Hydro One Networks Inc.

8<sup>th</sup> Floor, South Tower 483 Bay Street Toronto, Ontario M5G 2P5

www.HydroOne.com

Tel: (416) 345-5700 Fax: (416) 345-5870 Cell: (416) 258-9383 Susan E. Frank@HydroOne.com

Susan Frank

Vice President and Chief Regulatory Officer Regulatory Affairs



BY COURIER

August 14, 2006

Ms. Kirsten Walli Secretary, Ontario Energy Board Suite 2700, 2300 Yonge Street P.O. Box 2319 Toronto, ON. M4P 1E4

Dear Ms. Walli:

EB-2006-0088/EB-2006-0089 – Multi-year Electricity Distribution Rate Setting Plan Cost of Capital (EB-2006-0088) and 2nd Generation Incentive Regulation Mechanism (EB-2006-0089) – Hydro One Networks Submission and Expert Reports

As stipulated in the Board letter dated July 25, 2006 regarding the revised Board staff Discussion Paper on cost of capital and the 2nd Generation Incentive Regulation, I am enclosing three (3) hard copies of Hydro One Networks' submissions and supporting expert reports organized as shown below.

Exhibit A	Hydro One Networks' Comments and Evidence regarding Multi-Year Electricity
	Distribution Rate Setting Plan Cost of Capital (EB-2006-0088) and Second
	Generation Incentive Regulation Mechanism (EB-2006-0089)
Exhibit B	Opinion on Capital Structure and Fair Return on Equity by Kathleen C. McShane of
	Foster Associates Inc
Exhibit C	Elenchus Research Associates report entitled "Capital Investment Incentives in the
	OEB's 2 <sup>nd</sup> Generation Incentive Regulation Mechanism for Ontario Electricity
	Distributors

An electronic version of the comments in searchable Adobe Acrobat (PDF) and Word is being provided to you via email to <a href="mailto:Boardsec@oeb.gov.on.ca">Boardsec@oeb.gov.on.ca</a>. as requested.

Sincerely,

Susan Frank

Attach. (3)

Filed: August 14, 2006 EB-2006-0088 EB-2006-0089 Exhibit A Page 1 of 15

# HYDRO ONE NETWORKS INC. COMMENTS AND EVIDENCE RE:

# MULTI-YEAR ELECTRICITY DISTRIBUTION RATE SETTING

# PLAN COST OF CAPITAL (EB-2006-0088) AND 2<sup>ND</sup> GENERATION

# **INCENTIVE REGULATION MECHANISM (EB-2006-0089)**

5

1

2

3

4

- 6 Hydro One Networks ("Hydro One") is pleased to submit comments and expert evidence
- 7 in accordance with the Ontario Energy Board (the "Board" or "OEB") web posting dated
- 8 October 26, 2005, under Docket Number EB-2006-0088 and EB-2006-0089.

9

#### **OVERVIEW**

11

10

- This evidence is supplemental to Hydro One's initial comments filed with the Board on
- July 5, 2006, respecting Board staff's initial proposals for both the cost of capital
- 14 ("COC") and 2<sup>nd</sup> Generation IRM ("2GIRM") dated June 19, 2006.

15

- 16 Hydro One's comments respecting COC and 2GIRM are provided in this Exhibit A.
- Expert supporting evidence respecting the COC prepared by Ms. Kathleen McShane of
- Foster Associates Inc., is filed as Exhibit B. The expert evidence of Mr. John Todd
- respecting 2GIRM of Elenchus Research Associates is filed as Exhibit C.

20

- Hydro One is pleased with the changes that Board staff have included in their July 25<sup>th</sup>
- discussion paper reflecting many of the comments made by Hydro One, the Coalition of
- 23 Large Utilities, the Electricity Distributors Association and many of the Local
- 24 Distribution Companies. However Hydro One still has a number of concerns with Board
- staff's final proposal. With respect to the COC these include:

Filed: August 14, 2006 EB-2006-0088 EB-2006-0089 Exhibit A Page 2 of 15

1

4

5

6

7

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

27

- 1. The treatment of preferred equity in the recommended capital structure;
- 2 2. The very low return on equity ("ROE") level, with a suggested range of up to 8.37 per cent;
  - 3. The abandonment of the Automatic Adjustment Mechanism for setting ROE in favour of an untested new methodology;
    - 4. The reliance on only the Capital Asset Pricing Model ("CAPM") for the determination of ROE;
      - 5. The proposed two-tiered ROE for incremental versus existing rate base investments; and
      - 6. The cap on short-term debt in the capital structure.

Given the Board staff Cost of Capital proposals are a fairly radical departure from the current approved practices of not only this Board, but also those of other regulatory bodies throughout Canada, Hydro One strongly recommends that the Board allow sufficient time for an appropriate examination of all evidence submitted in this proceeding up to and including a formal hearing, if deemed necessary by the Board.

With respect to the Board staff's proposal for 2GIRM, Networks provides below comments on the improvements made to the model in response to input provided by stakeholders participating in the process, and raises specific concerns that include the following:

- 1. The exclusion of any adjustment driven by growth or performance requirements;
- 2. Exclusion of Hydro One from rate adjustments for Smart Meters; and
- 3. The limited discussion respecting 3<sup>rd</sup> Generation IRM ("3GIRM").

Filed: August 14, 2006

EB-2006-0088 EB-2006-0089 Exhibit A Page 3 of 15

#### SPECIFIC COMMENTS RE: COC

Hydro One is pleased by Board staff's recommendation to establish the overall level of common equity in a LDCs' capital structure at 40 per cent in recognition of the major capital investments which must be made in the coming years and the recognition that electricity utilities in Ontario have a different risk profile than their gas counterparts. A 40 per cent common equity component coupled with an equity return which investors would view as fair and reasonable would allow Hydro One to maintain its current "A" debt rating on a stand-alone basis.

#### 1. Preference Share Treatment

Hydro One does not believe that preference shares should be given identical weight and treatment as common equity. They are not equal. As noted by Ms. McShane at page 10 of Exhibit B, rating agencies discount the value of preference shares in their analysis. Hydro One supports Ms. McShane's recommendation that preference shares continue to be treated as a separate component of the capital structure.

#### 2. ROE Return Recommendation

Hydro One continues to be concerned with Board staff's recommendation for a ROE with a suggested range of up to 8.37 per cent. This level is below the awarded levels of return of LDCs in other Canadian jurisdictions and well below ROEs awarded to American LDCs. The Board must be cognizant of returns awarded across North America given the now global nature of the financial markets. The Board must also take into consideration the large capital investment projects that are being undertaken throughout North America and the resultant competition for funding that will ensue. An equity return in the range proposed by the Board staff will impede the ability of LDCs to assess capital markets at

Filed: August 14, 2006 EB-2006-0088 EB-2006-0089

Exhibit A

Page 4 of 15

reasonable rates. Ms. McShane provides a detailed analysis of what investors would

2 consider a fair return and we strongly support her recommendation of an ROE for Hydro

One of 10.5% as discussed in Exhibit B.

# 3. Automatic Adjustment Mechanism

Hydro One continues to support the use of the Automatic Adjustment Mechanism for ROE used by the Board in establishing Hydro One's initial ROE of 9.88 per cent on an annual basis in years when a full cost of service review is not being held. The use of consensus forecasts is an established and accepted methodology to determine allowed ROEs throughout Canada. The Board staff's recommendation to use estimates of forward rates based on five to fifteen year zero coupon yields has not been adopted in any regulatory jurisdiction in Canada. Further the relatively short term of the bonds fails to reflect either the longer term nature of the underlying assets, nor the volatility that can occur from reliance on shorter term bonds. As such, Hydro One recommends the Board continue to rely on consensus forecasts of 30 year bond yields as a key input in establishing ROE. Ms. McShane discusses this in further detail at Exhibit B, pages 28 and 29.

Hydro One is also concerned that the forward rate methodology recommended by Board staff would be more complex to implement and update than positioned by Board staff. The key questions that needs addressing are how readily accessible is the forward rate data and how accurate a predictor would it be in comparison with the consensus forecast approach.

It would be helpful if Board staff could prepare a comparison of the two method's data availability and the two method's accuracy as a predictor of future rates for the technical conference.

Filed: August 14, 2006 EB-2006-0088 EB-2006-0089 Exhibit A Page 5 of 15

1 2

#### 4. Reliance on CAPM as ROE Determinant

3

Board staff's suggestion that the Board rely on one test, the CAPM, to establish the 4 Equity Risk Premium ("ERP") as an input into the ROE determination for LDCs is of 5 serious concern to Hydro One. Ms. McShane highlights the flaws with this one model 6 approach in Exhibit B at pages 11, 15 and 16. Hydro One recommends that the Board 7 give serious consideration to the concerns expressed by Ms. McShane with Board staff's 8 proposal for sole reliance on the CAPM. Hydro One notes that the investment community 9 shares these same concerns as addressed by BMO in their paper which was filed by 10 Enersource as Appendix A in their initial submission filed with the Board on July 05, 11 2006. 12

13

14

#### 5. Two-tiered ROE

15 16

17

18

19

20

21

22

23

While encouraged by Board staff's recognition that a higher equity return may be required to support the very large capital investment levels required in the industry, the recommendation that new investments be given a 50 to 150 basis point higher equity return is not practical to implement and monitor on an ongoing basis. Nor is it clear as to what period of time the incentive return on incremental investments would continue to apply. Hydro One recommends the Board consider a higher equity return not just for new investment programs in support of government initiatives, but also in recognition of the fact electrical infrastructure in the province is reaching end-of-life and also requires significant re-investment.

2425

26

27

28

Hydro One does support the concept of an incentive return vehicle for major infrastructure investments but not as proposed by Board Staff. Hydro One would support the inclusion of a trigger mechanism for the application of an incentive return. Hydro One

Filed: August 14, 2006 EB-2006-0088 EB-2006-0089

Exhibit A Page 6 of 15

would suggest that if the forecast of capital investment in a forecast test year were to

exceed 5 per cent of a LDCs' rate base, then the LDCs' ROE should be adjusted upward

by the incentive return amount determined by the Board.

4 5

2

### 6. Short-term Debt Component

6

8

7 Hydro One continues to support the Board's current practice of treating the short-term

debt component within the capital structure as the balancing element between rate base

and the deemed equity component and actual long-term debt and preference share levels.

10 Hydro One notes that this Board staff recommendation conflicts with their

recommendation in their Minimum Filing Requirements Proposal in the EB-2006-0170

proceeding where in Section 2.7, they support Hydro One's recommendation that short-

term debt be used to equate total capitalization with rate base.

14 15

13

11

#### **GENERAL COMMENTS RE: 2GIRM**

16

17 Hydro One notes that in response to comments received from interested parties to this

proceeding Staff has made adjustments to the June 19<sup>th</sup>, 2006 version of the 2<sup>nd</sup>

Generation Incentive Regulation Mechanism (2GIRM) proposal that in general improves

20 the proposal.

2122

23

24

25

19

Hydro One is supportive of the concept of introducing mechanical adjustments to set

distribution rates on a going forward basis as this reduces the regulatory burden on the

Board and the LDCs as a whole, and improves the efficiency of the regulatory process

through streamlining of the rate setting processes.

Filed: August 14, 2006 EB-2006-0088 EB-2006-0089 Exhibit A Page 7 of 15

- The simplicity of design for 2GIRM allows for the timely introduction of incentive
- regulation while at the same time it provides learning for the evolution and transition
- towards more comprehensive incentive regulation in the longer term.

4

- 5 Hydro One is encouraged by the recognition in the July 25<sup>th</sup> Staff discussion paper of the
- 6 need and commitment to develop an enduring incentive adjustment process for the LDCs
- that will be embodied in the 3<sup>rd</sup> Generation Incentive Regulation Mechanism

8

11

12

13

14

- 9 Hydro One wishes to provide comments specific to the following items included in the 2GIRM:
  - 1. Improvements made to the 2GIRM process
  - 2. Allowance for including adjustments that capture changes driven by growth and performance requirements
  - 3. Include Hydro One for Smart meter adjustments, and
  - 4. Discussion concerning 3<sup>rd</sup> Generation IRM

15 16

17

#### 1. Improvements to 2GIRM Process

18 19

#### **Term of 2GIRM**

2021

22

23

24

The premise behind incentive regulation is that it provides the requisite signals for LDCs to make the decisions that lead to more efficient outcomes which benefit the LDCs and distribution customers, and that the period during which the incentives are meant to apply is sufficient to realise those benefits.

2526

27

28

By necessity the Staff proposal yields an unequal plan period whereby some utilities will only experience one year of 2GIRM versus those utilities that will experience three years of 2GIRM. Therefore, for those utilities with the shortest incentive plan period

Filed: August 14, 2006

EB-2006-0088 EB-2006-0089 Exhibit A Page 8 of 15

there is likely little incentive to do their utmost to achieve the desired outcome before

they return for re-basing of rates.

3

6

7

8

9

Given the Board's desire to embark on an efficient process for rate adjustments there is

little that can be done to maximise the benefits from 2GIRM other than creating a

common process for mechanical rate adjustments that provides some limited learning of

incentive regulation. Therefore, there is greater pressure to ensure that the design and

implementation of 3GIRM is expedited so as not to lose the thread of continuing

incentive regulation. From this perspective the learning, however limited, from the

2GIRM should form a valuable input to the design of 3GIRM.

11 12

10

#### X-factor

13 14

15

16

17

18

The adoption of a single productivity adjustment factor (X) for all LDCs may not be truly reflective or representative of the status of cost efficiencies across the distribution

sector in Ontario. Consequently a "one size fits all" approach may penalise those LDCs

who to date have achieved significant cost savings and provide benefits for those LDCs

who have not yet realised significant cost savings.

19 20

Furthermore, the report prepared by the Consultant did not provide compelling evidence

as to the basis for selecting the value for the X-factor applicable to all LDCs.

2223

24

25

26

27

28

21

Notwithstanding these short comings and recognizing that in order to embark on a

2GIRM process the Board has to start somewhere, Hydro One is of the view that in the

absence of more compelling data a single X-factor is acceptable for the time being and

that this will enable the process to begin in an orderly manner consistent with the desire

for mechanical adjustments to rates. However, Hydro One feels that this is an important

issue that should be addressed at the outset so that sufficient experience and data can be

Filed: August 14, 2006 EB-2006-0088 EB-2006-0089 Exhibit A Page 9 of 15

gathered to perform the analysis that will yield more specific X-factors, particularly as this will be necessary for the 3<sup>rd</sup> Generation Incentive Regulation Mechanism (3GIRM).

#### **Z**-factor

Hydro One is pleased to note that the revised 2GIRM includes an allowance for Z-factor adjustments. This is an important addition to the adjustment mechanism since this allows utilities some flexibility in the event of unforeseen circumstances and provides some assurance to the LDCs that associated costs, subject to meeting a set of criteria, will be eligible for recovery.

Hydro One is supportive of the four criteria selected by Staff and identified in the paper in Table 4 of section 3.3.6. These appear to be reasonable. Starting with thresholds which are consistent with the 2006 EDR handbook is a sound way to undertake inclusion of such adjustments. With experience these thresholds may be revised to account for differences between LDCs and also in recognition of the aging of the distribution systems which may be subject to increasing Force Majeure events. Therefore, the Board should embark on the requisite studies to develop supporting data and rationale for ensuring that the criteria and applicable thresholds create the right signals for LDCs.

# **Service Quality**

Staff proposal recognises the importance of SQIs and the role these play in the incentive regulation process but the proposal does not include any performance basis for setting the SQIs going forward. Rather the intent appears to be to use the current set of SQIs but to increase the reporting requirements and to do so through changes to Codes.

Filed: August 14, 2006

EB-2006-0088 EB-2006-0089

Exhibit A Page 10 of 15

Enshrining SQIs and performance requirements in Codes in of itself will not result in

improvements in LDCs' performance as measured by the SQIs. The requirements for

more frequent reporting will not provide any more incentives for improving

performance. Rather it will increase the LDCs burden with little benefit if any.

Addressing this issue as a matter of compliance is contrary to the spirit of incentive

regulation which relies more on a cooperative approach that benefits all parties.

7

10

11

13

14

2

3

4

5

6

8 Given the interim nature of the 2GIRM and the fact that SQIs and performance

requirements are evolving in response to experience and improvements in data quality

and availability, perhaps the Board should focus on this issue as part of a longer-term

plan when better data and more precise basis of arriving at differential performance

targets can be established.

#### **CDM**

15 16

17

18

19

20

21

22

On the matter of CDM the issue of declining load and the inability to recover lost

revenues continues to be a concern, particularly as there do not appear to be any

mechanisms in 2GIRM to deal with this matter. A price-cap approach tends to

exacerbate the matter. Therefore, it would be very helpful to LDCs that are actively

responding to the various directives to implement CDM if the Board could provide

guidance as to how these issues will be addressed as part of 2GIRM and moving

forward in the longer term.

2324

A possible solution could be to increase the prices in proportion to the OPA's forecast

of CDM targets. For example, the price adjustment factor could be in proportion to

50% of the forecast CDM target level.

27

25

Filed: August 14, 2006 EB-2006-0088 EB-2006-0089 Exhibit A Page 11 of 15

#### **Reporting and Data Requirements**

Hydro One notes that Staff does not propose any additional reporting requirements for 2GIRM. In as much as that is a welcome sign to LDCs given their busy schedules and workloads there is nevertheless a need to gather sufficient and accurate data that will provide the learning and assure that the evolution of incentive regulation for the electricity distribution sector moves forward. The success of incentive regulation is predicated on the need for sufficient and accurate data. In this respect Hydro One sees a need for the Board to develop the requirements that will ensure the collection of such data so that the learning from 2GIRM can form useful input for developing 3GIRM.

# 2. Allowance for including adjustments that capture changes driven by growth and performance requirements

Hydro One notes that 2GIRM does not make provision for recovery of incremental costs incurred during the incentive plan period, nor for growth in rate base that would deal with major capital additions. These are crucial considerations that need to be dealt with during the period of 2GIRM chiefly because Hydro One and other LDCs expect significant capital expenses in order to manage an aging distribution system, maintain reliability and quality of service for existing customers, and to expand the distribution system to accommodate new customer connections.

Hydro One has retained the services of Elenchus Research Associates to assess the experience with this matter in other jurisdictions that have implemented incentive regulation. The consultant's report is attached as Exhibit C and provided below are the key conclusions extracted from Section 3 of the report.

Filed: August 14, 2006 EB-2006-0088

EB-2006-0089 Exhibit A

Page 12 of 15

The proposed 2<sup>nd</sup> Generation IRM set out in the Discussion Paper embeds a strong, and

2 presumably unintended, financial incentive to defer capital investment for as long as

possible within the term of the regime. Distributors can be expected to respond to this

incentive by deferring all but the most critical capital investments until immediately

before their rebasing reviews and entry into the 3<sup>rd</sup> Generation IRM.

6

3

4

This incentive is contrary to the stated objectives of the 2<sup>nd</sup> Generation IRM in that it

8 discourages distributors from making the necessary investments to accommodate growth

and to sustain appropriate standards of reliability and service quality as the expenditures

must be funded out of the shareholder profit resulting in below market returns.

11

13

14

15

16

17

9

10

Mechanisms that allow for the explicit recovery of costs associated with capital

investments are a common feature of multi-year regimes in other jurisdictions, whether

they are multi-year cost of service regimes or multi-year IR/PBR regimes. The types of

mechanisms used in other jurisdictions could be incorporated into the proposed 2<sup>nd</sup>

Generation IRM without increasing its complexity or compromising other features of the

regime.

18 19

21

22

24

25

The approach that would best reflect the principles of incentive regulation would be for

20 the Board to establish appropriate SQIs and targets for each SQI and put in place

financial rewards and penalties for meeting or failing to meet the established targets that

provide an effective incentive to maintain standards that are economically efficient.

23 While it may be appropriate and practical to implement this approach for 3<sup>rd</sup> Generation

IRM, it is unlikely to be a suitable approach to implement for the transitional 2<sup>nd</sup>

Generation IRM.

26

28

In the absence of an explicit capital investment incentive linked to SQIs, it would be

appropriate to incorporate into the 2<sup>nd</sup> Generation IRM a simple capital investment

Filed: August 14, 2006 EB-2006-0088 EB-2006-0089 Exhibit A Page 13 of 15

mechanism that removes the incentives to under-invest. This could be accomplished by

adding an additional factor to account for capital investment to the proposed price cap

formula as described in Section 3.1 of the report in Exhibit C.

45

#### 3. Smart Meters

6

7 Hydro One is encouraged by Staff's recognition of the importance of this matter to make

allowances for cost recovery a part of 2GIRM.

9

Staff has identified in their discussion paper a proposal to increase in 2007 the fixed

distribution rate of distributors by a rate adder of \$1.00 and that this would apply for

those LDCs that are actively working to achieve the government's target for smart meter

installation by 2007. This is encouraging in that it gives the active LDCs the assurance of

offsetting some of the costs in respect of the smart meter initiative. Hydro One supports

this approach. However, the list of utilities noted in the discussion paper does not include

Hydro One.

17

14

15

16

Like those utilities noted in the discussion paper, Hydro One is actively involved in

implementing the government's directives and is installing its share of smart meters to

meet the 2007 target. Accordingly Hydro One has notified the Board of the status of its

smart metering activities<sup>1</sup>.

22

20

Therefore Hydro One is also eligible to receive the rate adder of \$1.00 identified in the

Staff discussion paper and requests that it be included together with the other named

25 distributors.

<sup>&</sup>lt;sup>1</sup> Hydro One Networks Inc. - Smart Meter Program Update, August 4, 2006

Filed: August 14, 2006 EB-2006-0088 EB-2006-0089 Exhibit A Page 14 of 15

# 4. 3<sup>rd</sup> Generation Incentive Regulatory Mechanism Process

At this time the Staff discussion document is very sketchy on the details that will accompany the 3GIRM which is expected to be an enduring incentive regulatory model applicable to electricity distributors in Ontario. Also, Staff notes in its discussion paper that the 2GIRM will be independent of the 3GIRM. This is a concern.

Incentive regulation requires a stable environment in which evolution of the processes can occur without interruption to the benefit of the participants and the regulatory process. Specifically there needs to be continuity between the phases of evolution so that learning from experience can be applied to make changes for the better so that future incentive regulatory models will lessen the regulatory burden and improve regulatory efficiency. This has generally been the experience in other jurisdictions, notably in the UK and Australia where incentive regulation has evolved over a substantial period of time. However, there appears to be less comparable evidence of experience with incentive regulation as applied to the distribution sector in North America. The lessons learned from incentive regulation that was applied in the natural gas sector should provide valuable experience to avoiding pitfalls that resulted in the demise of that process in Ontario. Therefore, Hydro One would encourage the Board to widen its scope of review of experience to better establish which elements of incentive regulation work well and which do not, and pick those that would be most beneficial to the distribution sector in Ontario.

Continuity in the development and evolution of processes will also ensure that LDCs see the benefit of participating in the incentive regulatory process since improvements will be made that relate to actual experience which identifies what works and what does not. This creates a stable regulatory environment for the LDCs that minimizes uncertainty due to abrupt changes, which can adversely impact on LDCs operating and investment

Filed: August 14, 2006 EB-2006-0088 EB-2006-0089 Exhibit A Page 15 of 15

performance. Therefore, it would seem prudent to use the experience of 2GIRM as input

to the design of 3GIRM. In this way 2GIRM begins the evolutionary process in incentive

regulation and acts as a stepping stone.

4

8

10

11

12

13

14

2

5 Hydro One is encouraged that Staff recognize the importance of dealing with

6 maintenance, capital and other expenditures as part of the incentive regulation package.

7 These are important matters for distributors that impact on their operating and investment

performance, particularly in the light of an aging distribution infrastructure, the enhanced

9 focus on reliability and quality of service and the need to expand the system to

accommodate growth. Therefore it is important that these be dealt with adequately in the

regulatory model to provide stability and assurance to LDCs to focus their efforts on

running their businesses in an efficient manner. However, it is not sufficient to wait until

3GIRM to deal with this issue and Hydro One reiterates the need to also make this a part

of 2GIRM.

15 16

#### **CONCLUDING REMARKS**

17

19

20

21

22

18 Hydro One hopes the above comments coupled with the expert evidence of Foster

Associates Inc. respecting COC issues and Elenchus Research Associates respecting

2GIRM will be helpful to the Board and all stakeholders in this proceeding and we look

forward to actively participating in the technical conference the week of September 18,

2006 to further clarify the Company's positions.