability risk model fails to accomplish these objectives.

59. The most significant criticism of the reliability risk model, particularly to the extent that it is used as a tool for communicating with customers, is that reliability risk is not predictive of actual performance reliability. Factors such as weather have a significant influence on reliability particularly for customers served by single circuit systems.

²⁹ J8.1 Attachment 1, page 1.

³⁰ Transcript Vol 5 at page 132.

60. There are also a number of issues relating to the inputs to the reliability risk model including:

- i. The model only considers a limited number of asset types, even within the three categories of assets included in the model being conductors, transformers and breakers;³¹
- ii. The model is based on the age of assets, and assumes that assets are replaced based on age and not their condition, notwithstanding that Hydro One's practice is to replace assets based on asset condition; and,
- iii. The model assumes that assets which have been replaced have failed, which is not always the case, particularly in the case of integrated station projects.

61. In order to provide a higher degree of confidence with respect to the predictive capacity of the reliability risk model and to address some of the above concerns, Hydro One was asked to test the reliability risk model by applying it retrospectively to years where actual reliability performance data is available, for example 2011 to 2015³². Hydro One has refused to undertake such testing.³³

62. While Hydro One confirmed that the same investments would have been proposed whether or not the reliability risk model had been in existence³⁴, Hydro One also points to reliability risk to justify significant increases in capital spending as demonstrated by the following exchange³⁵:

MS LEA. ...Why, given the performance that you have, do you feel the need to increase your spending so significantly?

MR. PENSTONE: I think, Ms. Lea, this goes to the issue of reliability risk.

63. Given the issues described above, and Hydro One's inability to demonstrate the accuracy of its modelling, CME submits that no reliance should be placed on the outcome of the reliability risk modelling for the purposes of this Application.

³¹ Transcript Vol 6 at page 131.

³² Transcript Vol 3 at page 182 lines 16-17.

³³ Transcript Vol 5 at page 122 line 8-13.

³⁴ Transcript Vol 5 at page 127 lines 12-16.

³⁵ Transcript Vol 5 at page 110 lines 22-25.

ii. Customer Engagement Process

64. Hydro One states intensified focus on customer needs and preferences and customer satisfaction as one of the hallmarks of the Application.³⁶ Specifically, Hydro One points to the customer engagement process undertaken by Ipsos Public Affairs ("**Ipsos**") in March and April of 2016 (the "**Ipsos Consultation**")³⁷ which, according to Hydro One, "was intentionally structured so that information regarding customer needs and preferences could be used to inform the applied-for Transmission System Plan"³⁸ consistent with the requirements of the Handbook to Utility Rate Applications.

65. CME has concerns about the manner in which the Ipsos Consultation was undertaken, the nature of the information provided to participants and most importantly the conclusions which Hydro One has drawn from the process about customer needs and preferences in relation to reliability risk, rate levels and the corresponding indicative level of investment in the transmission system.³⁹ Hydro One states that the Ipsos Consultation provides "directional guidance" about levels of investment or, in other words, that the consultation demonstrates that customers support increased capital spending and increased rates. CME disagrees.

a. The Ipsos Consultation Process

66. In terms of the Ipsos Consultation process, CME's primary concerns relate to the very short time frame in which the consultation was undertaken and the lack of participation in the process relative to participation rates regularly achieved by Hydro One in its annual customer feedback process.

67. According to IPSOS, the "consultation should take place as early as possible to build trust and awareness of the process."⁴⁰ CME submits that the evidence is that this did not occur and that the Ipsos Consultation was rushed to the point that both trust and awareness of the process was compromised:

Ipsos was not formally retained until March of 2016, notwithstanding that Hydro
 One's Application was to be filed two months later in May of 2016⁴¹ which may

³⁶ Argument in Chief at page 24.

³⁷ Exhibit B1-2-2 Attachment 1 (the "Ipsos Report").

³⁸ Argument in Chief at page 24.

³⁹ Argument in Chief at page 26.

⁴⁰ Ipsos Report, page 3.

⁴¹ Transcript Vol 3, page 159.

have caused some customers to assume that Hydro One's capital investment plan had already been established for the purposes of the Application;

- ii. Ipsos conducted the bulk of its consultations in the month of March⁴² notwithstanding that they recognized that March can be a very busy month for some people because it includes March break;⁴³
- iii. Invitations were sent out only 7 to 10 business days in advance of the consultations⁴⁴ compared with Hydro One's annual customer feedback process where customers are given multiple opportunities to participate over a calendar year.⁴⁵

68. The compressed time frame in which the Ipsos Consultation took place likely had a negative influence on participation rates which were as follows:

- Wave 1 (consisting of one on one, in-depth discussions)- 14 customers invited, 12 participated⁴⁶
- ii. Wave 2 (consisting of larger group discussion) 133 customers invited, 22 participated⁴⁷;
- iii. Wave 3 (On-Line Consultation) 183 customers were invited and 28 participated.⁴⁸

69. While CME acknowledges that the evidence from Ipsos was that a participation rate of 22 out of 133 invitees in the Wave 2 "business to business" component of the process constitutes a reasonable level of participation, the participation rate of 28 out of 183 customers asked to complete the on-line survey is unexplained and casts doubt on the extent to which results of the Iposos Consultation are truly representative of the preferences of Hydro One's customers.

70. CME also notes that, of the total number of participants, only 19 were transmission connected large industrial customers.⁴⁹ The balance of the participants were generators, local

⁴² Transcript Vol 3, page 160 at lines 24-26.

⁴³ Transcript Vol 3, page 166 at lines 10-14.

⁴⁴ Transcript Vol 3, page 168 at line 8.

⁴⁵ Transcript Vol 3 at page 175.

⁴⁶ Ipsos Report at page 7.

⁴⁷ Ipsos Report at page 8.

⁴⁸ Ipsos Report at page 10.

distribution companies and others who do not pay transmission rates directly. CME submits that these demographics bring into question any conclusions that may be drawn from the Ipsos Consultation about a willingness to accept additional rate increases.

b. <u>Misleading Terminology and Background Information Provided to</u> Participants in the Ipsos Consultation

71. CME is concerned that the information underpinning the Ipsos Consultation and presented by Hydro One to participants in the form of a slide presentation titled "Transmission Customer Engagement: Investing for the Future"⁵⁰ (the "**Customer Presentation**") may have been misleading particularly to the extent that it exaggerated potential threats to transmission system reliability and overemphasized the ability of capital investment to address these threats.

(1) Outages v. Interruptions

72. In Hydro One's lexicon, the terms "outage" and "interruption" have very different meanings. An "outage" refers to a period of time when a piece of transmission equipment is unavailable or where the performance of facilities is reduced for any reason including to permit the inspection, testing, maintenance or repair of facilities.⁵¹

73. An "interruption" signifies an outage on the transmission system that interrupts the supply of energy to transmission customers.⁵²

74. Given that testing, maintenance and repair of facilities is included in the calculation of outages, an increase in the number of outages will, in part, be the product of improvements to the transmission system. Instead of highlighting this fact, however, Hydro One includes the following statement in a slide describing the increasing challenges which the transmission system faces due to asset condition:

Evidence suggests that reliability risk is increasing:

Equipment outages caused by failure or necessary repairs/replacements increased ~300% from 2011-2015.⁵³

⁴⁹ Transcript Vol 2, page 172.

⁵⁰ B1-2-2 Attachment 2.

⁵¹ Customer Presentation at page 9 (footnote 3).

⁵² Customer Presentation at page 9 (footnote 1).

⁵³ Exhibit B1-2-2 Attachment 2 – "Transmission Customer Engagement: Investing for the Future" March 2016 at page 9.

75. The outages used to calculate the 300% percentage increase in equipment outages includes planned outages which increased substantially in 2014 and 2015⁵⁴ as a result of increased sustaining investment⁵⁵, and is based on duration⁵⁶ which includes instances where Hydro One elected not to bring the equipment back on line.

76. Given the above, the fact that some participants in the Ipsos Consultation used the terms "outage" and "interruption" interchangeably⁵⁷ is troubling as it suggests that some participants were left with an inaccurate understanding of the extent to which the performance of the transmission system is actually declining.

(2) Reliability Performance Trends

77. In this Application, Hydro One proposes a Transmission Scorecard which it states "provides a suite of metrics which are appropriate to measure Hydro One's business performance."⁵⁸ One of the key metrics contained in the Scorecard is the SAIDI metric which measures the average duration of interruptions and tracks performance of a five year period. On the basis of this metric, Hydro One's transmission reliability <u>performance</u> has actually improved over the past 5 years.⁵⁹

78. It is also the case that Hydro One ranks in the top quartile among its Canadian Electricity Association peers for reliability on its multi-circuit system.⁶⁰

79. Rather than highlighting these facts in their Customer Presentation, however, Hydro One elected to project back 10 years⁶¹ in order to reach the conclusion that "overall transmission reliability has remained flat."⁶²

80. The lack of consistency in how these reliability performance metrics are presented not only leads to confusion but also masks actual improvements in reliability which have been achieved in the last 5 years. This may also have lead participants to indicate preferences for increased capital spending.

⁵⁴ Transcript Vol 4 at page 8 lines 19-21 and page 11 lines 10-14.

⁵⁵ Transcript Vol 4 at page 11 lines 10-14.

⁵⁶ Transcript Vol 4 at page 9 line 19.

⁵⁷ Ipsos Report, page 12.

⁵⁸ Argument in Chief at page 51.

⁵⁹ Transcript Vol 3 page 185-186.

⁶⁰ Transcript Vol 5 at page 65.

⁶¹ Transcript Vol 3 page 187 lines 27-28 and page 188 line 1.

⁶² Customer Presentation at page 10.

(3) Understanding Rate Impacts and Trade Offs

81. During the Ipsos Consultation customers were asked to consider "trade-offs between outcomes and costs."⁶³ In this regard, Ipsos reaches the following conclusion:

The general sentiment, overall, was that the right balance between reliability risk and rates is somewhere between Scenario 2 (6.3% rate increases for an essentially unchanged reliability risk) and Scenario 3 (6.8% rate increase for approximately 10% improvement in reliability risk).⁹⁶⁴

82. While Hydro One and Ipsos clarified that it did not ask participants to select a preferred scenario and that the results of the Ipsos Consultation were only intended to provide Hydro One with "directional guidance" it is clear that Hydro One believes that the Ipsos Consultation produced "information about the extent to which and the size of rate increases that customers would be willing to accept."⁶⁵ Hydro One has also taken the position that the results of the Ipsos Consultation provides some justification for the dramatic increases contained in this Application⁶⁶. CME disagrees that the Ipsos Consultation supports this conclusion.

83. Firstly, the three scenarios contained in the Customer Presentation are all predicated on reliability risk⁶⁷ which, for the reasons described above, CME submits does not provide an accurate picture of the real benefits of capital investments to customers.

84. It is also clear that, at least some of the participants in the Ipsos Consultation, were confused or didn't understand the difference between reliability performance and reliability risk⁶⁸

85. Secondly, participants were not given the opportunity to consider a scenario which did not assume a rate increase resulting from significant increases in capital spending. In fact, a customer asked Hydro One to provide such a scenario, described as the "Zero Scenario" in the Ipsos Report, Hydro One described instead a scenario which would result in a year over year 3.2 % rate increase, which scenario was immediately discounted on the basis that it would produce at 20% increase in reliability risk⁶⁹ over five years (2016-2020)⁷⁰

- ⁶⁹ Ipsos Report at page 26.
- ⁷⁰ Transcript Vol 4 at page 33.

⁶³ Argument in Chief at page 26.

⁶⁴ Ipsos Report at page 14.

⁶⁵ Transcript Vol 7 at page 34-35.

⁶⁶ IR-1-106 at page 2.

⁶⁷ Transcript Vol 3, page 175.

⁶⁸ Transcript Vol 4 at page 20 lines 1-7

86. Given the above described problems with the Consultation Process, CME submits that the reliance placed on the results of that process by Hydro One in this Application is inappropriate.

iii. <u>Benchmarking</u>

87. Pursuant to the 2015-2016 Transmission Revenue Requirement Settlement Agreement (EB-2014-0140) Hydro One agreed to commission an independent Transmission Total Cost Benchmarking Study to be filed as part of its next rate application. Ratepayers sought this commitment from Hydro One on the understanding that such a study would be of assistance in assessing Hydro One's performance and would facilitate comparisons between Hydro One and other electricity transmitters.

88. Hydro One states that it "seeks to become fully aligned with the OEB's ratemaking expectations...including the principles and objectives of the OEB's Renewed Regulatory Framework (the "RRF"). The RRF supports the expanded use of benchmarking to inform rate setting and to assess utility performance⁷¹ and that benchmarking will be used to "inform the public about [utility] performance and facilitate comparisons among [utilities]."

89. Similarly, the Handbook to Utility Rate Applications⁷² states that the "OEB will use benchmarking to assess a utility's performance and to compare its performance against other utilities."

90. A Transmission Total Cost Benchmarking Study dated May 17, 2016 and prepared by Navigant Consulting Ltd. ("**Navigant**") and First Quartile Consulting ("**1stQ**") has been filed in this Application as Attachment 1 to Exhibit No. B2-2-1 (the "**Benchmarking Study**").

91. The Benchmarking Study was designed in a manner which would make it difficult to reach conclusions about Hydro One's productivity, at least on a total factor basis.⁷³

92. Navigant agreed that, relative to the peer group selected for the Benchmarking Study, Hydro One is the outlier.⁷⁴

⁷¹ Report to the Board: Renewed Regulatory Framework for Electricity Distributors: A Performance Based Approach" October, 18, 2012 at pages 59-60.

⁷² Handbook to Utility Rate Applications, October 13, 2016, page 3.

⁷³ Transcript Vol 3, page 12 at lines 22-26.

⁷⁴ Transcript Vol 3, page 23 lines 7-12.

93. One of the reasons given for the selection of the peer group was that using a dissimilar peer group⁷⁵ would assist in the development of best practices; however, the consultants charged with preparing the Benchmarking Study also acknowledged that using dissimilar comparators will make the comparison more difficult⁷⁶ thereby compromising the primary objective of the benchmarking requested by ratepayers.

94. CME submits that the Benchmarking Study does not accomplish the objective which ratepayers sought to achieve when they asked Hydro One to complete the study, namely to inform the public about Hydro One's performance as an electricity transmitter and to facilitate comparisons between Hydro One and **similar** electricity transmitters.

95. The OEB should give no weight to the Benchmarking Study when considering matters such as Hydro One's proposed capital expenditures or proposed operations and maintenance expenditures.

96. In addition, Hydro One should be directed to undertake a new total cost benchmarking study, in consultation with ratepayers, which reflects a peer group which is more similar to Hydro One and which would be submitted with Hydro One's next rate application.

D. PRODUCTIVITY IMPROVEMENT AND PERFORMANCE SCORECARD

97. In this Application, Hydro One is seeking approval from the Board with respect to its proposed Transmission Regulatory Scorecard⁷⁷ (the "**Scorecard**"). While the Scorecard does contain some useful metrics, there are two concerns with what is proposed.

98. Firstly, the Scorecard does not propose any form of productivity metric which would measure the revenue requirement year over year against the service delivered to ratepayers, such as a \$/MWh metric.

99. Secondly, CME is concerned that the metric which tracks in service additions as a percentage of the OEB approved plan may inadvertently incentivize inefficient spending.

⁷⁵ Transcript Vol 3, pages 16- 17.

⁷⁶ Transcript Vol 3, page 20.

⁷⁷ Exhibit B2-1-1 Attachment 1.

E. OPERATIONS MAINTENANCE & ADMINISTRATION COSTS

100. In its pre-filed evidence, Hydro One emphasizes what appears to be a decrease in forecast operations, maintenance and administration ("OM&A") costs.⁷⁸ As indicated by Board Staff, however, the primary drivers of the apparent declining trend is a decrease in Common Corporate Costs, which benefits from a significant increase in capitalized OM&A and a decision to push forward the reporting of pension costs (as opposed to any pension cost saving action).

101. As a starting point, CME submits that Hydro One should have volunteered the above information on its own, rather than attempting to characterize its projected OM&A expenditures as being "meaningfully below target."⁷⁹

102. In fact, sustaining OM&A is increasing over the test years, by 6% in 2017 and by slightly less in 2018,⁶⁰ a forecast which is somewhat surprising giving the recent and projected increase in sustainment capital investment which should be reducing the amount of sustainment OM&A required.

103. CME is also troubled by the apparent link identified by Board Staff between Hydro One's consistent overearning⁸¹ and regular underspending in terms of OM&A in every year other than 2015⁸² and supports Board Staff's recommendation that Hydro One's requested OM&A for the test period should be reduced by an amount consistent with Hydro One's average underspending being \$15 Million per year.

i. Compensation - Remains Above the Median

104. Partway through the oral hearing, Hydro One filed a presentation describing the results of a 2016 update to the Mercer compensation study which has been filed in several of Hydro One's previous rate applications. The results show that Hydro One's compensation is farther above the median than it was in 2013.

105. We agree with the submissions of Board Staff that the OM&A envelope for recovery from ratepayers should be reduced by \$12.5 Million in each of the test years based on the estimated the dollar difference between the weighted average compensation for Hydro One employees

⁷⁸ Exhibit C1-2-1 at page 2.

⁷⁹ Exhibit C1-2-1 at page 7.

Exhibit C1-2-2 at page 3.

⁸¹ BOMA IR I-2-30.

⁸² CCC IR !-13-25 page 2-4.

and the median for the peers.⁸³ CME submits that it is important to ensure that Hydro One continues to be incented to drive its compensation costs toward the median.

Management Compensation and Incentives ii.

106. As part of its transformation into a publicly traded company, Hydro One set out to recruit new senior executives with proven public company leadership experience with a strong focus on financial performance and capital market activities.

Hydro One retained consultants to assist it in developing compensation packages which 107. would be attractive to such individuals and which would include short and long term incentives which are tied to the performance or the achievement of certain targets or goals.

One of the performance metrics which has been selected in this regard relates to total 108. shareholder return⁸⁴. While this type of metric is clearly aligned with the interests of Hydro One's shareholders, it is not appropriate in terms of driving value for ratepayers. CME is concerned by Hydro One's stated "goal" of "expending the capital expenditure to keep the machine moving, as well as hitting the in-service addition target, which is what goes into rate base.85, This has produced an environment of "steady-state spending".

The potential mischief of this approach was illustrated by Board Member Thompson's 109. hypothetical example where there may be 20 projects when Hydro One starts out the year that is expected to consume \$1 Billion, but as a consequence of stellar performance the projects only cost \$500 Million. Under Hydro One's current framework, these savings would be seen as a failure because the company did not spend \$1 Billion. Put another way, efficient delivery would be penalized.

In this regard, the Board should be concerned that the only safeguards built in to prevent 110. wasteful spending to meet Hydro One's annual spending goal:

- i. Each specific project has a budget; and,
- At the project closure stage Hydro One reviews the original scope and intent and ii. objectives of the investment and compares those to what was delivered.

 ⁸³ Board Staff Submission at page 28.
 ⁸⁴ Transcript Volume 8 at page 150.
 ⁸⁵ Transcript Volume 9, pp.192-193.

111. These two safeguards, as identified by Hydro One, demonstrate the problem with an incentive being tied to spending the maximum budget or achieving or exceeding a certain return on equity. There is no reward for achieving project deliverables under budget. In fact, it is the opposite: delivering project deliverables under budget is penalized. In our submission, such an incentive structure should be rejected by the Board.

F. COST OF SERVICE

i. <u>Should Hydro One Receive the Benefit of the Deferred Tax Asset Created</u> as a Result of Hydro Ones's Initial Public Offering?

112. As described in Board Staff Submissions⁸⁶ and in Hydro One's Argument in Chief,⁸⁷ as a result of the sale of more than 10% of Hydro One Limited's share, Hydro One exited the Payments in Lieu of Taxes (the "**PILS**" regime) and became liable for federal and provincial income tax. Pursuant to the *Electricity Act*, Hydro One Limited was required to pay a departure tax amounting to approximately \$2.6 Billion (the "**Departure Tax**").⁸⁸ In fact, this amount was paid by the province of Ontario which received in return 2.6 Billion shares in Hydro One Limited valued at \$1 per share.⁸⁹

113. The departure of Hydro One Limited from the PILs regime also created a deferred tax asset of \$2.6 Billion (the "**Deferred Tax Asset**").⁹⁰

114. In its Application, Hydro One proposes to recover in rates \$81.3 Million in 2017 and \$90.4 Million in 2018⁹¹ in respect of income taxes which will, in large part, not be payable by Hydro One as a result of the application of the Deferred Tax Asset.

115. Hydro One argues that the whole of the benefit of the Deferred Tax Asset should accrue to its shareholders as opposed to being allocated to reduce transmission rates. In support of this position it relies on the Stand-alone and Costs Follow Benefits principles arguing that ratepayers did not bear the cost of the Departure Tax, that Hydro One bore the cost of the Departure Tax and the Deferred Tax Asset arose due to circumstances

⁸⁶ Board Staff Submissions at page 38.

⁸⁷ Hydro One Argument in Chief at page 64.

⁸⁸ Hydro One Argument in Chief page 64.

⁸⁹ Transcript Vol 2 at page 173.

⁹⁰ J2.9.

⁹¹ C1-1-1 at page 1.

entirely unrelated to the costs and activities that Hydro One incurs to provide transmission services.

116. Notwithstanding the foregoing, as demonstrated by the prospectus prepared in connection with the IPO, Hydro One clearly contemplated the possibility that the Board would not permit it to recover in rates the full amount of the taxes which would have been payable by Hydro One but for the deferred tax asset:

Risks Relating to Deferred Tax Asset

As a result of leaving the PILs regime and entering the corporate tax regime, Hydro One will recognize a deferred tax asset due to the revaluation of the tax basis of Hydro One's fixed assets at their fair market value and recognition of eligible capital expenditures. Management believes this will result in annual net cash savings over the next five years due to the reduction of cash taxes payable by Hydro One. There is a risk that, in future rate applications, the Ontario Energy Board will reduce the Company's revenue requirement by all or a portion of those net cash savings.⁹²

117. On this basis alone we submit that the matter warrants further consideration.

118. SEC has proposed a number of alternative characterizations of the relevant transactions which we submit have merit and which should be considered by the Board.

- 119. In particular, we find the following arguments persuasive:
 - While Hydro One Limited paid the Departure Tax, the Province of Ontario subsequently returned the entire amount of the payment to Hydro One through its \$2.6 Billion share purchase;
 - ii. Since the Province of Ontario was the government collecting the Departure Tax, by paying it, the Province was essentially forgoing the benefit of the Departure Tax for the purposes of increasing the price of the shares to be sold in the IPO;
 - iii. Viewed in the above light, the Deferred Tax Asset would represent a windfall to Hydro One and its shareholders to the extent that Hydro One is entitled to benefit from it to the exclusion of ratepayers; and,

⁹² CME IR- (Prospectus at page 160)

iv. Utilities should only be allowed to recover in rates prudently incurred costs of providing a regulated service, plus a fair return on investment. Notional costs, such as income taxes which will not actually be paid by the utility, should only be included in rates in very limited circumstances.

120. Based on the above, CME submits that the logic in RP-2004-0188 should apply in this case, namely that where a utility has not incurred a cost in order to generate a tax benefit, and at least some of the benefit should be allocated to ratepayers. This is not a circumstance where Hydro One is justified in collecting through rates the entire amount of the income taxes which it is not paying.

G. NETWORK SERVICE CHARGE

121. As set out⁹³ in the Application, the Network Service Charge (**NSC**) determinant is currently the higher of:

- i. The customer's demand that is coincident with the monthly system peak; or
- ii. 85% of the customer's non-coincident monthly system peak demand between
 7 a.m. and 7 p.m. on Independent Electricity System Operator (IESO) business days.

122. Under this approach, customers with a monthly peak demand that occurs away from the time of the total systems monthly peak will benefit from a reduced network charge. Most importantly for manufacturing and industrial customers, no transmission network charges apply to customers that avoid consuming between 7 a.m. to 7 p.m. on IESO business days unless the monthly peak demand occurs outside the 7 a.m. to 7 p.m. period.

123. A number of CME members have shifted their manufacturing processes to night in order to avoid consuming between 7 a.m. to 7 p.m. on IESO business days. We submit that shifting significant load from peak periods to after 7 p.m. benefits the entire system

124. That said, over the past six years there have been 17 months where the monthly system peak fell outside of the 7 a.m. to 7 p.m. window.⁹⁴ When that occurred, manufacturers who took all steps necessary to ensure that their manufacturing occurred outside of peak hours, were nevertheless charged the higher network charge because their demand was coincident with the

⁹³ Exhibit H1, Tab 2, Schedule 1, page 2 of 5.

⁹⁴ Exhibit I, Tab 9, Schedule 16, page 2 of 3.

monthly system peak. CME submits that such an outcome provides inappropriate incentives to Ontario manufacturers who have taken all steps necessary to ensure that their processes are always scheduled during the defined non-peak period.

125. CME submits that the current NSC determinant fails to recognize the benefit that manufacturers bring to the system by moving their entire manufacturing process to the predefined non-peak window. Put another way, manufacturers that provide large consistent offpeak loads should not be penalized if a single peak occurs after 7 p.m.

126. Contrary to Hydro One's response,⁹⁵ CME wishes to advise the Board that its members have reported great difficulty in predicting when a non-peak window is going to occur outside of the 7 a.m. to 7 p.m. non-peak period. It is simply unrealistic to suggest, as Hydro One has done, that manufacturing and industrial customers are able to leverage historical system peak information to predict when the peaks will occur outside of 7 a.m. to 7 p.m.

127. Moreover, when asked what steps, if any, manufacturing or industrial customers that operate between 7 p.m. and 7 a.m. could take to ensure that they do not operate during a coincident peak, Hydro One made two suggestions. First, such customers forecast system peak times based on historical, actual and future forecast system peak information as found on the IESO's public reports site. Second, that customers consider shifting operations to start later than 7 p.m. during the months of February, March, April, September and October. Both of these suggestions place an unrealistic burden on manufacturing and industrial customers.

128. CME requests that the Board direct Hydro One to present a report in the next transmission case that addresses how the NSC determinant can be modified to ensure that manufacturing or industrial customers who shift their operations to outside of the 7 a.m. to 7 p.m. window, are not penalized when a system peak occurs after 7 p.m. We would request that the report consider:

- Whether the NSC determinant should only be based on manufacturing and industrial customer's non-coincident monthly peak demand between 7 a.m. and 7 p.m. on IESO business days, and not in any way determined by the customer's demand that is coincident with the monthly system peak;
- ii. Whether there should be a separate NSC determinant that is only applicable to manufacturing industrial customers; and

⁹⁵ Exhibit A, Tab 9, Schedule 16, page 2 of 3(d),

iii. Whether additional steps can be taken by Hydro One to assist manufacturing and industrial customers to ensure that they not inadvertently operate during a monthly system peak that occurs outside of 7 a.m. to 7 p.m.

H. COSTS

129. CME requests that it be awarded 100% of its reasonably incurred costs in connection with this matter.

ALL OF WHICH IS RESPECTFULLY SUBMITTED this 1st day of February, 2017.

Emma Blanchard

Emma Blanchard Vincent J. DeRose Counsel for CME