Ontario Energy Board

Report of the Board

on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors

July 14, 2008

intentionally blank

Table of Contents

intentionally blank

1 Introduction

Purpose

In 2006, the Board announced its intention to implement a multi-year rate-setting plan for distributors (the "Rate Plan"), to be effected through a number of initiatives. The Board has since confirmed the cost of capital to be used in adjusting annual revenue requirements for 2007 and beyond, and established a mechanistic price cap rate adjustment ("2nd Generation IR") for electricity distributors over the period 2007 to 2009. The Board has issued a report which sets out its policy on key rate-making issues that may be associated with consolidation in the electricity distribution sector and which builds on and complements the work of the Board in relation to incentive regulation. Work has also concluded on the regulatory framework for conservation and demand management ("CDM") activities undertaken by electricity distributors, and on the codification of the service quality requirements for electricity distributors. The Board continues its electricity distributor cost allocation review, and has consulted with the sector on a comparative utility cost analysis methodology for electricity distributors. Also, the Board is examining the design of electricity distribution rates in light of emerging issues and industry developments in relation to matters such as metering, CDM, and distributed generation.

Board staff have undertaken research, commissioned expert advice and consulted with stakeholders on the principles and methodology for the 3rd generation incentive regulation ("3rd Generation IR") mechanism that will be used to adjust electricity distribution rates starting in 2009 for those distributors whose 2008 rates were rebased through a cost of service review.

Consultations were informed by the advice of: Dr. Lawrence Kaufmann of the Pacific Economics Group, LLC ("PEG"), staff's consultant; Prof. Adonis Yatchew of the University of Toronto, consultant to the Electricity Distributors Association; Dr. Francis

Cronin, consultant to the Power Workers' Union; and Ms. Julia Frayer of London Economics International, LLC, consultant to the Coalition of Large Distributors (Enersource Hydro Mississauga Inc., Horizon Utilities Corporation, Hydro Ottawa Limited, PowerStream Inc., Toronto Hydro-Electric System Limited and Veridian Connections Inc.) and Hydro One Networks, Inc.

These consultations considered all of the necessary elements of an IR mechanism framework including the form and term of the plan, the inflation and productivity factors, the potential for earnings sharing, and the treatment of unforeseen events. The consultations also included a focus on specific issues associated with capital investment to support infrastructure maintenance and development, lost revenue due to changes in electricity consumption and distributor diversity. These activities began in August 2007 and have culminated in the policies set out in this report.

This report sets out the Board's policies and approach to 3rd Generation IR and presents guidelines that the Board expects distributors to use in preparing their rate applications. With few exceptions, this report represents the Board's final determination of its policies regarding 3rd Generation IR. As indicated elsewhere in this report, the Board will consult further on the outstanding issue of the values for the productivity factor, the stretch factor, and the capital module materiality threshold before determining those values. The Board will also in due course provide further guidance on the issue of tax changes in relation to the Z-factor (see section 2.6).

Organization of this Report

This report is organized as follows. The Board's policy for, and analysis of, 3rd Generation IR are outlined in Section 2 with brief descriptions of the matters being addressed, the Board's policies and rationale, and summaries of the issues and options raised in consultations. Written comments made by participants throughout this consultation have been considered by the Board in developing the policies set out in this report, and are available from the Board's website. This report makes reference to

participant comments to the extent necessary, but does not contain an exhaustive description of those comments.

Section 3 outlines in more detail how and when the adjustments to distribution rates will be implemented. Section 4 provides a summary. Section 5 contains a guide to assist interested participants in preparing their presentations at a stakeholder conference that will be held the week of August 5, 2008 to address the outstanding values referred to above. Guidelines associated with the policies set out in this report are provided as an Appendix.

intentionally blank

2 Elements of the Plan

This is the third time the Board has adopted an incentive rate setting mechanism for electricity distributors. The first mechanism was established in 2000 ("1st Generation IR") and is described in the Board's first electricity distribution rate handbook. The second mechanism - 2nd Generation IR - was established in 2006 and is set out in the December 20, 2006 "Report of the Board on Cost of Capital and 2nd Generation IR for Ontario's Electricity Distributors".

Building incrementally on the 2nd Generation IR plan, the 3rd Generation IR plan is a more sustainable incentive regulation ("IR") plan for electricity distributors. The 3rd Generation IR plan is more specifically grounded in empirical analysis and takes the differences in the operations of distributors into account.

2.1 Form

There are various approaches to IR. Two popular approaches that use indexing are price caps and revenue caps – a price cap sets the maximum price that a distributor may charge, and a revenue cap sets the maximum allowable revenue requirement.

Issues and Options Raised in Consultation

The February 28, 2008 Board staff Discussion Paper on 3rd Generation IR for Ontario's Electricity Distributors (the "Discussion Paper") described various forms of IR and various individual mechanisms to address the specific issues associated with capital investment, lost revenue and distributor diversity.

Prof. Yatchew provided an analysis of three alternative approaches that were described in the Discussion Paper and that combine some of those mechanisms. In his presentation to participants during the stakeholder meeting held on May 6, 2008, Prof.

Yatchew commented that under comprehensive multi-year cost of service, incentives are substantially less powerful relative to properly implemented IR; and moreover, the regulatory burden is high for the regulator and distributors. He noted that the hybrid approach (under which OM&A would be indexed and capital costs would be forecasted) would create incentives to increase capital expenditures, in order to maintain or improve a good OM&A performance profile - a disadvantage of the hybrid approach. According to Prof. Yatchew, the third approach, the comprehensive price cap index, has the highest efficiency incentives, if properly implemented. However, he also observed that while the comprehensive price cap is by far the most appealing, it has the potential of doing financial harm for some distributors in contrast with the revenue cap, particularly those that are experiencing declining per-customer energy consumption.

Policy and Rationale

The Board will retain a comprehensive price cap form of adjustment mechanism for electricity distributors. The price cap, used in the 1st and 2nd generation IR plans, continues to be supported by distributors and other stakeholders and is a simple approach that will, along with the implementation of mandatory service quality requirements, provide balanced incentives for efficiency improvements and the maintenance of adequate service quality over the course of an IR term. The concern of potential financial harm for some distributors in contrast with revenue caps is mitigated by the other elements of the 3rd Generation IR plan described in this report.

2.2 Term

Staff's consultations over the last year have considered IR plan term length in dealing with the specific issues associated with capital investment to support infrastructure maintenance and development, lost revenue due to changes in electricity consumption and distributor diversity. The longer the period of time between rate rebasings (i.e., the longer the IR plan term), the greater the potential need for some form of special treatment of incremental capital investment and/or lost revenues. Also, one way to

recognize distributor diversity in an IR plan may be to give the distributor choice with respect to the length of the plan term. By and large, capital replacement, distributor diversity and similar issues are likely to be more manageable with shorter plan terms.

Issues and Options Raised in Consultation

In the Discussion Paper, seeing merit in allowing for flexibility in the plan term, staff suggested that distributors have the choice of plan term which could vary from three to five years. In a presentation during the stakeholder meeting held on May 6, 2008, staff proposed a fixed term of four years (i.e., rebasing year plus four years) as a reasonable plan term. This proposal was in response to the varied comments received on the need for a shorter or longer term and to concern over giving distributors choice. Further consultation on this issue continued to demonstrate a divergence of opinion.

Policy and Rationale

The Board has determined that the plan term for 3rd Generation IR will be fixed at three years (i.e., rebasing year plus three years). The rates of the distributor are not expected to be subject to rebasing before the end of the plan term other than through an eligible off-ramp.

The Board is of the view that a shorter term is appropriate in view of important refinements anticipated by 2012 to empirical work on the electricity distribution sector, including total cost benchmarking, an Ontario total factor productivity ("TFP") study, and input price trend research. Participant support for a shorter term is evident in their concerns over distributor data limitations, evolving government policy which continues to mandate new roles for Ontario distributors, and the Board's commitment to reviewing rate design policies.

2.3 Inflation Factor

Under cap mechanisms, changes in price indices drive allowed changes in output prices for regulated services (i.e., indices escalate the allowed prices).

The inflation factor could be established in two ways: either an industry-specific price index ("IPI") designed to track the inflation of the industry inputs, or a macroeconomic index.

Issues and Options Raised in Consultation

The choice of inflation factor affects the X-factor. When an IPI is used, the X-factor has two main components. The first is the productivity factor, and the second is the stretch factor. When economy-wide inflation factors are used, the X-factor has additional components to capture the expected difference between changes in the selected inflation factor and input prices for the regulated industry. This difference is often referred to as the input price differential. Depending on how the productivity factor in an index is derived, a productivity differential may also be considered in conjunction with an economy-wide inflation factor in order to reflect any differences. As explained by Dr. Kaufmann in his presentation to participants at the stakeholder meeting held on May 6, 2008, input price differentials can be measured directly by comparing the change in industry input prices to the change in the selected economy-wide inflation measure. This approach is mathematically equivalent to computing both "productivity differentials" and "input price differentials," but it is simpler and requires less information. Computing an input price differential in this manner therefore eliminates the need to obtain estimates of economy-wide TFP trends which are needed to compute both productivity and input price differentials.

In the Discussion Paper, staff provided an illustrative example of an IPI using the methodology adopted by the Board in the 1st Generation IR with a different labour price index and different weights calculated by PEG to reflect the most recent cost structure.

The Discussion Paper invited comments on this illustration, the choice of the indices and the options to address the volatility of the resulting IPI. In light of participants' comments, summarized below, at the May 6, 2008 stakeholder meeting staff proposed the use of a macroeconomic index (the Canada Gross Domestic Product Implicit Price Index for final domestic demand or "GDP IPI FDD") instead of an IPI, and asked PEG to estimate the requisite input price differential. To do this, PEG looked at the relationship between input prices of the industry and the selected macroeconomic inflation measure. PEG examined the relationship between input price trends for Ontario distributors and Canada's GDP IPI FDD, as well as the relationship between input prices for U.S. distributors and a measure of US economy-wide inflation (the GDP-PI). PEG found that economy-wide inflation was much greater than industry input price inflation in Ontario, while in the U.S. the opposite was true. PEG was of the view that this disparity demonstrates that there is considerable uncertainty about the appropriate value for an input price differential in 3rd Generation IR. In the absence of persuasive empirical evidence, PEG therefore recommended an input price differential equal to zero.

Generally, participants agreed with the benefits of an IPI. However, concerns were expressed about implementation details of the IPI. Some of these concerns referred to the choice of input price indices and whether distributor-specific data would better track the inflation of inputs. Also, some participants commented on the weights of the sub indices. Many participants expressed concern about the methodology used for the calculation of the capital price sub index and the resulting volatility. Some participants proposed alternative approaches to smooth the index, while distributors suggested that further work is required to ensure that the index tracks actual cost pressures and reflects distributor costs going forward and suggested that in the meantime, the Board use a macroeconomic index.

Support for the use of the GDP IPI FDD and PEG's recommended input price differential was mixed. While some participants accepted the proposal, other participants continued to support the use of an IPI or expressed concern over the issue of tax changes in relation to the GDP IPI FDD (as it is currently being considered in the

EB-2007-0606/615 proceeding in relation to gas distributor incentive regulation) or disagreed with the recommended input price differential. In particular, three participants estimated non-zero input price differentials. One participant representing a group of ratepayers estimated that the input price differential should be positive 0.43% based on the Ontario differential calculated by PEG. Another participant proposed that the differential should be positive 0.65% and argued that a differential of zero would be unfair to ratepayers and that the number should be based on judgment rather than on empirical studies. Dr. Cronin argued that the input price differential should be different from zero because distributor input prices have consistently grown more slowly than macro input prices. Based on a historical assessment of trend relationships, Dr. Cronin proposed a negative differential, estimating that based on Ontario data the input price differential has ranged from -1.1 to -2.3 over the last twenty years. Dr. Cronin also calculated productivity differentials and showed that for various periods this differential has also been non-zero.

Policy and Rationale

The Board will use the Canada Gross Domestic Product Implicit Price Index for final domestic demand (GDP IPI FDD) as the inflation factor.

The Board is of the view that a macroeconomic index is easier to implement for 3rd Generation IR: only one index needs to be obtained and the only calculation necessary will be the annual change in the index. In addition, the macroeconomic index that will be used, GDP IPI-FDD, tends to grow at a relatively stable rate over time and it is familiar to Board staff and stakeholders, since it is currently being used in 2nd Generation IR and in both gas IR plans.

The Board recognizes that an IPI would track industry input price fluctuations better than an economy-wide measure. It may better mitigate significant gains and losses that might result from the failure of a macroeconomic index to track industry input price inflation. However, the Board observes that the implementation of the IPI methodology

that was used in 1st Generation IR with recent data produces a very volatile index, as shown in the illustrative example presented in the Discussion Paper. Such volatility could be harmful to both ratepayers and distributor shareholders, if reflected in rates. The Board believes that further research is required on the methodological approach to address such volatility and to ensure that the chosen sub indices appropriately track the inflation faced by the industry.

The Board has determined that the input price differential in 3rd Generation IR will be equal to zero.

A sustainable incentive regulation framework requires confidence in the parameters of the rate adjustment formula, and without greater certainty on input price trends in the sector, the Board believes that the determination of an input price differential is premature. Absent a solid methodology for the calculation of the industry IPI for Ontario as well as a TFP based on Ontario data, the Board is concerned that an input price differential that is not equal to zero may result in rates that are not just and reasonable from the perspective of both ratepayers and distributors. Therefore, until Ontario data are used to set the productivity factor in the indexing formula, the Board believes that a value of zero for the input price differential is reasonable for 3rd Generation IR.

Participant comments reinforce to the Board that further research is needed to better understand the input price trends of Ontario electricity distributors before an IPI or an input price differential can be considered for implementation. This research could be carried out for consideration in future IR plans.

Implementation

The Board will continue to use the year-over-year change in the GDP IPI FDD (Series V3840594) to calculate price escalation. The change will be calculated early in March, once Statistics Canada publishes the last year's index and the latest available

information on any changes to the index of two years ago. As with 2nd Generation IR, there will be no explicit adjustments for return on equity or debt costs.

2.4 Productivity and Stretch Factors

Under a price cap mechanism, the allowed rate of change in the price of regulated services is restricted by the growth in an inflation factor minus an X-factor. Generally, the X-factor has two main components: the productivity factor and the stretch factor.

The productivity component of the X-factor is intended to be the external benchmark which all firms are expected to achieve. It should be derived from objective, data-based analysis that is transparent and replicable. Productivity factors are typically measured using estimates of the long-run trend in TFP growth for the regulated industry.

The stretch factor component of the X-factor is intended to reflect the incremental productivity gains that firms are expected to achieve under IR and is a common feature of IR plans. These expected productivity gains can vary by company and depend on the efficiency of a given company at the outset of the IR plan. Stretch factors are generally lower for firms that are relatively more efficient.

Issues and Options Raised in Consultations

PEG's report entitled "Calibrating Rate Indexing Mechanisms for Third Generation Incentive Regulation in Ontario" (the "PEG IR Report") makes specific recommendations for the productivity and stretch factor components of the X-factor and provides a discussion of relevant IR precedents.

In brief, PEG recommended in the PEG IR Report that for Ontario distributors, the X-factor be comprised of: (1) an industry TFP-based component reflecting TFP growth potential estimated using U.S. data; and (2) an efficiency benchmark-based stretch factor based on Ontario data.

The Productivity Factor

As detailed in the PEG IR Report, TFP trends were computed using an index based approach and on three sets of available data: U.S. data for the period 1988-2006, Ontario data for the period 1988-1997, and Ontario data for the period 2002-2006. Ontario data for the period 1998-2001 was not available. Dr. Kaufmann noted the results of these analyses show a slowdown in productivity in the most recent years of the U.S. TFP trend and in the latest Ontario TFP trend, and expressed uncertainty over the persistence of the trend. In the case of Ontario, Dr. Kaufmann advised in the PEG IR Report that four years of TFP changes are insufficient to compute a reliable, long-run TFP trend. He also believed that there is an identifiable, downward bias in the Ontario TFP measure which could not be explained given available information, and that the quality of the Ontario TFP measure was generally diminished by the lack of available data (especially data on distributors' capital additions). In the case of the U.S., Dr. Kaufmann commented that much of the measured TFP decline for the U.S. electricity industry in the period 2002-2006 was due to transitory factors that will not persist.

Because of concerns with relying solely on the four years of Ontario data, the recommendation in the PEG IR Report for the productivity factor was based on a comparative analysis of TFP growth between 1988 and 2006 for the U.S. and Ontario electricity distribution industries. TFP growth for Ontario distributors in the period 1988-1997 was previously computed for the purposes of the 1st Generation IR, and PEG considered this information as well as the trends it computed for Ontario distributors in 2002-2006 and for the U.S. industry for the entire 1988-2006 period. Dr. Kaufmann concluded that TFP trends for U.S. power distributors were a reasonable, although not perfect, proxy for contemporaneous TFP trends in Ontario. Overall, the average TFP growth rate for the Ontario TFP industry was almost identical to the average TFP growth rate for the U.S. industry over the thirteen years for which TFP growth could be computed.

PEG's analysis concluded that: 1) there was not enough historical data to compute a long-run TFP estimate for the Ontario distributors; and 2) TFP growth of U.S. distributors was a reasonable proxy for the Ontario industry. Therefore, PEG's recommended productivity factor was based on the long-term TFP trend for the U.S. electricity distribution industry. In the TFP study, PEG determined its sample period using a "start date analysis" designed to ensure that the estimated TFP trends were not affected by transitory conditions, such as abnormal economic or weather conditions, which can distort measured TFP trends. Based on this analysis, PEG chose a sample period of 1995 to 2006. PEG's recommended productivity factor of 0.88% was equal to the average rate of TFP growth for U.S. electricity distributors over this period.

The consultants retained by participants agreed that the index based approach is appropriate. However, their views differed as to the details involved in carrying out the analysis.

Four participants commented on the issue of the sample period used in PEG's TFP study. Two participants supported PEG's analysis to select the sample period and two participants did not. Prof. Yatchew disagreed with PEG's selected sample period. He argued that PEG's approach is conceptually deficient because, in selecting the start of the period, PEG's analysis searched for only a single year that is likely to be most similar to the most recent year in terms of factors that could distort TFP, rather than searching for an entire period that is likely to be representative of the future.

Dr. Cronin did not support PEG's recommended approach for developing a productivity factor for three main reasons: the belief that the U.S. industry was too dissimilar to that in Ontario to provide a basis for a productivity factor; the belief that PEG's measure of capital was flawed; and concern that PEG's output measure was incorrectly specified. Rather than having a single productivity factor, Dr. Cronin recommended a productivity factor-menu approach. Distributors would be allowed to select from a menu of productivity factors, each with an associated allowed return on equity ("ROE"). The "baseline" option would be a productivity factor of 0.8% with an associated allowed ROE

of 8.5%. The proposed menu also included four other options, where increments of 0.2% in the productivity factor are associated with 100 basis point increments in the allowed ROE. The maximum productivity factor of 1.6% was therefore associated with a 12.5% allowed ROE.

In general, distributors raised similar concerns in their comments. These participants noted that the average TFP growth for the U.S. electricity distribution industry was 0.72% over the 1988-2006 period. These participants also noted that TFP has decelerated in both the U.S. and Ontario in recent years. They further argued that there are likely to be continued cost pressures over the term of 3rd Generation IR due to, among other things, increasing capital replacement expenditures and the impacts of government policy. These participants therefore expressed the belief that more emphasis should be placed on the Ontario TFP data, and greater weight put on the recent trend evident from that data, as the basis for the productivity factor. Ms. Frayer raised concerns that PEG's computed TFP trend did not include peak demand as an output measure. She also commented that PEG's capital measures for Ontario are likely to be biased. Ms. Frayer developed an alternative TFP measure that included peak demand and substituted a physical measure of capital (total distribution line length) for the inflation-adjusted, monetary value of capital. According to this specification, TFP for Ontario distributors declined between 1.3% and 2.5% per annum over the 2002-2006 period. In summary, distributors recommended a productivity factor of 0.55% for 3rd Generation IR. This recommendation was based on the midpoint of what these participants believed was a reasonable range of TFP growth rates estimated by Prof. Yatchew and Ms. Frayer. These participants argued that it was reasonable to have a lower TFP target than that recommended by PEG given the recent deceleration in TFP. They also argued that this approach was consistent with a Board precedent, since the productivity factor approved for purposes of the 1st Generation IR placed more weight on recent TFP growth than on more distant TFP growth.

Participants representing ratepayers generally supported PEG's recommended approach for establishing a productivity factor. Two groups commented that using the

U.S. data as a basis for the productivity factor was reasonable until sufficient Ontario data could be developed. Two other participants representing ratepayers commented that PEG's research shows that TFP trends for the U.S. industry are a reasonable proxy for contemporaneous Ontario trends. All of these participants supported PEG's recommended productivity factor of 0.88%.

The Stretch Factor

As described in the PEG IR Report, PEG's recommended stretch factors are informed by work it has done for Board staff in a separate project on the benchmarking of Ontario distributors' OM&A costs[1]. The PEG IR Report did not present final, recommended stretch factor assignments and values because the benchmarking work had not been finalized at the time the report was issued. The PEG IR Report illustrates a methodology for using these benchmarking evaluations to assign stretch factors to distributors. Distributors were assigned by PEG to different efficiency cohorts based on the following benchmarking evaluations:

Table 1: PEG's February Proposal

Group	Benchmarking Evaluations
I	Statistically superior
II	Not statistically superior but in top third on OM&A unit cost comparison
III	In middle third on OM&A unit cost comparison
IV	Not statistically inferior but in bottom third on OM&A unit cost comparison
V	Statistically inferior

Given these identified efficiency cohorts, PEG recommended stretch factors that were the same for all firms in a given cohort but differed between cohorts. Smaller stretch factors were assigned to the more efficient cohorts. More particularly, Group I had a

[1] The March 20, 2008 final report prepared for Board staff by PEG, entitled "Benchmarking the Costs of Ontario Power Distributors" (the "PEG Benchmarking Report") details the benchmarking evaluations and is available on the Board's web site.

recommended stretch factor of 0, Group II had a recommended stretch factor of 0.15%, Group III had a recommended stretch factor of 0.3%, Group IV had a recommended stretch factor of 0.45%, and Group V had a recommended stretch factor of 0.6%. These specific values were based on judgment but were also broadly supported by precedents from North American index-based IR plans. However, in light of participant comments, as summarized below, Dr. Kaufmann presented a revised proposal at the May 6, 2008 stakeholder meeting. In response to staff's request to simplify the proposal, the number of efficiency cohorts and stretch factors was reduced from five to three, and distributors were assigned to different efficiency cohorts based on the following benchmarking evaluations:

Table 2: PEG's Revised Proposal

Group	Benchmarking Evaluations
I	Statistically superior and in top quartile on OM&A unit cost comparison
II	In middle two quartiles on OM&A unit cost comparison
III	Statistically inferior and in bottom quartile on OM&A unit cost comparison

This updated recommendation led to a kind of "bell curve" for efficiency evaluations. That is, about two-thirds of Ontario distributors were in the middle and "average" performers in Group II, about one-sixth of the distributors were identified as "superior" performers in Group I, and about one-sixth of the distributors were classified in Group III.

In this revised proposal, PEG also linked its recommended values for the stretch factors more closely to regulatory precedents from Ontario rather than from all of North America. In the revised proposal, the stretch factor for Group I was 0, the stretch factor for Group II was 0.25%, and the stretch factor for Group III was 0.5%. These values generally conform to the values approved to date in Ontario, where 0.47% and 0.5% were the stretch factors approved in the early Enbridge and Union plans, respectively, and 0.25% was the stretch factor approved for all distributors in the 1st Generation IR plan.

Most participants supported the concept of stretch factors. However, participants differed on the appropriate magnitudes of stretch factors and whether the available data and analysis were sufficient to support the use of differentiated stretch factors at the present time.

Most participants representing groups of ratepayers generally supported PEG's approach to both proposals but believed the proposed values for the stretch factors were too low.

Several participants did not support PEG's recommended approach to both proposals because the underlying benchmarking evaluations focus on OM&A costs only. Some of these participants argued that benchmarking must also consider capital costs and reliability in order to benchmark company performance appropriately. They also commented that a benchmarking study that focuses only on OM&A can create perverse incentives to cut operating costs, which can be achieved through excessive capitalization or at the expense of reliability. As an alternative, one participant proposed a menu approach, in which distributors could select one of five stretch factors that ranged between 0.15% and 0.75%. Under this proposal, all distributors would be subject to an earnings sharing mechanism, and those firms selecting the higher stretch factors would be allowed to retain greater shares of their actual earnings. Dr. Cronin also supported a menu approach.

Prof. Yatchew commented that there was no theoretical rationale supporting the need for a stretch factor at the present time. He argued that stretch factors were warranted only immediately after distributors switched from cost of service regulation to IR. Because he maintained that Ontario distributors have been subject to some form of IR since 2000, he did not support a stretch factor and commented that it would be unreasonable to expect acceleration in productivity growth on this basis. As an alternative to stretch factors, Prof. Yatchew suggested that "diversity factors," that could be positive or negative relative to the industry TFP, may be more appropriate.

However, he and some other participants representing distributors also maintained that there is no evidence of productivity differences among the distributors. In spite of these fundamental concerns, some distributors did support the application of stretch factors in principle but claimed that they should be deferred until appropriate data and benchmarking analyses that focus on the total cost of distribution services could be developed.

In response to PEG's revised proposal, most participants reiterated their prior comments. One participant representing ratepayers did not support PEG's approach of establishing separate stretch factors for different distributors and recommended that a single stretch factor of 0.5% be applied to all firms.

Policy and Rationale

The Board has determined that X-factors for individual distributors will consist of an empirically derived industry productivity trend (productivity factor) and stretch factor. The approach to setting these factors will be based on economic theory and empirically derived from objective, data-based analysis.

The Productivity Factor

The index based approach is widely used in other jurisdictions for the purpose of calculating TFP. In addition, the approach is simpler compared to the alternative "econometric" approach and is therefore better understood by stakeholders.

Implementation

All distributors will be subject to the same productivity factor that will be set at the start of 3rd Generation IR and will remain fixed throughout the term of the plan. This will provide distributors with greater certainty as to the time to achieve or surpass the external benchmark and retain any achieved savings. The Board's Rate

Plan for the electricity distribution sector will stagger distributors' commencement onto 3rd Generation IR. To set the external benchmark that all distributors will be expected to achieve, the productivity factor will be the same for all distributors regardless of when they commence the plan.

While it is clear to the Board that participants support an index based approach for the derivation of an industry productivity trend to form the basis for the productivity factor for the IR plan, the Board would be assisted by further consultation on the interpretation of the results in order to determine the appropriate value for the productivity factor. The issue of the appropriate value for the TFP trend for 3rd Generation IR will therefore be included on the agenda for the August stakeholder conference (see Section 5).

The Stretch Factor

The Board has determined that non-negative (i.e., >0 or =0) stretch factors will be included in the X-factor. The Board believes that stretch factors are required in 3rd Generation IR and is not persuaded by the arguments that stretch factors are only warranted immediately after distributors switch from years of cost of service regulation to IR. Productivity stretch factors promote, recognize and reward distributors for efficiency improvements relative to the expected sector productivity trend. Consequently, stretch factors continue to have an important role in IR plans after distributors move from cost of service regulation.

On the issue of the application of benchmarking to OM&A costs rather than total cost, The PEG IR Report describes OM&A benchmarking as a well-established technique with ample precedent in the academic literature and regulatory proceedings. Further, OM&A benchmarking can lead to appropriate inferences on a firm's efficiency provided that the model contains appropriate controls for capital stock. PEG's econometric model included two such capital-related control variables. The Board notes that the consultants generally agree that benchmarking OM&A costs is, in principle, a legitimate

benchmarking approach, although they disagree as to whether PEG's analysis has sufficient controls for capital. In contrast to 2nd Generation IR, where all distributors were subject to the same X-factor, the Board is of the view that, as an incremental approach for 3rd Generation IR, distributor diversity should be recognized. The Board does not agree with comments that there is no evidence of productivity differences within the sector. The Board's comparative cost analyses demonstrate that there is a range of productivity levels across distributors. These differences in measured productivity levels support the position that distributors have different abilities to achieve incremental productivity gains and, therefore, that it may be appropriate to have different stretch factors for distributors.

Therefore, **the Board has concluded that distributors will be assigned to one of three groups with stretch factors based on their efficiency as determined through comparative cost analysis**. Using the resultant efficiency ranking, superior performers could be assigned a lower stretch factor and inferior performers could be assigned a relatively higher stretch factor. All others could be assigned an average stretch factor.

Establishing the Efficiency Ranking

The Board will use the results of two benchmarking evaluations to divide the Ontario industry into three efficiency "cohorts." Until total cost data is available, and the models are revised in consultation with stakeholders to carry out total cost benchmarking, these evaluations will be done using the most recent three years of OM&A cost data available in July of each year. For example, for the 2009 rate year the efficiency evaluations will be based on efficiency evaluations done using OM&A cost data for the years 2005, 2006 and 2007.

The first benchmarking evaluation will use an econometric model to assess the efficiency of each distributor's costs. The econometric model set out in the PEG Benchmarking Report controls for the impact of various factors beyond management control on a distributor's OM&A costs. These factors, determined by PEG's analysis to

be significant drivers of OM&A costs, include the number of customers served, kWh deliveries, the price of OM&A inputs (including labour), the percent of distribution line that was underground, system age and whether or not the distributors' territory is located on the Canadian Shield. This benchmarking model will be used to predict each distributor's OM&A costs, and the distributor's actual OM&A costs will be compared to the econometric prediction. A distributor will be deemed to be "statistically superior" if its actual OM&A costs are lower than the costs predicted by the econometric model and the difference is statistically significant. A distributor will be deemed to be "statistically inferior" if its actual OM&A costs are higher than the costs predicted by the econometric model and the difference is statistically significant. All distributors that are neither statistically superior nor statistically inferior will be deemed to be average cost performers.

The second evaluation will be based on comparisons of distributors' OM&A costs per unit of comprehensive distribution output. These unit cost evaluations will be based on a comparison between a given distributor's unit OM&A costs and the average unit OM&A costs of a peer group. There are a total of 12 peer groups identified in the PEG Benchmarking Report, which are defined based on the size of distributors, location in the Province (Northern, Southern or Greater Toronto Area), the degree of undergrounding, and whether the distributor has been experiencing rapid growth. PEG determined that these factors were most strongly associated with similarities in unit cost levels across distributors.

The two evaluations will then be compared and those distributors that rank superior in both will be assigned to Group I. Those distributors that rank inferior in both will be assigned to Group III. All other distributors, including those that rank superior or inferior in only one of the evaluations, will be included in the broad middle cohort, Group II, as shown in Table 3.

Table 3: Efficiency Cohorts for Stretch Factor Assignments

Group	Benchmarking Evaluations
I	Statistically superior and in top quartile on OM&A unit cost comparison
II	In middle two quartiles on OM&A unit cost comparison
III	Statistically inferior and in bottom quartile on OM&A unit cost comparison

Using this approach, the Board expects that the resultant efficiency ranking will approximate a normal distribution (i.e., "bell curve") where about two-thirds of Ontario distributors will be in the middle and "average" performers, about one-sixth of the distributors will be identified as "superior" performers in Group I, and about one-sixth of the distributors will be classified in Group III.

Implementation

Each year the cohorts for the entire sector will be re-evaluated. This means that the stretch factor for a given distributor may change during the term of the IR plan. This approach will recognize and reward distributors for efficiency improvements during the term of the IR plan. A distributor's individual ranking can be directly affected by its own efforts and can also be affected by the efficiencies achieved by other distributors. This means, for example, that a distributor initially ranked as a superior performer must continue to outperform its peers to maintain that ranking and associated stretch factor. The approach will call for the Board to publish revised cohort rankings by the end of August each year. This will give distributors sufficient time to incorporate changes in their individual stretch factors when they apply to have their rates set for the following year.

However, while the Board has determined that there will be three stretch factors representing diversity of efficiency and that these will be revised annually to reflect changes in efficiencies in the sector, the Board has not yet determined what the three stretch factor values will be. The Board would be assisted by

further consultation on the appropriate stretch factor values for the three groups for 3rd Generation IR. The issue of the appropriate stretch factor values will therefore be included on the agenda for the August stakeholder conference (see Section 5).

2.5 Incremental Capital

In the consultation on 2nd Generation IR that occurred in 2006, a number of participants commented that the IR regime needs to ensure that sufficient incentives are available in order to achieve efficiencies, recognizing the time patterns of costs and savings; and to provide for the expeditious review and approval of capital expenditure programs. Some participants argued that certainty in relation to capital expenditures beyond the single future test year is needed. It was suggested that the regime could include some form of approval of a multi-year capital plan and not just capital items that may arise in the following year.

In its July 23, 2007 "Report of the Board on Rate-making Associated with Distributor Consolidation" and associated covering letter, the Board indicated that electricity distributors' concerns over partial rebasing to account for needed capital expenditures should be examined as part of the development of the 3rd Generation IR plan.

Issues and Options Raised in Consultation

Staff's Initial Proposals

The Discussion Paper noted that participants differed as to whether special treatment of capital spending is necessary in an IR framework; however, the Discussion Paper described an option that staff thought might be reasonable. The approach would allow for the intra-term approval by the Board and appropriate pass-through of incremental capital expenditures associated with growing capital program demands. Dr. Kaufmann advised in his May 6th presentation to participants that implicit in an X-factor is a

historical pattern of capital expenditures for the industry, and that generally a separate capital module should not be required under a comprehensive rate indexing plan. However, he commented that if, going forward, projected capital investment is substantially different than the history of what is reflected in the X-factor, then there could be an issue and a capital module could be designed to address the disparity.

At the May 6, 2008 stakeholder meeting, staff proposed the introduction of an incremental capital module as a flexible and practical means of accommodating reasonable spikes in incremental capital investment needs during 3rd Generation IR. In brief, staff proposed that the module should only be invoked by a distributor intra-term and that any Board-approved amounts and rate base treatment should be fully resolved through comprehensive rebasing.

Under staff's proposal, in order to invoke the module a distributor would make specific application to the Board for review and approval. Staff proposed that the application would substantiate the need for incremental capital due to drivers that are non-discretionary in the control of the distributor's management such as: life-cycle replacement of aging distribution plant; and additions of non-revenue earning plant to meet new growth demands and/or address system impacts from customer choice of location for connection. Further, for incremental capital expenditures to be considered for recovery, staff proposed that the amounts would have to satisfy the eligibility criteria listed in Table 4.

Table 4: Staff's Proposed Incremental Capital Investment Eligibility Criteria

Criteria	Description
Causation	Amounts should be directly related to the claimed driver, which must be clearly non-discretionary. The amounts must be clearly outside of the base upon which rates were derived.
Materiality	The amounts must have a significant influence on the operation of the distributor; otherwise they should be dealt with at rebasing.
Prudence	The amounts to be incurred must be prudent. This means that the distributor's decision to incur the amounts must represent the most cost-effective option (not necessarily least initial cost) for ratepayers.

Staff further proposed that applications should be accompanied by comprehensive evidence to support a claim for incremental capital and that subsequently there should be annual reporting requirements on actual amounts spent.

With regard to a materiality threshold, staff proposed a threshold of 25% of the capital budget reflected in base rates going in to IR and that the threshold must be met on an individual driver basis.

Staff's Revised Proposal

In response to participant comments, as summarized below, staff revised its proposal as described in the Board's May 15, 2008 letter to participants. To address comments from distributors, staff proposed a threshold of the distributor's average annual CAPEX since the Board-approved base year relative to 150% of the distributor's depreciation expense embedded in base rates. Staff believed that 150% would be appropriate in order to allow for the impact of inflation and to provide a cushion to ensure that only serious cases of incremental capital need are considered.

Staff also proposed changes in relation to the proposed scope for capital expenditures eligible for recovery through the module. Staff noted that, to date, revenue-earning plant had not been included in discussions. However, for reasons of simplicity, staff suggested that the threshold test be indifferent to the driver, and proposed instead that the need driving any amount applied for by a distributor should be dealt with in the distributor's application.

Finally, staff proposed that a distributor's application to the Board requesting rate relief for incremental CAPEX during IR include the following:

- An analysis demonstrating that the threshold test has been met and that the amounts will have a significant influence on the operation of the distributor;

- A description of the underlying causes and timing of the capital expenditures, including an indication of whether expenditure levels could trigger a further application before the end of the IR term;
- An analysis of the revenue requirement associated with the capital spending (i.e., the incremental depreciation, return on rate base and payments in lieu of taxes ("PILs") associated with the incremental capital), and a specific proposal as to the amount of rate relief sought;
- Justification that the impact on revenue required is incremental to what was included in the application for the base year. Amounts being sought should be directly related to the claimed cause, which must be clearly non-discretionary and clearly outside of the base upon which current rates were derived;
- Justification that the amounts to be incurred will be prudent. This means that the distributor's decision to incur the amounts represents the most cost-effective option (not necessarily least initial cost) for ratepayers;
- Evidence that the incremental revenue requested will not be recovered through other means (e.g., it is not being funded by the expansion of service to include new customers); and
- A description of the actions the distributor will take in the event that the Board does not approve the application.

General Comments

In general, distributors initially expressed a preference for a multi-year capital plan review and approval approach in addition to the availability of a capital investment module. Some distributors maintained that the issue of unfunded capital arises when a distributor has to undertake programs or projects to meet requirements that may be in excess of what is allowed in the price cap formula, which implicitly considers a steady state growth rate in depreciation and returns, based on the historical costs of capital, and capital expenditures that are in effect equal to that annual depreciation expense. While these distributors were supportive of moving forward with a comprehensive price cap for 3rd Generation IR and were not advocating that distributors be held "whole"

during the term for all capital expenditures, some distributors did advocate that distributors have a reasonable expectation of achieving their approved returns without being unduly penalized by having to significantly reduce their OM&A and/or capital programs. While some distributors expressed concern about the magnitude of the threshold in staff's revised proposal, they commented that the form of the mechanism is a major step forward in recognizing the business drivers necessitating such a module.

Participants representing groups of ratepayers generally expressed concern that staff's proposed approach may over-compensate distributors and result in over-earning during the IR term without clear requisite benefits to ratepayers. Many of these participants commented that CAPEX will be addressed in rebasing prior to IR, and they cautioned that any approach implemented with a capital module should only deal with incremental needs and that applications should have to include comprehensive evidence to support the claim.

One participant recommended that module treatment of capital investment should only be extended to two categories of "need" (lumpy spending and spending to improve productivity) and only to the amount that is not captured through the basic "inflation minus productivity" indexing rate adjustment components.

Another participant commented that the IR plan term should be three years to help reduce potential need for some form of special treatment of materially significant investment. This participant acknowledged that, to the extent that distributors find during the term of the IR plan that the formula is not sufficient to support incremental capital expenditures, they should have an opportunity to apply for the Board for relief; however, the onus would be on the distributor to demonstrate why its rates, derived using the formula, would not be sufficient to support the incremental capital investment. Under a three-year plan, this participant noted, such requests would be the exception, and not the norm.

A third participant urged the Board not to include an incremental capital module, and noted that PEG clearly indicated that there is no need for any explicit adjustment for capital in the indexing mechanism just because rate base is growing. This participant suggested that, if a distributor believes that it has significant incremental capital needs, the distributor should be encouraged to make a cost of service or multiple year cost of service filing. This participant also recommended that, if distributors are allowed to invoke the incremental capital module, then the X-factor proposed by PEG should be increased significantly to reflect that a significant amount of the capital has been removed from a comprehensive incentive rate mechanism, leaving a partial mechanism. Finally, if incremental capital is approved in rates, this participant expressed the view that distributors cannot expect to retain any excess earnings that they may achieve over and above that level.

Comments on Scope

One participant representing a group of ratepayers commented that the Board should not allow incremental rates where, for example, a distributor seeks to capitalize more of the costs of its existing labour force, or where a distributor says that its input costs for poles have gone up faster than inflation, or where a distributor says that it wants to prepare for future growth patterns, because these are all capital spending issues that should be handled within, and not outside of, the price cap budget provided.

Comments on the Materiality Threshold

In response to staff's proposed 25% of capital budget threshold, distributors commented that linking an incremental capital module to a capital budget may be problematic because the base year capital budget is likely to vary significantly among distributors for a variety of reasons. They also commented that capital budgets could be distorted and/or not representative of future investment trends depending on investment cycles, the lumpiness of certain types of investments, and similar factors. Two participants commented that with the 25% of capital budget threshold the module could also be

triggered even if rate base is declining (i.e., capital expenditures are less than depreciation expense).

Commenting that the proposed application requirements appear acceptable and not excessive, one distributor commented that the 150% depreciation threshold is appropriate and will address the most serious cases. However, some distributors, agreeing in general with the application requirements, commented that 150% depreciation is too high, and proposed the use of 125% above the depreciation expense from the approved base year. Another participant commented that the threshold of 150% may underestimate the degree of hardship for some, and encouraged the Board to allow applications for incremental CAPEX that will have significant influence on operations, regardless of the amounts.

One participant representing a group of ratepayers commented that the 150% of depreciation threshold is an improvement over the 25% of capital budget threshold. However, this participant expressed concern that, depending on what amount would actually be recovered through the module and subsequently what level of depreciation expense becomes the new benchmark for the threshold test, distributors may be encouraged to over spend on capital expenditures or accelerate their capital spending if they are near the threshold in order to use the module to increase revenue. This participant proposed that, if at the end of the IR term the actual CAPEX to depreciation ratio falls below 150%, any revenues collected through the application of the incremental capital module should be rebated to customers (with appropriate interest).

Another participant representing a different group of ratepayers commented that the use of an average is an improvement over staff's original proposal, but cautioned that it can still lead to perverse results with regard to the timing of expenditures (i.e., re-adjusting forecasted capital needs to be eligible for the module sooner). This participant recommended that application requirements include sufficient information to test this issue.

Commenting that the proposed 150% depreciation is too low, a fourth participant representing another group of ratepayers demonstrated the relationship between annual capital spending (affected by inflation) and the base depreciation levels already built into rate base. For example, this participant commented, for a distributor with zero growth (and therefore constant real dollar capital spending), at a 2% inflation rate (i.e., the Bank of Canada target inflation rate) and a 3.9% average depreciation rate (the current Ontario norm), the price cap mechanism naturally provides for capital spending of 150% of depreciation or more; and where a distributor has growth, it will have available, without any special treatment, substantially more than the 150% level. This participant expressed the belief that the threshold has to be at least 20% higher than the CAPEX spending provided for naturally by the price cap regime. Further, this participant stated that it is possible to estimate the amount of CAPEX generally allowed for by the price cap, tracked to growth rates, and thus to create a simple threshold formula that depends only on the approved depreciation level, and the distributor's growth rate.

Comments on Implementation Issues

While participants generally expressed a relatively common understanding of the overall intent of the capital module and how it might be implemented, they differed on views with regard to details.

Some distributors proposed specific considerations for implementation of a capital module that were generally consistent with staff's revised proposal, with the exception of a lower materiality threshold (125% depreciation included in base rates). Also, these distributors suggested that while they agreed that annual reporting on actual spend would be appropriate, no true-up would be required for the IR term unless there was evidence that there was a serious overstatement of capital requirements. In contrast, a participant representing a group of ratepayers noted that the application of the module would be based on forecast capital expenditures from the distributors and therefore a true-up should be used to reflect differences between the actual and forecast amounts, particularly if the actual expenditures, for whatever reason, do not hit the 150%

materiality threshold that they were forecast to hit. Two other participants commented that if an application addresses more than one year (looking forward) then forecasting accuracy (in terms of both capital spending and customer load) as well as the potential for variances between forecast and actual spending amounts become more significant matters and there is an increased need for ratepayer protection.

To mitigate the potential for unintended results with regard to the timing of expenditures, another participant recommended that, in addition to what was already identified in staff's revised proposal, the application requirements should also include a requirement that the distributor do the following: demonstrate that the incremental revenue requirement impact is not covered by the IR mechanism through the provision of forecasts for customer count, volumes and associated revenue, and revenue requirement associated with existing and proposed capital; and calculate the "rate adder" associated with the incremental revenue requirement. Another participant expressed support for a deferral account approach, consistent with the current mechanism in place to deal with smart meter expenditures, with amounts subject to a true-up upon rebasing based on the actual amounts spent. This participant noted that this could be captured through a rate rider rather than an adjustment to rates.

Policy and Rationale

The Board has determined that there will be an incremental capital module in 3rd Generation IR. Distributors with an amount of capital spending that exceeds the materiality threshold may best be accommodated through rebasing. However, on balance, as all participants acknowledged, some incremental capital investment needs may arise during the IR term and the Board notes that a clearly defined modular approach is generally accepted.

The incremental capital module described in this report is intended to address concerns over the treatment of incremental capital investment needs that may arise during the IR term.

While the module may provide for a broad scope for incremental capital needs, specific application must be made to provide for review and approval of stated need. Applications must be accompanied by comprehensive evidence to support the claimed need. The Board considers that the application requirements proposed by staff are reasonable.

For incremental capital expenditures to be considered for recovery prior to rebasing, amounts must satisfy the eligibility criteria set out in Table 5.

Table 5: Incremental Capital Investment Eligibility Criteria

Criteria	Description
Materiality	The amounts must exceed the Board-defined materiality threshold and clearly have a significant influence on the operation of the distributor; otherwise they should be dealt with at rebasing.
Need	Amounts should be directly related to the claimed driver, which must be clearly non-discretionary. The amounts must be clearly outside of the base upon which rates were derived.
Prudence	The amounts to be incurred must be prudent. This means that the distributor's decision to incur the amounts must represent the most cost-effective option (not necessarily least initial cost) for ratepayers.

As noted in the above table, **eligibility of a distributor to apply for rate relief through the module will be subject to a materiality threshold**. **However, the Board would be assisted by further consultation on the appropriate materiality threshold. The issue of the appropriate materiality threshold will therefore be included on the agenda for the August stakeholder conference (see Section 5).**

The Board has also determined that there will be annual reporting on actual capital spending and a prudence review at the time of rebasing. Distributors that receive rate relief through this module will be required to report to the Board annually on the actual amounts spent. At the time of rebasing, the Board will carry out a prudence review to determine the amounts to be incorporated in rate base. The Board will also make a determination at that time regarding the treatment of differences between forecast and the actual spending during the IR plan term. If the forecast costs

exceeded actual amounts spent, the difference will be returned to ratepayers. Cost overruns will be reviewed at the time of rebasing.
The Board agrees with the comments of all participants that capital expenditures mandated through government policy (e.g., smart meters) should continue to be dealt with outside of the IR plan.

With the exception of the value of the materiality threshold, the Appendix outlines the detailed requirements as they apply to 3rd Generation IR.

2.6 Treatment of Unforeseen Events

Z-factors are intended to provide for unforeseen events outside of management's control, and are a common feature of IR plans. In general, the cost to a distributor of these events must be material and its cost causation clear.

Issues and Options Raised in Consultation

The Discussion Paper acknowledged a number of issues related to Z-factor claims by electricity distributors, including the general view of distributors and other stakeholders that the current materiality thresholds are too low. The Discussion Paper identified the option of raising the two existing materiality thresholds for expenses and capital costs from the current 0.2 percent to 3 percent. During the May 6, 2008 stakeholder meeting, and in response to participant comments as summarized below, staff proposed the continuation of the current rules, with the exception of the scope of events that would qualify for Z-factor treatment and of the materiality threshold, and put forward a single threshold of 0.5 percent on total revenue requirement.

For 2nd Generation IR, Z-factors are limited to natural disasters and tax changes. One distributor questioned whether Z-factors need to be this limited. This distributor expressed the view that the eligibility criteria and the application filing, review and approval process requirements are adequate to discourage applications for relatively

nominal amounts. Arguing that a specific materiality threshold is not needed, this distributor noted that the attention the Board, staff and intervenors give to a claim in an application would be proportionate to their respective concerns regarding the appropriateness and materiality of the claim.

As noted previously, some participants expressed concern over the issue of the treatment of tax changes under an IR plan that uses the GDP IPI FDD.

Some distributors recommended that the Board hold a consultation on the appropriate materiality threshold level and rules governing a Z-factor adjustment rather than applying an arbitrary 3% threshold level.

All participants representing ratepayer groups generally concurred that a single threshold which is indifferent to the type of costs incurred may be the most practical approach and that 0.5% of the total revenue requirement is reasonable. Further, they noted that this should apply to each event and not be a cumulative amount.

While generally agreeing with a move to a single threshold measure, another participant proposed refinements to the threshold test to address distributor diversity. This participant noted that, whatever formula is used to assess materiality, the actual dollar values for each distributor may not make sense if the distributor is very small or very large. Therefore, this participant proposed that for a distributor with a revenue requirement over $200 million the threshold would be fixed at $2 million, and for a distributor with a revenue requirement below $10 million the threshold would be fixed at $100,000.

Policy and Rationale

The Board has determined that the eligibility criteria are sufficient to limit Z-factors to events genuinely external to the regulatory regime and beyond the control of management and the Board.

With regard to the issue of tax changes, the Board will be informed by the decision in the EB-2007-0606/615 proceeding in relation to gas distributor incentive regulation applications in which tax as a Z-factor is being considered. The Board will provide further guidance to electricity distributors subsequent to issuance of that decision.

The Board believes that a materiality threshold is important to provide distributors with guidance as to whether or not they should be applying to the Board for relief from a Z-factor event. **The Board has decided to set the materiality threshold based on the distributor's revenue requirement**.

Setting a single threshold of 0.5% of total revenue requirement may not make sense if a distributor is very small or very large. Staff's analysis presented at the May 6th stakeholder meeting indicated that staff's proposal would result in inordinately low threshold amounts for some small distributors (e.g., $1,600 for a distributor with a revenue requirement of $320,000) and inordinately high threshold amounts for some large distributors (e.g., over $2 million for a distributor with a revenue requirement of $525 million). Therefore, **the materiality threshold will be differentiated based on the relative magnitude of the revenue requirement** in order to maintain the concept of relative materiality across diverse distributors. Specifically, the materiality threshold will be as follows:

- $50 thousand for distributors with a distribution revenue requirement less than or equal to $10 million;
- 0.5% of distribution revenue requirement for distributors with a revenue requirement greater than $10 million and less than or equal to $200 million; and
- $1 million for distributors with a distribution revenue requirement of more than $200 million.

As is currently the case, the threshold must be met on an individual event basis in order to be eligible for potential recovery.

Distributors are expected to report events to the Board promptly and apply to the Board for any amounts claimed under Z-factor treatment with the next rate application. This will permit the Board and any affected distributor to address extraordinary events in a timely manner. Subsequently, the Board may review and prospectively adjust the amounts claimed under Z-factor treatment.

The Board expects that any application for a Z-factor will be accompanied by a clear demonstration that the management of the distributor could not have been able to plan and budget for the event and that the harm caused by extraordinary events is genuinely incremental to their experience or reasonable expectations.

The Appendix outlines the detailed requirements as they apply to 3rd Generation IR.

2.7 Off-ramps

An off-ramp is based on a pre-defined set of conditions under which the IR plan would be terminated or modified before its normal end-of-term date, usually because of extreme events that cannot be effectively addressed, or that should not be addressed, through Z-factor treatment or some other IR mechanism such as earnings sharing.

For the 2nd Generation IR mechanism, there are limited adjustments available to distributors. Therefore, an off-ramp is available where these adjustments proved insufficient for specific cost pressures (e.g., additional capital investment). Where this is the case, distributors are expected to file a comprehensive cost of service application and not to rely on the simplified filing requirements for the incentive mechanism.

Issues and Options Raised in Consultation

The Discussion Paper invited comment on a pre-defined off-ramp associated with excessive over or under earnings. At the May 6, 2008 stakeholder meeting, and in

response to participant comments received as summarized below, staff proposed a less prescriptive approach in which a review may be initiated on a case-by-case basis on application.

While some participants supported the pre-defined off-ramp associated with excessive over or under earnings, others expressed the view that the use of off-ramps should be determined on a case-by-case basis where a distributor brings forward an application.

Some distributors recommended that the use of off-ramps be determined on a case-by-case basis where a distributor brings forward an application that proposes modifications to the adjustment mechanism or where the distributor is seeking a cost of service rebasing. One participant representing a ratepayer group also suggested that the distributor, its ratepayers, or Board staff should be able to invoke an off-ramp, and that the goal of providing for the off-ramp application should be to ensure that the IR plan and the distributor's circumstances are reviewed, not necessarily changed. In response, another participant stated it could not support this proposal because intervenors do not have access to the timely and detailed information needed to determine if a distributor should be compelled to come before the Board and explain why the IR plan should be terminated or continued.

Policy and Rationale

The Board has determined that the 3rd Generation IR plan will include a trigger mechanism with an **annual ROE dead band of ±300 basis points. When a distributor performs outside of this earnings dead band, a regulatory review may be initiated**. In support of this approach, a distributor will be required make a report to the Board no later than 60 days after the company's receipt of its annual audited financial statements, in the event that the distributor falls short of or exceeds its ROE by 300 basis points. The report will be reviewed to determine if further action by the Board is warranted. Any such review would be prospective and could result in modifications to the IR plan, a termination of the IR plan or the continuation of the IR plan.

The Board believes this to be appropriate because of the uncertainty associated the various components of an IR plan. The Board intends this to be an early warning mechanism rather than necessarily terminating the IR plan, although that could be the outcome of any subsequent review.

The Board notes that most participants representing groups of ratepayers supported a pre-defined earnings-based off-ramp, especially in the absence of an earnings sharing mechanism. Several of these participants proposed an off-ramp as described above and which is similar to that agreed to in the settlements accepted in the two recent gas IR proceedings.

Implementation

The Board agrees that effective implementation of a prescriptive off-ramp will require timely release of distributor performance and financial data. Reporting requirements and review processes will be developed to support this mechanism.

2.8 Earnings Sharing

An earnings sharing mechanism ("ESM") provides ratepayers protection to the extent there is some level of uncertainty in the IR plan parameters. In addition, to the extent that a distributor is able to achieve significant efficiency gains during the IR plan period, it allows for ratepayers to share in those gains.

Issues and Options Raised in Consultation

Staff's Discussion Paper invited comments from participants on whether an ESM should be part of 3rd Generation IR and, if so, whether an asymmetrical ESM might be appropriate.

In light of comments received, as summarized below, staff proposed an asymmetrical mechanism during the May 6, 2008 stakeholder meeting. Under the proposal, amounts would be recorded each year during the IR plan term if a distributor's actual non-weather normalized earnings exceeded the calculated ROE by 200 basis points,[2] and would be shared equally (i.e., 50:50) at the time of rebasing. This proposal was intended to respond to the views expressed by various participants that certain elements of staff's composite proposal for the 3rd Generation IR framework may benefit from the counter-balance of an ESM. Specifically: the distributor's access to an incremental capital module; uncertainty associated with the estimation of the input price differential and productivity differential to implement in conjunction with the GDP IPI FDD; and some uncertainty in relation to the setting of appropriate stretch factors. This proposal was also based on a four year IR plan term.

Participants representing ratepayer groups continued to express strong support for earnings sharing. They commented that ratepayers do not have access to full information regarding a distributor's financial results and do not have the same ability as distributors to seek Z-factor relief. As such, they commented that the use of an ESM would provide a level of ratepayer protection during the IR plan. In general, these participants commented that ESM benefits should be shared annually, not at the time of rebasing. Another participant expressed the view that an ESM is an important component of any IR plan and that, to the extent that the Board were to decide to allow

[2] ROE would be recalculated annually based on that year's application of the ROE formula and earnings sharing would be calculated as +200 basis points from that number.

for five year terms, an ESM would be an essential component of the IR plan. This participant expressed support for an asymmetrical earnings sharing mechanism given the fact that distributors can opt out of the IR plan at any point and apply for rates based on cost of service, and specifically proposed that if the term is five years the dead band should be 100 basis points and if the term is three years the dead band should be 200 basis points.

Two participants proposed menu approaches to the ESM that would be tied to the selection of productivity and/or stretch factors.

Another participant representing a ratepayer group, generally opposed to earnings sharing in IR plans, expressed the belief that an ESM is appropriate in 3rd Generation IR, and suggested that the asymmetrical ESM recently implemented for one of the gas distributors based on actual earnings and with a 200 basis point dead band, would be appropriate. However, this participant expressed the expectation that the need for an ESM could be reduced or eliminated in the next generation of IR for electricity distributors.

Some distributors commented that ESMs have the undesirable feature that they reduce the power of incentives for efficiency improvements, and cautioned that in considering such mechanisms, one should be mindful that, upon rebasing, consumers capture the benefits of efficiency improvements in perpetuity. This participant noted that, in the event that an ESM were to be implemented, it should be symmetrical and amounts should be cumulative over the term of the IR plan.

One participant commented that the need for an ESM, or an off-ramp for that matter, is very much dependent on the robustness of the IR mechanism. This participant provided as an example the critical short comings of the use of OM&A rather than total cost benchmarking in the application of the stretch factors. If the Board were to adopt this approach, this participant's view was that an ESM and an off-ramp would be required to mitigate the risk associated with this approach.

Some distributors commented that they accept the use of ESMs in IR plans that are in effect for more than five years, and recommended that under such plans if the achieved ROE from regulated activities was more than 300 basis points different from the Board's allowed ROE, then the computed overage/underage should be shared equally (i.e., 50:50) between the distributor and its ratepayers.

Policy and Rationale

The Board will not implement an ESM for 3rd Generation IR.

The Board has determined a relatively short plan term of three years for the 3rd Generation IR plan. During those three years, the IR plan will include an industry productivity factor as well as a stretch factor. Implicit in these factors are expected benefits that are shared with ratepayers, up-front throughout the IR term. In contrast, the ESM is designed to share benefits after-the-fact. This premise, supported by many participant comments, suggests that the only function of the ESM is a "safety net" should the productivity and stretch factors be too low. However, with a short plan term and confidence in these factors, the need for a safety net is largely reduced.

The Board is of the view that monitoring and reporting will capture any instances of a distributor earning super-normal profits. In such cases, a regulatory review, and potential off-ramp, can be triggered.

The Board also has concerns over the implementation of an ESM. The regulatory burden that this would place on distributors, intervenors, and the Board is significant. Once the framework for the over earnings calculations is established, the filings by the distributors would have to be tested for accuracy and prudence.

Therefore, in light of the short IR plan term, the availability of an off-ramp and the consumer benefit in the form of productivity and stretch factors for 3rd Generation IR, the Board has determined not to implement an ESM.

2.9 Service Quality

When the Board launched the Rate Plan, it also committed to implementing a regime of service quality requirements which would work to ensure that consumers continue to receive a high level of service from their distributors during the term of an IR plan.

On June 4, 2008, the Board issued amendments to the Distribution System Code which established a set of customer related service quality requirements with associated performance standards. These requirements include four previous service quality indicators (Connection of New Services, Appointments Met, Telephone Accessibility, and Written Response to Enquiries) and three new requirements (Appointment Scheduling, Rescheduling a Missed Appointment and Telephone Call Abandon Rate).

These service quality requirements and associated performance standards will come into effect in January 2009.

For the time being, the three existing system reliability indicators (SAIDI, SAIFI & CAIDI) will continue as reporting requirements. However, the Board's expectation is that system reliability requirements will eventually become mandatory.

2.10 Reporting Requirements

Reporting requirements and review processes will be developed as required to support the elements of the 3rd Generation IR mechanism that are described in this report.

intentionally blank

3 Implementation

A participant representing a group of ratepayers, building on a proposal by one of the distributors, recommended that in each rate order on rebasing, the Board panel structure the order so that annual adjustments, consistent with the IR plan as applied to that particular distributor, are included as part of the order. According to this participant, this approach could accomplish two things: first, where the Board accepts custom values based on specific application for any of the parameters in the IR plan, this approach would create a method by which that decision could be implemented; and second, it would also set the rates for each year of the IR plan term through a proper hearing on an evidentiary basis and any subsequent application by the distributor to re-open any of those years would be a reconsideration of the existing order (requiring an application to vary the existing order), not a fresh application. The Board sees merit in this suggestion and will give it further consideration.

3.1 How Adjustments Would be Determined

3.1.1 Continued Migration to Common Capital Structure

The Board will continue to include an adjustment to rates in 2009 and 2010 where applicable as outlined in its December 20, 2006 "Report of the Board on Cost of Capital and 2nd Generation IR for Ontario's Electricity Distributors", in order to transition distributors to the single deemed capital structure of 60% debt and 40% equity.

3.1.2 Conservation and Demand Management

The Discussion Paper noted that staff and the working group generally felt that the current Lost Revenue Adjustment Mechanism ("LRAM") is appropriate until the

completion of the consultations on rate design for electricity distributors since those consultations will look at related issues. The Discussion Paper invited comment on a revenue stabilization adjustment mechanism ("RSAM"), on a model that would include a CDM adjustment factor based on the CDM targets set by the Government of Ontario and/or the Ontario Power Authority, and on the option of maintaining the status quo vis-à-vis the Board's current LRAM and shared savings mechanism ("SSM") for electricity distributors.

Issues and Options Raised in Consultation

Most participants supported the continuation of the current LRAM and SSM. Some participants commented that a RSAM would involve a significant change in the risk profile of electricity distributors and/or their allowed return on equity, would require the production of load forecasts, and would shift the risk of volume fluctuations and deviations from forecast from the distributor to the ratepayers. In addition, alternative mechanisms do not appear to be practical at this point in time. One participant suggested that, going forward, if there is evidence that revenue erosion during the term of an IR plan is increasing, adjustment mechanisms may then be considered by the Board. As such, this participant concluded, this could be part of a longer term framework.

Distributors commented that they believed that in the short term distributors can make use of the existing lost revenue adjustment processes and that revenue-oriented IR alternatives could accommodate broader concerns around reductions in load and customer numbers.

Policy and Rationale

On March 28, 2008, the Board issued its "Guidelines for Electricity Distributor Conservation and Demand Management" which consolidate all of the Board's policies in relation to CDM activities undertaken by electricity distributors. In those guidelines, the

Board noted that whether and how CDM funding may be included in the IR mechanism rate adjustment would be addressed in the appropriate forum.

As a result of these 3rd Generation IR consultations, the Board has determined that **CDM-related costs recovered through distribution rates (i.e., any new spending on CDM, revenues from recovery of a lost revenue adjustment claim, or a shared savings claim) will continue to be dealt with separately from the IR rate adjustment**.

This represents the status quo. The Board acknowledges that, should alternatives to the status quo be examined, these could have implications for electricity distributors and ratepayers. In the Board's view, these would best be dealt with as part of the consultations on rate design for electricity distributors (consultation EB-2007-0031).

3.1.3 Deferral and Variance Accounts

A set of authorized variance / deferral accounts are identified in the Board's Accounting Procedures Handbook. In its December 20, 2006 "Report of the Board on Cost of Capital and 2nd Generation IR for Ontario's Electricity Distributors", the Board indicated that, to the extent possible, it will limit reliance on the creation of new deferral accounts during the term of the 2nd Generation IR plan to well-defined and well-justified cases only. The Board will continue this practice for purposes of the 3rd Generation IR plan.

With respect to the disposition of commodity deferral and variance accounts, the Board is required to make an order at least every three months to determine whether and how the amounts recorded in such accounts (currently recorded in Account 1588 of the Uniform System of Accounts) shall be reflected in rates. With respect to non-commodity deferral or variance accounts, the Board is required to make an order at least annually.

In a letter dated February 19, 2008, the Board notified electricity distributors and other interested stakeholders that it intends to launch an initiative to develop policies and processes for the review and disposition of Account 1588. The Board indicated that it will consider the use of account disposition thresholds or "disposition triggers". The Board also stated that it will consider whether to extend this initiative to deferral or variance accounts that are similar in nature to Account 1588, such as the Retail Settlement Variance Accounts (RSVAs) and the Retail Cost Variance Accounts (RCVAs).

The Board therefore expects distributors to deal with deferral and variance account disposition outside of the IR rate adjustment.

3.1.4 Adjustments to Revenue-to-Cost Ratios

On November 28, 2007, the Board released a report on the "Application of Cost Allocation for Electricity Distributors" which outlines the Board's expectations on how electricity distributors are to adjust the revenue-to-costs ratios to bring them within the ranges stated in the report.

The cost allocation policies reflected in that report are to be followed by distributors whenever they apply for rates on a cost of service basis. In the event that further adjustments to one or more revenue to cost ratios have been specified by a prior Board Decision, then base rates will need to be adjusted accordingly prior to the application of the price cap index.

3.1.5 Application of the Price Cap Index

Consistent with the 1st Generation IR and the 2nd Generation IR mechanisms, the 3rd Generation IR price cap index will be applied uniformly across all customer classes and to both the Service Charge and the Distribution Volumetric Rate (including low voltage

charges for embedded distributors), net of existing rate adders and rate rebalancing adjustments as determined necessary by the Board.

The Board has determined that a distributor's allowance for taxes will continue to be adjusted by the price cap index. A distributor's allowance for taxes (whether PILs or actual taxes) currently includes provision for income tax and the Ontario capital tax. The Board does not think the tax allowance should be shielded from the index. This allowance should escalate in line with the other components of the revenue requirement reflected in base rates. As discussed in Section 2.6, the Board will in due course provide further guidance on the issue of treatment of material changes in tax rules during 3rd Generation IR.

The Board has determined that smart meter related matters **will continue to be dealt with separately from the IR rate adjustment and that the guidelines included in the Addendum will continue to apply.**

Also, consistent with practice to date in Ontario, the index will not be applied to specific service charges. The Board carried out a generic review on specific service charges in 2005,[3] and is currently carrying out further related consultations in respect of the provision of specific services and the application of associated charges (consultation EB-2007-0722). Until this work is complete, **the Board expects distributors to continue to use the currently established specific service charges and to deal with the need for new specific service charges outside of the IR rate adjustment.**

The price cap adjustment will not be applied to Rate Riders, Retail Transmission Service Rates, Wholesale Market Service Rate, Rural Rate Protection Charge, Standard Supply Service – Administrative Charge, Allowances[4], Retail Service Charges or Loss Factors.

---

[3] See chapter 11 of the 2006 Electricity Distribution Rate Handbook.
[4] Transformation and primary metering allowances and any other allowances the Board may determine.

A “de-construction” of 2008 rates will be carried out prior to adjusting base rates. After adjusting base rates with the price cap index, rate elements will be “re-constructed” to derive 2009 rates.

3.2 Rebasing Rules

Rebasing at the end of 3rd Generation IR will be based on a cost of service filing. Benchmarking evidence may be used within the scope of the cost of service proceeding.

Under the existing cost of service filing requirements, distributors are required to provide a detailed variance analysis between the Test Year and Bridge Year, and between the Test Year, the Historical Year and the last Board-approved Test Year. In response to concerns raised by distributors that significant upward pressure is anticipated on capital expenditures, the Board has determined that the distributor will be required to provide historical plant continuity information for each year of the IR plan term since the last Board-approved Test Year, and will revise the filing requirements accordingly. This information will inform the Board’s review and approval of the distributor’s rebasing application and the determination of appropriate capital expenditure levels for inclusion in base rates going forward.

4 Summary

The Board engaged many interested stakeholders in the discussion of an appropriate 3rd Generation IR for electricity distributors. This consultation has assisted the Board in developing the policies detailed in this report. The Board has appreciated the input from all stakeholders in determining the approach it should take. The Board has been particularly encouraged by the productive dialogue among the experts hired by the various participants.

The rate adjustments for the 2009 rate year will apply to distributors that were subject to rate rebasing in 2008. Distributors that have not yet applied for, or been subject to, rebasing, will continue to be subject to the 2nd Generation IR. For the 2010 and 2011 rate years the policy will continue to apply to the distributors whose rates were rebased in 2008 and will also apply to the additional distributors whose rates have been subject to rebasing in 2009 and 2010. The 3rd Generation IR mechanism elements are summarized in the following table.

Table 6: Components of the Board's 3rd Generation IR Policy

Inflation Factor	• Canada GDP IPI for final domestic demand – updated annually in March. Until Ontario data used to derive total factor productivity trend, values for the input price differential and productivity differential will be zero.
Productivity Factor	• Fixed at industry total factor productivity trend percentage per year for term of plan – all distributors subject to the same value.
Stretch Factors	• Differentiated based on distributor efficiency – updated annually in July. • Distributors will be assigned to 1 of 3 groups with stretch factors based on their efficiency as determined through comparative cost analysis.
Z-factors	• Will be on application (by next rate filing) subject to the three criteria of causation, materiality and prudence.
Incremental Capital	• Will be on application subject to the three criteria of materiality, need and prudence.

The Board will consider work to refine its empirical work on the electricity distribution sector, including total cost benchmarking, an Ontario TFP study, and input price trend research, in the context of its overall business planning process.

intentionally blank

5 Topics for Presentations at the Conference

This report sets out the Board's policies and approach to 3rd Generation IR and presents guidelines that the Board expects distributors to use in preparing their rate applications. This report also identifies three outstanding matters where the Board's determination may benefit from further consultation.

On June 13, 2008, the Board notified participants of a stakeholder conference that will be held the week of August 5, 2008. The August stakeholder conference will provide a forum for further discussion of the appropriate values for the productivity factor, the stretch factor, and the capital module materiality threshold. The Board will not entertain comments on any other issue at the conference.

The Board would be assisted by participants addressing the following questions in their presentations at the conference.

Productivity Factor

- What is the appropriate value for TFP trend?

Stretch Factor

- What are appropriate stretch factor values for each of the three groups?

Incremental Capital Module

- What is an appropriate capital expenditure to depreciation threshold value to determine materiality?

intentionally blank

Appendix: Filing Guidelines

These filing guidelines set out the Board's expectations for applications by distributors for rate adjustments on the basis of the 3rd Generation IR mechanism as set out in this report.

General

The implementation of the 3rd Generation IR mechanism will occur first with rate adjustments scheduled for May 1, 2009.

The price cap adjustment will be applied to the Service Charge and Distribution Volumetric Rate (including low voltage charges for embedded distributors), net of existing rate adders and rate rebalancing adjustments as determined necessary by the Board. The price cap adjustment will not be applied to Rate Riders, Retail Transmission Service Rates, Wholesale Market Service Rate, Rural Rate Protection Charge, Standard Supply Service – Administrative Charge, Specific Service Charges, Allowances[5], Retail Service Charges or Loss Factors.

The price cap adjustment will reflect inflation less the X-factor, and an adjustment for the transition to the common deemed capital structure of 60% debt and 40% equity.

[5] Transformation and primary metering allowances and any other allowances the Board may determine.

Manager's Summary

Each application should include a completed Model and a brief Manager's Summary explaining all rate adjustments applied for. Any deviations should be thoroughly documented. Where necessary, support for applied adjustments, such as continuation of rate riders or for Z-factors, should be provided.

Incremental Capital Module

The incremental capital module has been incorporated into the 3rd Generation IR mechanism to address the treatment of incremental capital investment needs that arise during the IR plan term.

Eligibility Criteria for Incremental Capital Module Applications

The eligibility criteria for applications to recover amounts through rates to fund incremental capital investment needs are discussed in section 2.5 of this report, and are reproduced in Table 7 below for convenience:

Table 7: Incremental Capital Investment Eligibility Criteria

Criteria	Description
Materiality	The amounts must exceed the Board-defined materiality threshold and clearly have a significant influence on the operation of the distributor; otherwise they should be dealt with at rebasing.
Need	Amounts should be directly related to the claimed driver, which must be clearly non-discretionary. The amounts must be clearly outside of the base upon which rates were derived.
Prudence	The amounts to be incurred must be prudent. This means that the distributor's decision to incur the amounts must represent the most cost-effective option (not necessarily least initial cost) for ratepayers.

Materiality Threshold

To be determined by the Board.

Filing Guidelines

The Board expects that applications requesting relief for incremental CAPEX during the IR plan term will be accompanied by comprehensive evidence to support the claimed need, and include the following:

- An analysis demonstrating that the materiality threshold test has been met and that the amounts will have a significant influence on the operation of the distributor;
- A description of the underlying causes and timing of the capital expenditures including an indication of whether expenditure levels could trigger a further application before the end of the IR term;
- An analysis of the revenue requirement associated with the capital spending (i.e., the incremental depreciation, OM&A, return on rate base and PILs associated with the incremental capital), and a specific proposal as to the amount of relief sought;
- Justification that amounts being sought are directly related to the claimed cause, which must be clearly non-discretionary and clearly outside of the base upon which current rates were been derived;
- Justification that the amounts to be incurred will be prudent. This means that the distributor's decision to incur the amounts represents the most cost-effective option (not necessarily least initial cost) for ratepayers;
- Evidence that the incremental revenue requested will not be recovered through other means (e.g., it is not, in full or in part, included in base rates or being funded by the expansion of service to include new customers); and
- A description of the actions the distributor will take in the event that the Board does not approve the application.

Reporting Requirements

Distributors that receive rate relief through this module will be required to report to the Board annually on the actual amounts spent. At the time of rebasing, the Board will carry out a prudence review to determine the amounts to be incorporated in rate base. The Board will also make a determination at that time regarding the treatment of differences between forecast and actual capital spending during the IR plan term. If the forecast costs exceeded actual amounts spent, the difference should be returned to ratepayers. Cost overruns will be reviewed at the time of rebasing.

Z-Factors

Z-factors are events that are not within management's control. A distributor will be expected to supply the details of management's plans for addressing these events in support of the distributor's request for special cost recovery.

A distributor may record amounts which meet the eligibility criteria presented below for Z-factor events.

A distributor is expected to follow the guidelines listed below when applying to the Board to recover from ratepayers the amounts that the distributor has recorded. The Board may limit the recovery of certain amounts.

Eligibility Criteria for Z-factor Amounts

The eligibility criteria for applications to recover amounts in the Z-factor are discussed in section 2.6 of this report, and are summarized inTable 8 below. In order for amounts to be considered for recovery in the Z-factor, the amounts must satisfy all three criteria set out in Table 8.

Table 8: Z-Factor Amount Eligibility Criteria

Criteria	Description
Causation	Amounts should be directly related to the Z-factor event. The amount must be clearly outside of the base upon which rates were derived.
Materiality	The amounts must exceed the Board-defined materiality threshold and have a significant influence on the operation of the distributor; otherwise they should be expensed in the normal course and addressed through organizational productivity improvements.
Prudence	The amount must have been prudently incurred. This means that the distributor's decision to incur the amount must represent the most cost-effective option (not necessarily least initial cost) for ratepayers.

Materiality Threshold

The Board has determined that the following materiality thresholds will apply:

- $50 thousand for distributors with a distribution revenue requirement less than or equal to $10 million;
- 0.5% of distribution revenue requirement for distributors with a revenue requirement greater than $10 million and less than or equal to $200 million; and
- $1 million for distributors with a distribution revenue requirement of more than $200 million.

As is currently the case, the threshold must be met on an individual event basis in order to be eligible for potential recovery.

Filing Guidelines

Distributors are expected to submit evidence that the costs/revenues which were incurred / received meet the three eligibility criteria outlined above.

Distributors are expected to report events to the Board promptly and apply to the Board for any amounts claimed under Z-factor treatment with the next rate application. This will allow the Board and any affected distributor the flexibility to address extraordinary

events in a timely manner. Subsequently, the Board may review and prospectively adjust the amounts claimed under Z-factor treatment.

The Board expects that any application for a Z-factor will be accompanied by a clear demonstration that the management of the distributor could not have been able to plan and budget for the event and that the harm caused by extraordinary events is genuinely incremental to their experience or reasonable expectations.

Other Matters in Relation to Z-Factors and Incremental Capital Module

Distributors will be expected to file a proposal, including the manner in which it intends to allocate the incremental revenue requirement to the various customer rate classes, the rationale for the selected approach and a discussion of the merits of alternative allocations considered.

Distributors will also be expected to file a detailed proposal including justifications to recover, through a rate rider, the Board-approved incremental revenue requirement. The proposal should specify whether the rate rider will apply on a fixed or variable basis, or a combination thereof, and the time period for collection. A detailed calculation of the rate rider(s) should be provided for each year of the IR plan term.

Accounting Treatment

Eligible **Z-factor** amounts should be included in Account 1572, "Extraordinary Event Costs", of the Board's Uniform System of Accounts of the Board's Uniform System of Accounts contained in the Accounting Procedures Handbook for electricity distributors.

Eligible **Incremental Capital Module** amounts should be recorded in account 1508, Other Regulatory Asset, Sub-account Incremental Capital Expenditures.

Carrying charge amounts shall be calculated using simple interest applied to the monthly opening balances in the account and recorded in a separate sub-account of this account. The rate of interest shall be the rate prescribed by the Board for the respective quarterly period for deferral and variance accounts. These prescribed rates are reviewed and updated each quarter and published on the Board's web site.