

# Determining the Length of the Regulatory Control Period

January  
**2021**

---

As a part of its Price Review process, the RIC takes a closer look at the factors that impact the length of the price control period, its own experience in this regard and will assess whether extending the length of the price control period is relevant within the local context.

Consultative  
Document

## **TABLE OF CONTENTS**

1. Background.....	2
1.1 Purpose of this Document.....	2
1.2 Structure of this Document.....	2
1.3 Responding to this Document.....	3
2. Determining the Length of the Price Control Period .....	4
3. Regulatory Precedent.....	7
4. RIC’s Experience with a Five-Year Price Control .....	9
5. Applicability of longer or shorter controls within the local .....	10
context.....	10
6. Conclusion .....	12

# **1. Background**

Incentive based price controls, such as those implemented by the Regulated Industries Commission (RIC), require the use of a multi-year control period which ensures that the incentives included in such a regime are effective. **Section 48 of the RIC Act specifies that the RIC shall review the principles for determining rates and charges every five years or, where the licence issued to the service provider prescribes otherwise, at such shorter interval as it may determine.** In its 2006 Final Determination for the electricity transmission and distribution sector, the RIC chose to implement a five-year regulatory period, 2006 -2011. The RIC's position was that a five-year regulatory period was appropriate, as it struck a balance between providing incentives for improving efficiency, reducing regulatory uncertainty and allowing sufficient time for a state-owned service provider to improve its performance. The use of a shorter regulatory period carries the risk that the service provider may focus its efforts on short term gains, rather than on innovative actions that will lead to lower costs in the long term.

## **1.1 Purpose of this Document**

As part of its price review process, the RIC intends to assess the merits of a five-year control period, as well as explore the impacts of utilizing a price control period greater or less than five years. In so doing, the RIC will examine what is best suited for the local electricity transmission and distribution sector for the next regulatory control period.

## **1.2 Structure of this Document**

This document is divided into several sections hereafter. Section 2 describes some of the advantages and disadvantages of a longer term price control versus a shorter control period. Section 3 provides a brief overview of the length of the control period utilized by other regulators, Section 4 considers the RIC's own experience with a five year price control and finally, Section 5 presents the RIC's views on the way forward.

### **1.3 Responding to this Document**

All persons wishing to comment on this document are invited to submit their comments.  
**Comments close at 4.00 pm on February 8, 2021.**

Responses should be sent by post, fax or e-mail to:

**Executive Director**  
Regulated Industries Commission  
#37 Wrightson Road  
Port-of-Spain, Trinidad

**Postal Address:** P.O. Box 1001, Port-of-Spain, Trinidad

**Tel.** : 1(868) 625-5384; 627-7820; 627-0821; 627-0503

**Fax** : 1(868) 624-2027

**Email** : [ricconsultation@ric.org.tt](mailto:ricconsultation@ric.org.tt)

**Website** : [www.ric.org.tt](http://www.ric.org.tt)

All responses will normally be published on the RIC's website unless there are good reasons why they must remain confidential. Any requests for confidentiality must be indicated.

## 2. Determining the Length of the Price Control Period

The price control period is the specified time over which the utility is expected to execute what has been set out in its business plan which is submitted to the regulator for price setting purposes. Over this period, the utility will be allowed to recover sufficient revenue such that it provides quality service to its customers and can meet its efficient costs.

A cornerstone of incentive regulation is that the length of the regulatory period must be long enough so that the utility can implement initiatives to reduce costs and enjoy the resulting profits for a reasonable length of time. If this were not the case, the utility would have no incentive to reduce costs since gains would be immediately returned to customers. However, the longer the regulatory period, the longer customers must wait to share in the benefits of outperformance. Additionally, longer price control periods mean a greater likelihood that cost differentials may arise, especially in a highly uncertain environment. A regulator must therefore weigh the advantages of a longer term price control over a shorter period.

Certain economic principles are at the core of any determination on the length of price control including creating incentives for productive efficiency, pricing for allocative efficiency and innovating to encourage dynamic efficiency<sup>1</sup>. The application of these principles give rise to pros and cons that can be considered further when deciding on an appropriate length of price control.

Broadly, some of the key advantages of a longer term price control include the following:

- **Promote value for money over the longer term** – it has been argued that a service provider would take greater care in ensuring that it does not jeopardize its financeability if its planning horizon both for network investment and anticipating customer needs, were longer than the typical five-year period favoured by many regulators.

---

<sup>1</sup> Productive efficiency is concerned with producing maximum output for minimum cost, using an optimal combination of inputs. Allocative efficiency occurs when there is optimal distribution of goods and services, to maximize consumer preferences. Dynamic efficiency is concerned with the optimal rate of innovation and investment to improve production processes which reduce long run average costs. In short, it is the development of new and more efficient ways of doing business over time.

- **Greater incentives to improve performance** – the longer a utility is able to retain efficiency gains the greater the incentive to achieve improvements (productive efficiency), as the utility can keep these gains for a longer period before they are potentially clawed back by the regulator. Additionally, over the long run, this may reduce the utility's expenditure requirements.
- **Lower administrative costs** – If price reviews are undertaken less frequently it is likely that administrative costs will also fall. However, this would be offset to some extent by the fact that more resources may be needed to closely monitor the utility's performance between price reviews.
- **Lower regulatory risk** – a longer a price control period promotes regulatory certainty. This can be perceived as lower regulatory risk and in developed countries where networks are financed both by debt and equity, it can lead to lower overall financing costs.
- **Innovation and dynamic efficiency** – a longer price control period may encourage utilities to seek innovative solutions to improve efficiency and thus it promotes dynamic efficiency.
- **Certainty over investment programme** – as the price control review is used to establish the future investment programme, a longer price control period may enable the investment programme to be updated in a timely manner. There is greater stability for investment planning by reducing the impact of capex cycles.

Conversely, there are a number of disadvantages of a longer term price control, as follows:

- **Risks of perceived windfall profits/losses** – A longer period gives rise to an increased risk of forecasting errors and therefore greater possibility that the utility's costs may actually be much lower or higher, especially in the latter years of the price control period. This increases the possibility of windfall profits/losses for the utility.
- **Customers will have to wait longer to enjoy the benefits of the cost reductions made by the utility** – A longer lag between price reviews translates into a longer wait time before cost savings can be passed to customers.
- **Greater scope for prices to become out of line with costs** – The basis for economic regulation lies in the fact that utilities that are monopolies are not to be allowed to exploit customers by extracting monopoly rents. The longer the control period, the greater the

scope for the prices of the regulated utility to become out of line with costs. Moreover, if price controls are reviewed less frequently it is more likely that current prices will move further away from marginal costs. Hence, a longer price review period poses greater risks to allocative efficiency.

- **Possibility of price hikes/falls following price reviews** – The longer the price control period, there is increased likelihood that there will be greater changes in price when a new review takes place. Any large upward movement will be unwelcome by customers and may even reduce stakeholder confidence in the regulatory regime.
- **Risks of reopening the price control** – The longer the control period the greater the likelihood that problems could arise that may make it necessary to re-open the price control. This could limit the incentive to reduce costs if utilities anticipate such a reopening.
- **Reduced adaptability of the regime** – The longer the price control period, the longer the regulator must wait to institute changes that can improve aspects of the regime or mend defects.
- **Impact on workflow of regulator and utility** - A longer control period can create problems for a regulator’s workflow (and also that of the regulated utility), since there would be longer periods without price reviews followed by what might be more intensive periods of work. This could make it more difficult to retain skilled staff and preserve institutional memory.
- **Financeability risks** – As indicated above, the longer forecasting horizon may increase the risk that the utility’s revenues will be out of line with its costs. This will increase the risk that the utility will not be able to meet its commitments and may lead to increased financing costs.

Some of the short-comings listed above can be mitigated by the use of certain secondary controls in the overall price control formula. These can vary from options to pass benefits quickly to customers or more importantly to re-openers in respect of the price control. An example of the former can be seen in Ofgem’s<sup>2</sup> price controls for electricity distribution for the period 2010-2015

---

<sup>2</sup> The Office of Gas and Electricity Markets (Ofgem) is an independent national regulatory authority that regulates the gas and electricity networks in Great Britain.

whereby for every £1 unanticipated cost reduction that a utility makes, the saving is shared between investors and customers. This entitlement could be passed-through in the form of reduced prices or in the form of a rebate that offsets other costs, when setting the next price control. An example of the latter would be the “shipwreck clauses” favoured by some UK regulators to deal with the general financial difficulties of a company. The RIC favoured the use of a trigger mechanism<sup>3</sup> in T&TEC’s price control for 2006-2011.

### 3. Regulatory Precedent

In general, it seems that a price control period of four to five years finds favour with most regulators, particularly for network monopoly activities. This is the norm of regulatory regimes used in the UK and in the majority of European and Australian cases. Although, there is some evidence that sectors subject to more competition tend to have shorter price control periods than largely monopolistic sectors, it is difficult to draw definitive conclusions about why particular regulators choose particular lengths of price control.

Ofwat<sup>4</sup> which initially set a ten year price control period for the water and sewerage industry in England and Wales, has consistently set five-year price controls, which it believes strikes an appropriate balance between stability and incentives for the regulated utilities.

In 2010, Ofgem decided on RIIO<sup>5</sup> as the new approach to establishing price controls to replace the previously used RPI-X approach. Essentially, RIIO remains a revenue-cap approach and builds upon the RPI-X platform by providing greater performance incentives. One of the main changes however, is a move towards a longer regulatory control period of eight (8) years, with a provision for a mid-period review of output requirements in the event of any major changes. The argument

---

<sup>3</sup> A trigger event is one which can affect the commercial viability of the service provider and applies if it imposes a total annualized cost of more than 1% of revenue.

<sup>4</sup> The Water Services Regulation Authority (Ofwat) is a non-ministerial government department, which regulates the water and sewerage industry in England and Wales. The most recent price control period will apply from April 2020-2025.

<sup>5</sup> RIIO is **R**evue set to deliver strong **I**ncentives, **I**nnovation and **O**utputs and was implemented in 2013 by Ofgem for gas and electricity transmission markets. RIIO was implemented for the electricity distribution market in 2015.



for the longer period is that it allows utilities to retain cost savings for a longer period and to make investments that have a longer payback period, incentivizing long-run infrastructure enhancement.

The Australian Energy Regulator (AER)<sup>6</sup> has adopted five-year control periods for utilities operating in their electricity transmission and distribution sectors, up to 2030<sup>7</sup>. The Essential Services Commission (ESC) is responsible for regulating water utilities in Victoria, Australia and the current control period generally spans five years (2018-2023).

In Jamaica and Barbados, the experience has been very similar to the regulators in the United Kingdom. The Office of Utility Regulation (OUR) in its last tariff review for the Jamaica Public Services Company (JPSCo) utilized a five-year price control for the period 2014-2019. In Barbados, the Fair Trading Commission (FTC) has proposed the continuation of its previous three-year price control period, which was implemented for telecommunication services provided by Cable and Wireless (Barbados). FTC has included an option to extend for a fourth year at the discretion of the FTC<sup>8</sup>.

There have been some exceptions to the perceived norm of three to five years. Ofgem's regime for offshore electricity transmission involved a competitive tender and allowed the successful tenderer a twenty-year revenue stream subject to some adjustments but no periodic review during that time. Additionally, independent gas transporters are subject to a ten-year price control period within some upper and lower limits. In the USA it is not unheard of to have ten and even twenty-year price controls in gas and electricity distribution. Similarly, Pakistan has also had a seven-year price control in electricity distribution.

---

<sup>6</sup> The AER is responsible for economic regulation of electricity transmission and distribution networks and gas transmission and distribution pipelines, in all Australian jurisdictions except Western Australia.

<sup>7</sup> <https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements>

<sup>8</sup> Fair Trading Commission, Consultation Paper: Review of the Price Cap Plan 2016. Published September 2020. [https://www.ftc.gov.bb/library/2020-09-16\\_pcp\\_consultation\\_plan\\_2016.pdf](https://www.ftc.gov.bb/library/2020-09-16_pcp_consultation_plan_2016.pdf)

## 4. RIC's Experience with a Five-Year Price Control

The RIC's regulatory duty entails setting price controls that allow the service provider to finance efficient investments, cover efficient operating costs and earn an appropriate return on investment whilst delivering specified outputs, inclusive of quality of service standards. The RIC had established a five-year control period for the electricity transmission and distribution sector for the period June 1, 2006 to May 31 2011. The RIC's position then was that the five-year control period provided adequate opportunity for the service provider to earn profit by reducing expenditure through efficiency improvements. In essence, it represented the RIC's commitment to the service provider that it could keep any gains that it made for five years<sup>9</sup>. Additionally, since the pricing framework is set for the duration of the control period, it can be argued that it reduces regulatory risks and provides built-in safeguards for reducing uncertainties.

The RIC continuously monitored T&TEC's performance *vis a vis* forecasted revenues and expenditure. For the period June 1, 2006 - May 31, 2011, T&TEC's actual expenditure exceeded forecast expenditure by approximately five percent (5%) and revenue collection was just about half a percent (0.5%) under the RIC allowed revenue requirements<sup>10</sup>. However, key reasons for increased expenditure included increases in employee costs, as a result of new salary agreements that came into effect during the period, increased contributions by T&TEC to the Pension Scheme and increased depreciation charges due a change in the accounting treatment of leases.

Overall the RIC considers that its forecasts over the first control period were reasonable and there was no cause to reopen the price controls that were in effect. T&TEC's financial performance improved over the period of the first price control and the length of the price control period posed no risks in this regard.

---

<sup>9</sup> This was reinforced by the efficiency carryover mechanism which was instituted as part of the determination as well.

<sup>10</sup> T&TEC did not take up the rates for residential customers at the start of the control period. Residential rates were increased in 2009 while Commercial and Industrial customers saw increases at the start of the control period.

## **5. Applicability of longer or shorter controls within the local context.**

Regulators generally agree that the longer a service provider is able to keep the benefits of outperformance the greater the incentive to achieve improvements and cost saving. Thus, the level of efficiency gains that are achieved may be greater and outcomes may be better. Longer periods also foster greater innovation on the part of service providers and a greater inclination “to think outside the box” when seeking solutions. Longer control periods also limit the scope for ex-post efficiency adjustment as the regulator commits to a particular regulatory regime for a longer period and thus reduces regulatory risk and uncertainty. Hence, many regulators are considering or have already moved to longer control periods.

Indeed, Ofgem has argued in favour of longer control periods and have implemented an eight-year review period quite recently. They maintained that while not all problems will be solved, service providers are likely to have a greater incentive to ensure that they do not undertake any action that can jeopardize their financial position given that a full review may only be scheduled once every eight or ten years (and hence their planning horizon is longer). The thinking is that by allowing utilities to keep the benefits of outperformance for a longer period that this spurs innovation. Additionally, it also reduces the cost and time associated with frequent comprehensive reviews.

A shorter control period facilitates a more adaptable regulatory regime and one that reduces the risk of the utility making windfall profits/losses. However, some regulators have observed that shorter control periods have led service providers to focus their efforts on improving performance within this period rather than over the longer term. Consequently, the benefits of long term planning could be lost, resulting in lower value for money. This is a very important consideration for electric and water utilities which are characterized by long-lived assets that together make up a network that is expected to provide continuous service to current and future customers.

While the above arguments may hold true in instances where the service provider is privately owned and controlled, the RIC’s own experience in regulating state-owned and controlled entities

has demonstrated that such utilities make little attempt to anticipate customer needs and to deliver value for money through innovative cost cutting efforts. Thus, the RIC is not inclined to believe that the benefits, in terms of innovation and value for money, anticipated by longer term controls will materialize in the local context under the current governance frameworks.

The RIC is also concerned that longer term controls also pose many of their own risks. For example, if outputs are not achieved and appropriate safeguards are not built into the regime then recourse/recovery could be delayed for a longer period. The RIC has also considered the impact of utility pricing regimes on the domestic economic and social climate. Given the near historical performance and projections for the domestic economic climate, the length of the control period should provide a level of certainty and stability for commercial and investment purposes. The RIC will examine the importance of conducting timely price reviews in a separate paper.

The RIC Act states that the principles for determining rates should be reviewed every five years or shorter intervals, if so prescribed by service provider licenses. There is some flexibility to utilize a control period that is shorter than five years, however, the current Act is rigid that the period of control should not exceed five years. Therefore, implementation of controls that are greater than five years will require major changes to the RIC's legislative and regulatory framework, thereby increasing the complexity of the regulatory regime.

## **6. Conclusion**

A regulator needs to strike a balance between providing appropriate incentives for the regulated utility and not creating too great a risk of excessive gains or losses which increases with the length of the price control period. The RIC believes that the forecasts made for the first regulatory control period were reasonable and the service provider's financial well-being was not jeopardised by the length of that price control period. Overall the RIC considers that a five-year price control period strikes an appropriate balance between risks and the ability to undertake costs savings. In fact, for strongly monopolistic sectors, a price control of at least five years is seen by most regulators as balancing the need to provide a sufficiently long period for service providers to identify and achieve efficiency savings, while not risking setting price controls that lead to windfall gains or losses for service providers and customers. Moreover, the RIC is constrained by its Act to a period of five years or shorter, therefore, at this time, it is not possible to utilize a period longer than five years. The RIC is of the view that a five-year price control remains the most suitable option for the sector at this time.

**The RIC seeks comments on the appropriate length of the next regulatory period.**