# CHAPTER 2 OVERVIEW OF THE ELECTRICITY DISTRIBUTION RATE REGULATION FRAMEWORK

## 2.1 INTRODUCTION

This chapter provides an overview of the electricity distribution rate regulation framework that the Board is adopting for a three-year first generation PBR plan. The framework includes:

- Establishing initial rates for market opening.
- Use of a price cap PBR mechanism to adjust rates for year 2 and year 3 of the PBR plan.
- Establishing service quality standards.

## 2.2 ESTABLISHING INITIAL RATES

Electricity distribution utilities are required to file initial rates for several purposes:

- With market opening, the distribution charges need to be separated from commodity (SSS or retail options) and other non-competitive electricity charges (e.g., transmission and IMO charges).
- The distribution charge will be structured as a two-part rate: a monthly fixed service charge and a volumetric kW or kWh based rate.
- Adjustments to the existing distribution rates may be required for utilities that choose to increase their returns on common equity towards a market-based rate of return.

## 2.3 USE OF PBR AS THE RATE REGULATING MECHANISM

PBR is being adopted as the rate regulation scheme for electricity distribution utilities in the Province of Ontario. PBR has several features that make it an attractive regulatory mechanism:

- It provides strong incentives to the utilities to continue and expand their efforts to control cost, increase efficiency, and maintain service quality.
- It is expected to minimize the administrative burden.
- It should minimize the cost of regulation.

## 2.3.1 Objectives of PBR

PBR provides the electricity distribution utilities with incentives to operate efficiently and to innovate. It also gives consumers appropriate price signals, and allows sharing gains from more efficient production, consumption and innovation.

PBR is a framework that permits greater pricing flexibility. It also allows electricity distribution utilities the potential for greater returns, based on superior performance than would a traditional regulatory framework, such as cost-of-service regulation. It allows the utility to keep a portion of the rewards from innovation and provides a planning horizon for the term of the PBR plan, during which the mechanism for calculating price changes and earnings to be retained by the utility are fixed.

Customers benefit from PBR through the prescribed productivity factor and from potential gains through increased efficiency. By creating incentives that normally accrue in a competitive market, PBR brings the benefits of competition, and preserves the important service quality standards.

PBR decouples the price that the utility charges for its service from its cost. Since price adjusts according to a simple formula, if the utility can reduce its costs by more than its prescribed productivity factor it can keep the cost savings in the form of higher operating profits. Thus, PBR provides strong incentives for utilities to find efficiencies in their operations.

#### 2.3.2 First Generation PBR

The PBR mechanism for the first generation PBR plan for the electricity distribution utilities is a price cap plan with a three-year term. Under a cap mechanism, changes in the IPI, adjusted for a prescribed productivity factor, and costs associated with extraordinary events, establishes the level of annual changes in the prices of distribution services over the term of the plan.

This is a time of major change for the electricity industry in Ontario. The imminent opening of the retail electricity market and the reorganization of the industry are posing challenges for all involved in the industry. Hence, in developing the first generation PBR plan for the electricity distribution utilities, several objectives were established for the PBR mechanism:

- First, the first term of PBR should allow all involved to gain experience with PBR while minimizing the potential for "bad" outcomes. This means that the plan should be of relatively short duration, with a simple rate adjustment mechanism, and safeguards for both customers and utilities.
- Second, the PBR rate regulation scheme needs to be administratively simple. Hence, this regulatory scheme is intended to establish the proper incentives that allows regulation to be "light-handed", with considerably less regulatory oversight than in traditional cost-of-service models.
- Third, it became apparent in the PBR development process that although there may be other regulatory mechanisms that are promising, these could not be implemented at this time due to lack of consistent data, insufficient time, or insufficient resources. Therefore, this first generation of PBR is intended to establish a base for future regulatory initiatives and to gain experience with PBR.

## 2.3.3 Second Generation PBR

A mid-term review will be held to design the next generation of PBR. While the regulatory mechanism will be reviewed at that time, the Board will also conduct a rebasing study to identify the level at which rates should be established for the second generation PBR term. In addition, electricity distribution utilities will be required to undertake cost allocation studies to better align rates with cost causation of the customer groups in the second generation PBR.

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The intent is that second generation PBR and the corresponding updates to the Rate Handbook will be implemented in 2003. To fulfill that objective the Board anticipates undertaking an interim review of first generation PBR in 2001. Items to be assessed during that review include, but are not limited to, the following:

- The experience with PBR to date and future requirements.
- The possible role of alternate PBR mechanisms, e.g. yardstick.
- The rebasing of rates, including review of cost allocation among customer/rate classes.
- The design and term of the second generation PBR plan.
- Review and assessment of service quality and reliability standards.
- Role of electricity distribution utilities with regard to demand side management ("DSM").

## 2.4 SERVICE QUALITY STANDARDS

Left unchecked, the economic incentives of the PBR mechanism might ultimately lead the electricity distribution utility to cut service quality in order to reduce costs. Hence, an important component of PBR is standards that ensure that service quality is maintained or enhanced. Currently, there is such diversity in the size, circumstances, and service standards of distribution utilities in the Province that it is difficult to establish universally appropriate service quality standards. However, there needs to be some accountability and movement towards service quality standards. Hence, this Rate Handbook establishes six customer service and three service reliability indicators which will be monitored over the term of the first generation PBR plan. The indicators are:

Customer Service indicators

- Time to connect new services
- Time to locate underground cables
- Meeting appointments

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- Telephone accessibility
- Written response to inquiries
- Emergency response

Service Reliability Indicators

- System average interruption duration index (SAIDI)
- System average interruption frequency index (SAIFI)
- Customer average interruption duration index (CAIDI)

#### 2.5 DEMAND SIDE MANAGEMENT

Facilitation of energy efficiency is one of the objectives of the Act and DSM is important in achieving this objective. However, the role of the electricity distribution utilities with regard to DSM has not been examined as yet. The question on how DSM will be delivered in the restructured electricity industry requires better understanding. Therefore, appropriate considerations of DSM will be included in the review for second generation PBR.