**Transmission Pricing** 

**Advisory Group** 

# Note on changes to statutory framework

Version 1: For discussion with TPAG

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**Note:** This paper has been prepared for discussion with TPAG. Content should not be interpreted as representing the views or policy of the Electricity Authority.

# **Contents**

1	Introduction	1
1.1	Purpose	1
1.2	Electricity Authority objective	1
1.3	Electricity Commission objectives and outcomes	1
2	Comparison of objective statements for Authority and Commission	2
3	Implications in TPM context	2
3.2	The Existing TPM	3
3.3	Developing Alternative TPM Options	3

### 1 Introduction

### 1.1 Purpose

- 1.1.1 This paper:
  - sets out the statutory objectives of the Electricity Authority (Authority) and of its predecessor the Electricity Commission (Commission);
  - discusses the key areas of similarity and difference between the two sets of objectives; and
  - briefly comments on the potential implications of these differences in the context of the transmission pricing methodology (TPM).
- 1.1.2 The paper does not give any definitive views and has been prepared to prompt discussion amongst TPAG members.

## 1.2 Electricity Authority objective

1.2.1 Section 15 of the Electricity Industry Act 2010 provides the Authority with a single statutory objective:

"To promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers".

1.2.2 Given that the Authority only came into existence on 1 November 2010, no track record of decision-making has yet been established to provide guidance on the exact meaning of this objective. However, the Authority has released a document ('Interpretation Statement') which sets out its interpretation of the statutory objective. This statement was released in draft form to stakeholders in November 2010 for comment, and was finalised in early February 2011. A copy of the final document is available at: http://www.ea.govt.nz/document/12803/download/about-us/documents-publications/foundation-documents/.

### 1.3 Electricity Commission objectives and outcomes

- 1.3.1 Section 172N<sup>1</sup> of the Electricity Act 1992 set out a number of statutory objectives and outcomes for the Commission. It stated that:
  - (1) The principal objectives of the Commission in relation to electricity are—
    - (a) to ensure that electricity is produced and delivered to all classes of consumers in an efficient, fair, reliable, and environmentally sustainable manner; and
    - (b) to promote and facilitate the efficient use of electricity.
  - (2) Consistent with those principal objectives, the Commission must seek to achieve, in relation to electricity, the following specific outcomes:
    - (a) energy and other resources are used efficiently:
    - (b) risks (including price risks) relating to security of supply are properly and efficiently managed:
    - (c) barriers to competition in the electricity industry are minimised for the long-term benefit of endusers:

Now repealed.

- (d) incentives for investment in generation, transmission, lines, energy efficiency, and demand-side management are maintained or enhanced and do not discriminate between public and private investment:
- (e) the full costs of producing and transporting each additional unit of electricity are signalled:
- (f) delivered electricity costs and prices are subject to sustained downward pressure:
- (g) the electricity sector contributes to achieving the Government's climate change objectives by minimising hydro spill, efficiently managing transmission and distribution losses and constraints, promoting demand-side management and energy efficiency, and removing barriers to investment in new generation technologies, renewables, and distributed generation.

# 2 Comparison of objective statements for Authority and Commission

- 2.1.1 While a comprehensive legal analysis of the two objective statements has not been undertaken<sup>2</sup>, a number of broad observations can be made:
  - the Commission's principal objectives and specific outcomes covered a broad range of issues. In particular, the Commission was required by its Act to consider the impact of its proposals on efficiency, fairness and the environmental sustainability<sup>3</sup>;
  - by contrast, the Authority's has a narrower statutory objective. It does not contain any specific references to fairness or environmental matters. Furthermore, the Authority interprets the objective to centre on efficiency considerations<sup>4</sup>, given the overall requirement for it to act in a way that is "for the long-term benefit of consumers"; and
  - the Authority's objective is framed at a high level and does not make reference to specific outcomes that the Authority must seek to achieve. In contrast, the Electricity Act 1992 required the Commission to seek to achieve a range of specific outcomes (e.g. minimise hydro spill, remove barriers to investment in renewables).

## 3 Implications in TPM context

- 3.1.1 The differences between the two sets of objectives raise questions about:
  - whether the existing TPM (developed under the Commission) is consistent with the Authority's objective; and
  - whether the alternative TPM options (developed under the Commission and now being taken forward by the Authority) are consistent with the Authority's objective.

<sup>&</sup>lt;sup>2</sup> For example, no analysis has been undertaken of the Court's interpretation of concepts referred to in the respective objective statements (e.g. "efficiency", "properly managed").

The Commission's objective also refers to reliability. The Commission interpreted this as seeking to achieve the *efficient* level of reliability, where marginal benefits of improved reliability equate to the marginal costs. The Authority appears to have adopted a similar view, so this does not appear to be a material area of difference.

For example, "the Authority interprets the phrase promoting competition in the electricity industry for the long-term benefit of consumers to mean: Exercising its functions in ways that facilitate or encourage increased competition in the markets for electricity and electricity-related services, taking into account long-term opportunities and incentives for efficient entry, exit, investment and innovation in those markets." (paragraph A30) and "The Authority interprets promoting reliable supply to mean exercising its functions to encourage efficient reliable supply" (paragraph A47).

**Transmission Pricing** 

Advisory Group

- 3.1.2 To form a definitive view on these issues would require a significant amount of analysis (e.g. reviewing all of the documentary record behind the Commission's decisions). The analysis would also be complicated by the fact that other changes have occurred through the period since the existing TPM was developed. For example, the HVDC upgrade underway would now be regarded as a sunk cost, but it was not sunk when the existing TPM was developed. This change could affect the static and dynamic efficiency benefits of different TPM options, regardless of the change in Statutory Objective.
- 3.1.3 Given the complexities that are involved, this paper does not seek to undertake a comprehensive analysis but instead focuses on some preliminary high level observations.
- 3.1.4 To the extent that any points of tension arise between the objectives in the TPM context, they are likely to stem from either:
  - the requirement on the Commission to consider fairness and environmental sustainability and the efficient use of electricity as a part of its principal objectives (considerations that are absent from the Authority's objective); or
  - the requirement on the Commission to seek to achieve one or more of the "specific outcomes" listed in 172N(2) of the Electricity Act 1992 (absent for the Authority) and with respect to the HVDC guidelines decision, the requirement to seek to achieve, consistent with the principal objectives, sustained downward pressure on prices..
- 3.1.5 As regards the specific outcomes, many of these relate to efficiency considerations and the remaining elements do not appear to have been major drivers for decisions in the TPM context.
- 3.1.6 In relation to the Commission's principal objectives, the key issue is the extent to which its decisions were shaped by fairness or environmental sustainability concerns, rather than efficiency considerations.

## 3.2 The Existing TPM

3.2.1 In reaching decisions on the existing TPM, efficiency was the most important factor. The other factors were considered and were addressed in consultation and decision papers<sup>5</sup>. Without reassessing the TPM against the current objective it is no possible to identify with any certainty variations that would have led to different outcomes. Areas where potential tension could arise among objectives are considered above.

### 3.3 Developing Alternative TPM Options

- 3.3.1 In developing alternative TPM options, again it appears that efficiency concerns have been the major driver for the Commission. For example, the Commission engaged Frontier Economics early in the process to prepare a paper on "Identification of High Level Options and Filtering Criteria". While this paper sets out the Commission's objectives, the discussion is framed exclusively in efficiency terms. This paper appears to have been an important foundation document in the development of alternative TPMs.
- 3.3.2 It is important to note that even if Parliament had given both organisations statutory objectives with a sole focus on efficiency, differences in TPM might still arise in developing a preferred TPM context. These differences could stem from:

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<sup>&</sup>lt;sup>5</sup> For example, in the Explanatory paper – Commission' final decision – HVDC transmission pricing methodology [March 2006] and Transmission pricing methodology consultation paper [1 November 2006] and Transmission pricing methodology – summary of submissions and provisional response paper [11 April 2007]

- inherent uncertainties in some areas of analysis, such as estimating the size of locational signalling benefits. This can introduce a degree of subjective judgement; and
- the potential need to make trade-offs between different forms of efficiency. In particular, trade-offs might arise between shorter term static effects<sup>6</sup> and longer term dynamic effects<sup>7</sup>. In this context, it is useful to note that the Authority has stated that "in regard to long-term benefit, the Authority considers that its primary focus is to promote dynamic efficiency in the electricity industry"<sup>8</sup>.
- 3.3.3 Examining the alternative TPM options developed by the Commission (and now being taken forward by the Authority) it is worth noting that:
  - The analysis of the "High Level Options" has focussed on the economic benefits of location-based transmission prices this is an efficiency criterion;
  - The analysis of options that could provide incentives to avoid/defer reliability investments has focussed on economic benefits of transmission prices this is an efficiency criterion;
  - The analysis of options that might alter the mechanism for allocating HVDC charges to SI generators has focussed on competition for new investment this is an efficiency criterion;
  - The analysis of options that might alter the pricing for Static Reactive Compensation has focussed on lowering the cost of providing SRC this is an efficiency criterion.
- 3.3.4 It therefore appears that the development of alternative TPM options by the Commission has been motivated by efficiency outcomes. This suggests that the Authority would have developed similar alternative TPM options while applying its statutory objective.

<sup>&</sup>lt;sup>6</sup> For example recovering sunk costs with minimal distortion to *dispatch* decisions.

For example avoiding distortions to generator *investment* decisions.

<sup>&</sup>lt;sup>8</sup> Paragraph A12, "Interpretation of the Authority's statutory objective", Electricity Authority, February 2011.