

**HYDRO ONE TRANSMISSION PROPOSAL  
REGARDING THE ESTABLISHMENT  
OF A MECHANISM FOR THE  
TREATMENT OF UTILITY EARNINGS  
EB-2005-0501**

**FROM JANUARY 1, 2006 UNTIL NEW TRANSMISSION RATES  
ARE APPROVED**

**Submitted on November 23, 2005**

## **1.0 Executive Summary**

On October 26, 2005, the Ontario Energy Board (OEB) initiated a proceeding to approve or fix revenue requirements for the Hydro One Transmission Business for the years 2006, 2007 and 2008. As part of the proceeding, the OEB will give consideration to alternatives for the treatment of Hydro One earnings in the period between January 1, 2006 until the revised transmission rates are implemented. This submission reviews the various options available for the treatment of utility earnings in this interim period and recommends a preferred option.

The October 26, 2005 Notice from the OEB notes that the OEB is “considering methods which may limit uncertainty during the rate setting period”. Uncertainty regarding electricity supply capacity, reliability or quality is detrimental to customer operations, business confidence and ultimately the Ontario economy.

From Hydro Ones’ perspective uncertainty in rates (or the ability to recover costs) compromises our ability to fund the critical maintenance and expansion of the transmission system. The province currently faces a significant electricity supply shortfall, which places a number of different pressures on the transmitter. In the shorter term, the transmission system is being used to capacity and in many instances, stretched beyond its optimum design capacity, in order to compensate for a lack of generation. In the longer term, significant expansion of the transmission system will be required to accommodate new and refurbished generation, improve access to economic sources of electrical energy / demand and retire coal based generation sources. Utilities will also be tasked with implementing the Ontario Power Authority’s Integrated System Plan, which will be issued during the relevant time period.

In deciding upon the best option for the treatment of utility earnings in the interim period, a number of **key decision factors** must be given consideration. These include:

- The need to fund an extensive and critical Transmission-based capital expansion program to keep pace with the following factors:
  1. New international and local regulatory requirements, as well as local customer-based demands for improved system security and supply reliability
  2. The need for access to national (inter-provincial) and international sources of economic electrical energy and demand to compensate for a lack of capacity within Ontario
  3. The urgent and rapid incorporation of new intra-provincial sources of centralized and distributed generation
  4. Government requirements to improve environmental performance through the phase out of coal
  5. Management of aging system infrastructure.
- Implementation of an earnings treatment mechanism should provide the utility with the appropriate market signals for achieving efficiencies and provide the financial community with assurances that the mechanism in place is consistent with good industry practices.
- Minimize regulatory complexity and maximize transparency.
- The impact of financial uncertainty on the borrowing rates of the utility.

The key options, consistent with those mentioned in the OEB Notice, include:

1. Establishing New Interim Uniform Transmission Rates
2. Declare Current Rates Interim and Reset Revenue Requirement for 2006, and a portion of 2007, retrospectively during the 2007 Transmission Rate Hearing
3. Establish a Tracking Mechanism based on an over/under earnings deferral account
4. Establish a Tracking Mechanism based on an Earnings Sharing Mechanism (ESM).

Options 1 and 2 were discounted, primarily due to the high degree of financial uncertainty these options impose on the utility and the resulting impact on work programs and future borrowing rates.

Options 3 and 4 can be structured to have somewhat similar attributes. However, the ESM option is superior in that it provides the utility with incentives for pursuing efficiency gains, benefiting both customers and the utility in the near and longer term. The ESM has also been effectively used in other jurisdictions and can be structured to meet the current challenges of the electricity industry in Ontario.

Based on a detailed development of a number of ETM options, and evaluating these options in relation to the above-mentioned key decision factors, Hydro One recommends the implementation of an Earnings Sharing Mechanism having the following design principles:

- The calculation of any over/under earnings will be based on Hydro One audited Transmission financial statements.
- Earnings above the established threshold level will be used on a priority basis to invest in transmission system expansion projects, which are not currently funded in existing rates. These capital expenditures would be treated for accounting purposes in the same way as Capital Contributions and therefore would not be included in rate base. Significant near-term capital expenditures will be required to invest in urgent short-term system expansion projects and the early phases of some longer term projects. These projects would be subject to business case analyses and approval by the Hydro One Board as well as any regulatory or environmental approvals required for capital projects.
- If there are additional earnings, which exceed the level of capital investments in the transmission system, as described above, they would be subjected to an ESM mechanism with a dead-band approach. This provides the incentive necessary for the pursuit of utility efficiencies. A plus or minus 2% adjustment to ROE is recommended for the dead-band to moderate the utility risk profile. Earnings in excess of the dead-band would be returned to customers. Earnings falling below the minus 2% dead-band would be recovered from customers. See Sections 7.1 & 7.4 for further details of the proposed ESM.

Hydro One believes that an ESM having the design principles outlined above would achieve a good balance of benefits to both customers and the utility. The benefits include:

1. Providing the potential for near-term cash required for the expansion of the transmission system, which is critical to addressing the existing supply shortfall in the province. This approach lowers near-term borrowing requirements and stabilizes rates over the medium and long term.
2. Availability of appropriate commercial signals for pursuing utility efficiency gains.
3. Sharing of earnings, which exceed the requirements of the transmission system.
4. The ability to maintain sufficient financial certainty by developing a method for forecasting earnings and reporting ongoing financial results

## **2.0 Background and Introduction**

The OEB has commenced a proceeding on its own motion to determine whether the transmission rates of Hydro One Networks are just and reasonable, and to approve or fix revenue requirements for 2006, 2007 and 2008 for the transmission business.

As part of this proceeding the Board must consider how to deal with utility earnings for the period of January 1, 2006 until revised transmission rates are implemented. The OEB has indicated that it is reluctant to have the existing uniform transmission rates declared interim, due to the impact on other transmitters in the Province and the indeterminate nature of the interim period.

Approaches for managing earnings, until new rates are established, could range from:

- A retroactive review of 2006 costs, and some 2007 costs, following a Board Decision on Transmission rates in 2007 – and then truing-up for disallowed costs; to
- Establishing an Earnings Sharing Mechanism based on a hurdle rate for Net Income or Return on Assets, with a share of over (or under) earnings being credited to (or recovered from) customers, in some manner.

This submission outlines the potential options for managing utility earnings within the above range of possibilities, identifies the characteristics of these options and summarizes the implications on customers and the electric utility industry of some of the more viable options. The submission also recommends a preferred option.

## **3.0 Utility Context**

Hydro One currently owns, operates and maintains over 95% of the transmission system infrastructure in the province of Ontario, having a current total asset value of \$6.8B.

The Transmission Business outlook over the next five to ten years is one of significant growth in the expansion and replacement of the system, to keep pace with the following factors:

- New international and local regulatory requirements and local regulatory and customer based demands for improved system security and supply reliability. This includes regulatory requirements imposed by interconnected market regulators (North American Electric Reliability Council), the Ontario Energy Board, as well as requirements of customer associations and specific transmission customers
- The need for access to national (inter-provincial) and international sources of economic electrical energy and demand to compensate for a lack of capacity within Ontario and improve supply security
- The urgent and rapid incorporation of new intra-provincial sources of centralized and distributed generation

- Government requirements to improve environmental performance through the phase out of coal and the promotion of renewable forms of generation
- Management of aging system infrastructure

To ensure Hydro One meets these challenges, the transmission program has a strong focus on 'mission critical' assets – those transmission assets that are critical to generation facilities and the unrestricted supply of energy to our customers. This is accomplished through targeted component replacement programs and proceeding on an expedited basis with approved projects for reducing system constraints, increasing interconnection capability and improving local area reliability.

Ontario's need for significant transmission investments is similar to the overall situation in North America. The Federal Energy Regulatory Commission (FERC) has recently issued a News Release proposing transmission incentives to increase power grid investments. This News Release is attached as Appendix 2.

#### **4.0 Key Decision Factors in Developing a Preferred Earnings Treatment Mechanism**

In deciding on the best option for the treatment of utility earnings, in the interim period, a number of **key decision factors** must be given consideration. These key decision factors are outlined in the following sections:

##### **4.1 The Need to Urgently Fund an Extensive Transmission Capital Expansion Program**

As mentioned in Section 3 - Utility Context, there is a critical need to expand the transmission system to meet the electrical supply and capacity short fall forecasted for the province. The Earning Treatment Mechanism (ETM), which is established, must account for the near and medium term financial pressures that this aggressive and extensive capital expansion plan places on Hydro One.

##### **4.2 Earnings Tracking Mechanism Precedent**

The mechanism for tracking earnings should be based on an established mechanism that has been effectively used in other jurisdictions. This ETM should provide the utility with the appropriate commercial signals for achieving efficiencies and provide the financial community with assurances that the mechanism in place is not experimental in nature and utilizes good industry practices. Initial investigations have found that earning-sharing mechanisms (ESM) have been used in U.S. jurisdictions to effectively manage situations of utility over or under earnings in the periods between rate hearings. Examples of precedent cases and their relationship to this proceeding are attached as Appendix 1.

The OEB has identified two options for tracking earnings in the rate review period – the use of an over / under earnings deferral account or the use of an earnings-sharing mechanism. The OEB has indicated it would also consider other methods of ensuring the interests of ratepayers are sufficiently protected.

The development of a tracking mechanism must consider the need to account for fluctuations in the operational environment, which are outside the control of management. This could include the need for weather normalization methods to adjust actual demand, considerations of load changes due to large customer business issues and usage patterns, including economic downturns, and the impact of demand-side management (DSM) or distributed generation in the load forecast.

#### 4.3 Minimization of Financial Uncertainty:

The need to minimize financial uncertainty to ensure that the utility can continue to borrow at attractive rates and report on its financial performance with a sufficient degree of certainty and accuracy.

Hydro One is subject to the following disclosure requirements:

- Quarterly disclosure to the investment community
- Up-front disclosure to Credit Rating Agencies
- Annual Financial Statements and Management's Discussion and Analysis
- Ontario *Securities Act* requirements, in particular, the Annual Information Form (AIF)

In its 2005 annual financial statements and related management's discussion and analysis (MD&A), Hydro One will provide significant disclosures regarding the Board's October 26, 2005 decision to call a hearing to set transmission revenue requirements for 2006 and 2007. In addition, Hydro One will provide appropriate disclosures describing the Board's proposal to implement an earnings treatment methodology for application to the period between January 1, 2006 and the date when new transmission rates are implemented.

The nature of these incremental disclosures will be contingent on the approved earnings treatment methodology in place when the financial statements and MD&A are prepared in mid-January 2006. MD&A will include a general description of the methodology and the assumptions to be made in applying it, an estimate of the potential financial impacts (through a range, if necessary), a discussion of measurement uncertainty surrounding the estimate provided, and possible increases to the existing discussion of regulatory risk.

If the approved methodology is specific enough to allow for transactional accounting with no specific uncertainties, the measurement uncertainty and regulatory risk disclosure will be reduced. This would require clarity around the amounts to be excluded from revenues and to be recognized as a regulatory liability.

#### 4.4 Regulatory Efficiency

The design of the mechanism for managing earnings should be transparent and minimize cost burdens on the Regulator and Utility, thereby reducing costs ultimately borne by the ratepayers. This decision factor stresses the importance of simplicity in design, the ability to link mechanism attributes to requirements and the ability to put in place an effective reporting process.

#### 4.5 Definition of Earnings

There are different interpretations of what constitutes "Earnings" during the rate review period. The definition chosen will significantly impact the method used to true-up any over or under earnings and therefore the impact on the utility and its customers. The definition should be based on publicly-available information, such as Financial Statements, to maintain transparency and minimize cost.

The revenue received from ratepayers is to be included in taxable income. A deduction in the current year for earnings to be returned to ratepayers would only be available if the OEB direction/decision establishes a specific legal liability, as at the end of the taxation year. Stability and even impacts can be achieved by establishing the need for the legal liability at year-end.

#### 4.6 Disposition of Over/Under Earnings

While disposal of any over/under earnings cannot occur until the OEB completes its rate review, the method of dealing with any over or under earnings should be defined when the tracking mechanism is established. This will minimize uncertainty to the regulatory and financial communities. There are a number of options:

- The IESO could be directed to undertake some form of issuing rebates or increases to customers reflecting the over-earning or under-recovery, which may occur. If over-earning occurred, the funds could be used to offset costs associated with development of the 2007 Transmission Rates.
- If over-earning occurred, the funds could be used as contributed capital for investments in expanding and reinforcing the Transmission system, thereby offsetting future capital costs, lowering the impact on rate base and mitigating transmission rates over a number of years.

#### **5.0 Range of Options for an Earnings Treatment Mechanism**

The following options were considered by the OEB for establishing an Earnings Treatment Mechanism (ETM), in the interim period:

1) **Establish New Interim Uniform Transmission Rates**

This option consists of setting new rates with the intention of collecting a new revenue level that approximates the new revenue requirement.

Because Ontario has a number of transmitters, the new interim uniform transmission rates would affect other transmitters in the province and complicate the reconciliation process operated by the Independent Electricity System Operator, increasing costs to implement the process.

This option would require some type of examination of all costs (Capital and O&M) to establish the interim rate.

2) **Declare Current Rates Interim and Reset Revenue Requirement for 2006, and the portion of 2007, retrospectively during the 2007 Transmission Rate hearing.**

This is likely to occur sometime in the middle part of 2007 and would result in a retroactive true-up to correct for any disallowed costs and any over/under earnings.

3) **Establish a Tracking Mechanism based on an over/under-earnings deferral account.**

This approach would involve the establishment of a new deferral or variance account to record over or under earnings. This option would require the establishment of an allowed earnings level and a clear definition of what earnings are considered above or below the allowed level. This difference would be booked to the deferral account.

Entries into the account would likely be made on a monthly or quarterly basis, which would rely on projected or planned earnings for that period.

It is assumed that, in the event of a surplus, the amounts in the deferral account would be rebated to customers in some manner. Deficits are assumed to be recovered through a rate rider or by adjusting future rates accordingly.

4) **Establish a Tracking Mechanism based on an Earnings Sharing Mechanism.**

The focus of the earnings sharing mechanism (ESM) is on earnings not on utility expenditures and the prudence of these expenses, after the fact. This ensures that adjustments in spending levels, to deal with operational factors beyond management's control required within the period, are pursued by the company without concern that they may be excluded during a future prudence review. This ensures the maintenance of reliability and service quality levels, without concern of under recovery.

Excess earnings could be directly credited to customers in some manner or could be invested in transmission system capital projects. Using the excess earnings to fund capital-based transmission system improvements would effectively result in customers paying to improve the transmission system with today's rates, thereby reducing the amount that rates would need to increase in the future.

Coupling the ESM and incremental capital investment activities with a dead-band approach would provide an appropriate commercial signal for the utility to pursue cost control measures and implement efficiency gains.

**6.0 Screening and Assessment of Options**

This section discusses how the key decision factors mentioned in above Section 4 impact the viability of the various options mentioned in above Section 5. This approach is used to assess the effectiveness of the various options, screen options that are clearly inferior in nature and rationalizes the retention of options having the most beneficial characteristics.

**Option 1 - Establishment of New Interim Uniform Transmission Rates**

This option is really not an earnings tracking mechanism as it addresses more than earnings. Establishing new interim uniform transmission rates would require some form of detailed review of utility revenue requirement, which likely could not be carried out in the near term. Reconciling revenues from interim rates after a Decision in the Transmission proceeding (which could be in mid 2007) would create a prolonged period of financial uncertainty for the Hydro One. This financial uncertainty could be harmful to Hydro One given its financial disclosure obligations.

Due to the make-up of the Uniform Transmission Rates in the province, the establishment of the interim rates could negatively affect other transmission providers.

The implementation of interim uniform transmission rates would affect the reconciliation process of the Independent Electricity System Operator, as well as that of the target utility and the other transmission utilities in the province.

Given the above-mentioned negative attributes of this Option, it was eliminated from further consideration.

Option 2 – Declare Current Rates Interim and Reset Revenue Requirement Retrospectively During 2007 Transmission Rate Hearing

As with Option 1, this option is also not an earnings tracking mechanism. Resetting Revenue Requirement for 2006, and the portion of 2007, retrospectively during the 2007 Transmission Rate hearing would create a prolonged period of financial uncertainty.

This option may be more suitable for situations involving shorter time periods, within a specific year.

In addition, retroactive rate increases have been viewed unfavourably by customers and the media in previous situations that were of much shorter duration.

This financial uncertainty could be very harmful to the utility given the expected growth in the transmission system to support the supply shortfall and customer needs, and given its financial disclosure obligations.

Given the above-mentioned negative attributes of this Option, it was eliminated from further consideration.

Option 3 - Establishment of an Over-Earnings Deferral Account

Options 3 and 4 are focused on earnings. In Option 3, all dollars above the allowed earnings get booked to the deferral account with the entire amount rebated to customers.

A significant negative characteristic of this option is that there is no incentive for the company to look for efficiencies during the rate review period. This option would also provide poor precedent for performance based monitoring systems and has not typically been used for longer periods of earning tracking mechanisms.

This option could also negatively affect the company's credit rating due to the length of the period of uncertainty. The investors would realize that the company faced the potential to under-perform and not earn the allowed return with no potential to earn any excess returns.

Option 4 - Establishment of an Earnings Sharing Mechanism

The advantage of an earnings-sharing mechanism (ESM) is to provide incentive to the utility to control and reduce costs. Since an ESM is based solely on earnings, the utility will be capable of forecasting utility financial performance with a sufficient degree of certainty to satisfy the investment community.

The sharing could be based on a number of formulae to apportion over (or under) earnings between customers and the utility. This provides a significant degree of flexibility for meeting the unique circumstances faced by either the utility or customers.

In addition, ESM mechanisms have been successfully applied in a number of other jurisdictions, as outlined in Appendix 1. Therefore, this mechanism will not be viewed by the investment community as experimental in nature.

Any earnings sharing mechanism that is introduced at this time has the potential to be used again in the future. Therefore, it is important that the mechanism provides a fair and balanced approach for customers and for the utility.

An earnings-sharing mechanism best suits the objective of ensuring that the utility does not have excessive earnings accruing to the shareholder's benefit while still providing incentive to improve efficiency.

While there are many ESM approaches being used today, in the next section the company will recommend the sharing approach that it believes is most appropriate in the current industry environment.

## **7.0 Recommended Option**

Based on a detailed development of a number of ETM options, and evaluating these options in relation to the above-mentioned key decision factors, Hydro One recommends the implementation of an Earnings Sharing Mechanism having the following design principles:

- The calculation of any over/under earnings will be based on Hydro One audited Transmission financial statements.
- Earnings above the established threshold level will be used on a priority basis to invest in transmission system expansion projects, which are not currently funded in existing rates. These capital expenditures would be designated as Capital Contributions and therefore would not be included in rate base. This would provide an effective means of financing the early elements of the extensive capital expansion program. Significant near-term capital expenditures will be required to invest in urgent short-term system expansion projects and the early phases of some longer term projects such as environmental assessment studies, purchases of property for rights-of-way and stations, ordering of long lead time equipment, etc.
- Earnings, which exceed the capital requirements of the transmission system would be subjected to an ESM mechanism with a dead-band approach, to provide the incentives necessary for the pursuit of utility efficiencies.
- The dead-band should be structured to be symmetrical in nature to moderate the utility risk profile. A plus or minus 2% adjustment to ROE is recommended for the dead-band with the utility taking on the risks and benefits within the dead-band. Earnings in excess of the dead-band would be returned to customers. Earnings falling below the minus 2% dead-band would be recovered from customers.

Hydro One believes that an ESM having the design principles outlined above would achieve a good balance of benefits to both customers and the industry. The benefits include:

- Providing the potential for near-term cash required for the expansion of the transmission system. This lowers near-term borrowing requirements and stabilizes rates over the medium and long term.
- Availability of appropriate commercial signals for pursuing utility efficiency gains.
- Sharing of earnings, which exceed the requirements of the transmission system.

- The ability to maintain sufficient financial certainty by developing a method for forecasting earnings and reporting ongoing financial results

Based on the above analysis, Hydro One recommends that an ESM be established, with the design principles outlined above.

### **7.1 Mechanism to Establish Over/Under Earnings**

The following section outlines a proposed mechanism for calculating over/under earnings using a return on assets (or return on rate base) approach.

All required information can be sourced from the Transmission financial statements:

- Net income <sup>1</sup> - from Statement of Operations
- Net interest (financing charges) - from Statement of Operations
- Fixed assets (net of accumulated depreciation) - from Balance Sheet (average of beginning and ending year)
- OM&A - from Statement of Operations
- Long-term debt - from Balance Sheet (average of beginning and ending year)
- Long-term debt payable within one year - from Balance Sheet (average of beginning and ending year)
- Gross interest – from note showing breakdown of financing charges

<sup>1</sup> Subject to adjustment for weather normalization (see below).

The above information is used to calculate the following:

- Rate base is calculated as average fixed assets, plus a working capital allowance based on 15% of OM&A.
- Actual return on assets is calculated as net income plus net interest, divided by rate base.
- Average cost of debt is calculated as gross interest divided by average total debt outstanding.
- Allowed return on assets is calculated as a weighted average of the cost of debt, the cost of preferred shares, and the allowed ROE per approved formula, based on the approved capital structure.
- Over/under earnings are calculated as the difference between the actual and the allowed return on assets, multiplied by the rate base.

The following example uses illustrative data to show how the calculation of over/under earnings would work:

Assume the following:

Net income = \$300M

Net interest = \$200M

Average fixed assets (net of accumulated depreciation) = \$6000M

OM&A = \$400M

Average total debt = \$3500M

Gross interest = \$225M

Allowed ROE = 10%

Cost of preferred equity = 5.5%

Approved capital structure = 36% common equity; 4% preferred equity; 60% debt

Then:

Rate base	=	Average fixed assets + (OM&A x 15%)
	=	\$6000M + (\$400M x 15%)
	=	\$6060M
Actual return on assets	=	(Net income + Net interest) / Rate Base
	=	(\$300M + \$200M) / \$6060M
	=	8.25%
Average cost of debt	=	Gross interest / Average total debt
	=	\$225M / \$3500M
	=	6.43%
Allowed return on assets	=	(Cost of debt x 60%) + (Cost of preferred equity x 4%)
	=	+ (Allowed return on common equity x 36%)
	=	(6.43% x 60%) + (5.5% x 4%) + (10% x 36%)
	=	7.68%
Over/(under) earnings	=	(Actual return on assets - Allowed return on assets)
	=	x Rate base
	=	(8.25% - 7.68%) x \$6060M
	=	\$35M

Note that in the event that over/under earnings need to be calculated for a partial year only, then the above mechanism can be modified by adjusting the over/under earnings for the number of months subject to earnings sharing. For example, if we assume over/under earnings are to be calculated for the January to June period only (i.e. based on new transmission rates coming into effect on July 1), then the over/under earnings in the above illustration would be adjusted as follows:

Part-year over/under earnings	=	Full-year over/under earnings
	=	x (number of months / 12)
	=	\$35M x (6/12)
	=	\$17.5M

Calculation of Dead-Band

The following example shows how a 2% symmetrical dead-band, using the above illustrative numbers would be derived.

Return on assets ceiling	=	(Cost of debt x 60%) + (Cost of preferred equity x 4%)
	=	+ ([Allowed return on common equity + 2%] x 36%)
	=	(6.43% x 60%) + (5.5% x 4%) + (12% x 36%)
	=	8.40%
Dead-band ceiling	=	(Return on assets ceiling - Allowed return on assets)
	=	x Rate base
	=	(8.40% - 7.68%) x \$6060M
	=	\$44M

To establish the dead-band floor, a similar calculation would be made with the ROE adjusted down by 2% and the result would be a floor level of -\$44M.

### Application of ESM

Once the dead-band ceiling and floor levels have been established, the ESM would be applied. Again, the numbers from the illustrative example above are used.

Assume:

Over earnings = \$35M

Incremental Tx system capital projects = \$25M

Remaining over earnings	=	Over earnings – Incremental Tx system capital projects
	=	\$35M - \$25M
	=	\$10M

Remaining over earnings are less than the dead-band level and therefore would be retained.

### 7.2 Normalization of Net Income

For the purposes of calculating over/under earnings, Hydro One is recommending that net income be adjusted to normalize for weather-related variances in revenue. It is normal for utilities to accept the risk and reward of weather volatility. Over time, the impacts of weather effects on revenue are expected to be close to the weather-normal forecast. However, any revenue overage due to favourable weather conditions in one year should be excluded from any over/under earnings calculation.

Hydro One is able to track the actual impact that weather has on demand, and compare this to the weather normal forecast. Hydro One will monitor the impact of weather effects on revenue and report this information to the OEB as appropriate.

Hydro One believes that the only normalization factor, which should be given consideration within this approach, is weather due to the fact that the other key factors mentioned in 4.3 are accounted for by other methods.

### 7.3 Methodology for Establishing Incremental Capital Investments

Base capital investment levels will be established by examining the capital expenditures in the original transmission rates and the capital spending levels in the intervening years. Transmission system investments that are incremental to this base level will be defined as incremental projects. These incremental projects will be eligible to be funded by any excess earnings, subject to OEB approval.

Incremental Transmission system expansion projects include those designed to enable the phase-out of coal based generation, new generation projects resulting from government or OPA driven RFPs, or the new projects resulting from changes to the Transmission System Code.

The incremental projects would only be undertaken based on sound business case analysis as well as any required regulatory and environmental approvals. Costs for the incremental projects would be

charged to Hydro One Transmission's "Construction Work in Progress" (CWIP). If excess earnings are identified for the interim period, an equivalent amount of incremental project cost would be removed from CWIP and recorded as contributed capital. The remaining CWIP will be transferred to Fixed Assets in Service and therefore included in rate base.

The incremental capital projects benefit all Ontario electricity users by increasing the reliability and availability of supply of the transmission system. This method of returning excess earnings to ratepayers as investments will not earn a return as part of the rate base. This approach maintains stable rates in the rate review period and minimizes rate impacts thereafter.

The practice of using excess earnings to fund capital investments has been used by regulators in the U.S. Refer to Appendix 1 for further details.

#### **7.4 Use of the Dead-band Sharing Mechanism**

The mechanism should be able to protect customers from excessive over-earnings or the utility from excessive earnings deficiencies. A dead-band should be included that allows for a reasonable deviation from the target level without requiring retroactive adjustments. This allows for operational factors (positive and negative) to be absorbed within the mechanism's parameters without the negative impact of a retroactive review. The dead-band also provides an incentive for the utility to find efficiencies which benefit both the customers and the company. An explanation of how the dead-band would be applied is provided in Section 7.1.

#### **7.5 Summary**

Hydro One is recommending that any over or under earnings be tracked and disposed of in the following manner.

If there are over earnings, first they would be spent on incremental capital projects (e.g. expansions of the transmission system to meet provincial requirements to phase-out coal based generation).

Any remaining over earnings above those required for incremental capital projects would be subject to a 2% dead-band and retained.

Any over earnings above the 2% dead-band would be returned to ratepayers.

If there are under earnings within the 2% dead-band these would be absorbed by Hydro One.

Any remaining under earnings beyond the 2% dead-band would be recovered from ratepayers.

#### **8.0 Method of Tracking Over/Under Earnings**

Under the recommended option, Hydro One Networks will need to track over/under earnings for purposes of external financial reporting purposes and for regular reporting back to the OEB.

Over/under earnings will be reported in separate regulatory liability/asset accounts and will operate similar to other regulatory variance accounts. Interest would be accreted on the balances.

Capital expenditures would be reflected in the accounts on a gross basis reflecting Hydro One Networks' normal accounting policy. If there are amounts recorded as a regulatory liability, reflecting over earnings, those amounts will be applied to the cost of the capital expenditures on the transmission system. For external reporting purposes, only the net amount of capital would be reported in the financial statements. For reporting back to the Board, the amount of over earnings applied against capital expenditures, and any unapplied over earnings amount residing in the regulatory liability account, and interest, would be reported.

If there are amounts recorded as a regulatory asset, reflecting under earnings, those amounts will be reflected as a regulatory asset on the balance sheet.

### **8.1 Approval of Earning Sharing Amount**

The Earnings-Sharing amount should be reviewed as part of the Transmission proceeding. Any adjustments or final reconciliation that might be required should be included in the Decision for the main proceeding.

## **APPENDIX # 1**

### **ILLUSTRATIVE EARNINGS TRACKING REGULATORY PRECEDENTS**

Earnings sharing mechanisms have evolved as a well-established and predominant method to assist regulators in addressing the control of utility earnings in the absence of detailed annual cost of service reviews. Following are illustrative regulatory precedents where regulators have initiated or approved some form of earnings sharing mechanism. It should be noted that the mechanisms have been designed to account for the specific circumstances faced by the regulated entities in the future. The earnings sharing mechanisms are typically implemented in a context that also recognizes such utility and regulatory objectives as rate stability or smoothing, incentives for utility efficiencies and funding future capital expansion programs.

Illustrative Precedents from US jurisdictions were provided to Hydro One by Mark Lowry, Pacific Economics Group, LLC

#### **Review of the Use of Earnings Sharing Mechanisms in the United States**

##### **1. MidAmerica Energy Company (ME):**

###### **Docket No RPU-03-1, Iowa Department of Commerce Utility Board**

The earnings sharing mechanism is based on a positive deadband of 200 basis points within which excess revenue above a threshold ROE is shared on a 50:50 basis with 50% going to the shareholder and 50% being used for investments in current or new generation projects.

If the ROE exceeds the positive 200 basis points, then 83.3% of the excess revenues are directed toward investments in generation and the shareholder retains 16.7%.

If no new plant is built, the balance returns to customers over a five year period.

The Utility Board views the earnings sharing mechanism as a benefit to customers as some of the investment costs are paid through the shared revenues.

The benefits of the earnings sharing mechanism are described as rate stability, revenue sharing and a commitment to build new generation.

The Board notes that this approach results in avoided rate shock associated with major new investments.

##### **2. Yankee Gas Services Company (YGSC):**

###### **Docket No 01-05-19PH01, Connecticut Department of Public Utility Control**

The earnings sharing mechanism is based on a variable sharing mechanism to support an aggressive capital expansion program by the Company.

A larger share of excess earnings is directed to the utility in the earlier years of the plan to allow for investments to expand the system.

The sharing formula was structured as follows:

In 2002: 75:25 sharing between the Company and ratepayers for the first 100 basis points of earnings above an allowed ROE - and 50/50 sharing for earnings above 100 basis points.

- In 2003 & 2004: 75:25 sharing between the Company and ratepayers for the first 50 basis points of earnings above the allowed ROE and 50/50 sharing above 50 basis points.

In 2005: 50/50 sharing between the Company and ratepayers for all earnings above the allowed ROE.

**3. Connecticut Light and Power Company (CLP):**

**Docket No 03-07-02, Connecticut Department of Public Utility Control**

The earnings sharing mechanism is based on a 50:50 sharing of earnings between the Company and customers.

The customer's share is applied to reduce costs to customers in a manner determined by the Commission.

CLP sought approval for 2004 to 2007 rates based on increases below that necessary to achieve its proposed rate of return (to mitigate large rate increase) and the Commission granted certain increases to allow significant capital improvements to modernize the distribution system for customer growth.

The Commission approved a continuation of the mechanics of an existing earnings sharing mechanism, with the manner of the application of the customer share of excess earnings to be determined by the Commission at the time of such sharing.

**4. United Illuminating Company (UIC):**

**Docket No 01-10-10, Connecticut Department of Public Utility Control**

The earnings sharing mechanism is based on a 50:50 sharing of earnings over the allowed ROE where:

- 50% is retained by the shareholder
- 25% goes to customers through bill credits
- 25% goes to reduce the customer's balance of stranded costs (which also reduces the related interest burden born by customers)

Sharing is based on earnings over an allowed ROE and the shared earnings are not capped but subject to possible reviews under an over earnings statute.

The Commission rejected companion quality of service standards due to UIC's track record of providing good service and other considerations including administrative burden.

**5. Atlanta Gas Light Company (AGL):**

**Docket No 18638-U, Georgia Public Service Commission**

The earnings sharing mechanism is based on excess earnings being applied to a Pipeline Replacement Program to finance investments and achieve rate stability.

The proceeding was initiated by the Commission to consider whether the existing rate plan should be modified and whether base rates should be reset at the end of the plan.

A new Comprehensive Rate Plan was required to deal with forecasted excess earnings in 2005 of \$21.9M. Plan features include:

- The collection of excess earnings in a regulatory liability account.
- The use of the liability account to fund the Pipeline Replacement Program in order to maintain stable rates in the future.

**6. Alabama Power (AP):**

**Dockets No 18117 and 18416, Alabama Public Service Commission**

The earnings sharing mechanism is based on a deadband around a benchmark return, with the customer share applied to rate stabilization.

The Commission approved a Rate Stabilization and Equalization Factor (RSE rate) for the purpose of lessening the impact, frequency and size of retail rate increase requests.

The RSE rate allows AP to adjust its charges more readily to achieve the allowed rate of return or reduce its charges where overearnings would result.

The application of the RSE rate is based on a computed twelve month year end rate of Return on Common Equity with monthly bills increased (or decreased) if the resulting return is less than a

benchmark or “adjusting point” return less 0.75% (or more than the adjusting point return plus 0.75%) in order to restore the adjusting point return.

Actual adjustments are limited to a maximum amount of 3% of total retail revenues

#### **7. Mississippi Power and Light Company (MPL):**

##### **Docket No 95-UN-0478, Mississippi Public Service Commission**

The earnings sharing mechanism is based on a deadband around a performance-adjusted return in order to annually adjust approved rates based on over or under earnings.

Rate adjustments are made if the actual rate of return is above or below the targeted rate of return by more or less than 0.50%.

If the actual rate of return is more than 0.50% below the targeted return, rates are increased so that the resulting increase in revenue (based on the evaluation period volumes) would increase the return by 50% of the difference between the lower band and the initially determined return on rate base. The rate increase is subject to a maximum increase of 2% of total revenue or \$14.5M, whichever is less.

Similarly, if the rate of return exceeds the 0.5% upper band, rates are decreased so that the resulting decrease in revenue (based on the evaluation period volumes) would decrease the return by 50% of the difference between the upper band and the initially determined return on rate base.

The rate adjustment is subject to a maximum decrease of 2% of total revenue or \$14.5M, whichever is less.

#### **8. Entergy Louisiana (EL):**

##### **Formula Rate Plan Rider Schedule FRP-4, July 1, 2005, Louisiana Public Service Commission**

The earnings sharing mechanism has a deadband based on the performance adjusted Return on Common Equity, plus or minus 0.80%.

EL approved rates may be periodically adjusted in accordance with a Formula Rate Plan Rider.

The Rate Plan Rider is determined based on an amount necessary to increase (or decrease) the earned rate of return on common equity by 60% of the difference between the lower (or upper) band and the initially determined rate of return.

However, no change is made unless the resulting change exceeds a significance test (i.e. the earned rate of return on common equity changes by more than 0.05% (5 basis points)).

#### **Review of the Use of Earnings Tracking Mechanisms in Ontario**

The Ontario Energy Board has used Earnings Sharing Mechanisms (ESM) in recent proceedings involving Union Gas and Enbridge Gas Distribution Inc.

##### **Union Gas**

###### **RP-1999-0017 Decision with Reasons, July 21, 2001**

###### **RP-2003-0063/EB-2004-0480 Decision, December 15, 2004**

In its RP-1999-0017 Decision, the Board directed the establishment of an earnings sharing mechanism as part of a 2001 to 2003 PBR Plan.

The ESM was symmetric, based on actual earnings, with a deadband around the approved ROE of one percentage point after taxes.

Beyond that amount, sharing of over or under earnings was based on a 50:50 sharing between the ratepayer and the shareholder.

The approved ROE was to be reset annually on the basis of the Board’s ROE adjustment formula.

In the RP-2003-0063/EB-2004-0480 Decision, the Board established an asymmetric ESM with no deadband for Union Gas' 2005 fiscal year.

The ESM is based on 50:50 sharing of any excess earnings between the shareholder and ratepayers. Any under earnings are to be absorbed by the shareholder.

In determining excess earnings, the benchmark ROE is determined through the Board's formula approach. The definition of excess earnings also reflects normalization for weather.

**Enbridge Gas Distribution Inc.**

**RP-2003-0048 Interim Rate Order, September 26, 2003**

In an Oral Decision, the Board approved an asymmetric ESM for fiscal 2004.

The ESM was based on a 50:50 split of over earnings.

Over earnings were defined as earnings above the Board approved ROE, based upon the actual, un-normalized fiscal 2004 earnings.

Ratepayers were not responsible to make-up under-earnings.

The Board directed EGDI to report the fiscal 2004 financial results when they were available and apply for the disposition of any over-earnings in accordance with the ESM.

**Great Lakes Power Ltd.**

**EB-2005-0241 Partial Decision and Order, March 22, 2005**

**EB-2005-0241 Order, November 14, 2005**

In the Partial Decision and Order on March 22, 2005, the Ontario Energy Board directed Great Lakes Power to establish a deferral account to record revenue deficiency incurred by the Company, plus carrying charges, under currently approved transmission rates.

On September 15, 2005 the Board approved the Company's revenue requirement and revenue deficiency through its acceptance of a settlement agreement reached between the parties to the proceeding.

In the Order of November 14, 2005 the Board directs Great Lakes Power to establish a Deferred Rate Impact Amounts account. This account is established to record the revenue deficiency since April 1, 2005, by calculating what revenues would have been collected if the new revenue requirement had been effective as of April 1, 2005.

The deferral account mechanism has not created material financial uncertainty for the Company due to its short duration and the fact that it was undertaken within a specific calendar year and because the expectation was that rates and net income would be increased as a result of the proceeding. Finally, this mechanism was established as a result of the need to incorporate a single new capital investment project.

**APPENDIX # 2**

**FEDERAL ENERGY REGULATORY COMMISSION**  
**Washington D.C. 20426**

**News Release**

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**FOR IMMEDIATE RELEASE**  
November 17, 2005  
Docket No. RM06-4-000

**COMMISSION PROPOSES TRANSMISSION PRICING REFORMS  
TO INCREASE POWER GRID INVESTMENT**

The Federal Energy Regulatory Commission today proposed transmission pricing reforms designed to promote needed investment in energy infrastructure. The proposed rules will benefit energy customers by bolstering power-grid reliability and lowering costs for delivered power by reducing transmission congestion, the Commission said.

The recently enacted Energy Policy Act of 2005 directed the Commission to develop incentive-based rate treatments for transmission of electric energy in interstate commerce. Today's proposal is designed to implement those incentives, provide regulatory certainty, and support expanded and improved transmission infrastructure while ensuring that transmission rates remain just and reasonable, the Commission said.

Transmission investment has declined in real dollar terms for 23 years from 1975 to 1998. Although there was an increase following 1998, investment remains below 1975 levels. Over that same period, electricity demand has more than doubled, resulting in a significant decrease in transmission capacity relative to demand in every North American electric reliability region.

"Underinvestment in transmission is a national problem. Today, the Commission proposes a national solution that encourages investment in all regions of the country, and encourages investment by both vertically integrated utilities and transmission companies. This is something the Commission has been working on for some time," stated Commission Chairman Joseph T. Kelliher.

The Commission is proposing incentives for traditional utilities as well as additional incentives for stand-alone transmission companies, or transcos. For purposes of these proposed regulations, transcos may be independent or they may have some passive ownership interests by affiliated traditional, vertically integrated public utilities. Transcos have made a positive contribution to transmission investment and formation of additional transcos will promote needed investment, the Commission said. To encourage

transcos, the Commission would authorize a higher rate of return on equity along with recovery of accumulated deferred income taxes.

Included among the incentives proposed for all jurisdictional utilities, including transcos, are:

- Providing a rate of return on equity sufficient to attract new investment;
- Recovery in rate base of 100 percent of prudent transmission-related construction work in progress, in order to increase cash flow;
- Expensing prudent pre-commercial operation costs instead of capitalizing them, allowing for immediate cash flow for the utility;
- Allowing hypothetical capital structures to provide the flexibility needed to maintain the viability of new capacity projects;
- Accelerating recovery of depreciation expense;
- Recovering all prudent development costs in cases where construction of facilities may be abandoned or canceled due to circumstances beyond the control of the utility;
- Allowing deferred cost recovery; and
- Providing a higher rate of return on equity for utilities that join transmission organizations.

To receive an incentive-based rate of return on equity, a public utility must demonstrate that the new facilities would improve regional reliability and reduce transmission congestion. In addition, the public utility must explain if the planned facilities are part of a regional planning process, how the proposed return on equity was derived and why it is appropriate.

The proposed rules also allow for recovery of costs associated with (1) joining a transmission organization; (2) electric reliability organizations; and (3) infrastructure development in National Interest Transmission Corridors identified by the Department of Energy pursuant to the Energy Policy Act.

The Commission also invited comments, without proposing rules, on performance-based ratemaking, the role of public power and advanced technology.

Comments on the proposed rules, *Promoting Transmission Investment Through Pricing Reforms*, must be filed by January 11, 2006.

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R-05-79