Decision-making and economic framework for distribution pricing

Decisions and reasons

5 March 2013

Introduction

1 The Electricity Authority (Authority) is an independent Crown entity charged with promoting competition in, reliable supply by, and the efficient operation of the electricity industry for the long-term benefit of consumers (the statutory objective).[1]

2 The Authority may set pricing methodologies for distributors.[2] A pricing methodology determines how a distributor sets the prices of individual goods or services, or classes of goods or services, and includes the approach for setting prices for different customer groups. The Commerce Commission is responsible for determining the revenue that distributors may recover for supplying distribution services, and quality standards, according to Part 4 of the Commerce Act 1986.[3]

3 The Electricity Industry Participation Code 2010 (Code) does not prescribe a distribution pricing methodology. The Authority's predecessor, the Electricity Commission, adopted a light-handed approach to regulation of distributor pricing by introducing *voluntary* pricing principles (principles), and information disclosure guidelines (guidelines) in October 2010.[4] The principles and guidelines are attached at Appendix A.[5] The Electricity Commission specified that regular reviews of distributors' pricing approaches should occur to determine the extent to which distributors are using efficient and pro-competitive pricing structures. Such reviews were expected to:

(a) raise awareness among distributors and highlight examples of best practice

(b) create a competitive tension among distributors by encouraging them to score well relative to their peers

(c) provide a mechanism for the Electricity Commission (now the Authority) to make informed decisions on whether the voluntary approach is achieving desired outcomes.

4 The Authority is following the approach established by the Electricity Commission and will review the pricing methodologies and practises of distributors to determine the extent to which they are consistent with the principles and guidelines and to determine the extent to which they are consistent with promoting the

[1] Electricity Industry Act 2010, section 15.

[2] Electricity Industry Act 2010, section 32(2)(b).

[3] Some consumer owned distributors have been exempted from Commerce Commission Price Quality regulation.

[4] Electricity Commission, October 2010, Distribution Pricing Principles and Information Disclosure Guidelines, available at, http://www.ea.govt.nz/dmsdocument/1944.

[5] Note: the Commerce Commission incorporated the Authority's information disclosure guidelines into the Electricity Distribution Information Disclosure Guidelines Determination 2012 that establishes the approach to information disclosure for electricity distribution businesses. Refer, http://www.comcom.govt.nz/assets/Electricity/Information-Disclosure/Part-4-Review/Electricity-Distribution-ID-Determination-1-October-2012-SIGNED-2.PDF.

statutory objective. However, in the interim the Authority decided to develop a decision-making and economic framework for distribution pricing (economic framework) to establish a framework for ensuring efficient allocation in distribution pricing. This approach ensures consistency with transmission pricing. The Authority developed a decision-making and economic framework for *transmission* pricing which was finalised on 7 May 2012.

5 The economic framework was released in May 2012 for consultation. It received 16 submissions and 3 cross-submissions.[6] A summary of submissions is available on the Authority's website at http://www.ea.govt.nz/our-work/programmes/transmission-work/principles-or-model-approaches-to-distribution-pricing/.

6 This paper sets out the Authority's decision to adopt the economic framework for distribution pricing, describes the economic framework, provides further explanation of how the Authority will apply the economic framework, and provides the Authority's response to the main issues raised in submissions.

Decision on the decision-making and economic framework for distribution pricing

7 The Authority has decided to adopt a decision-making and economic framework for distribution pricing (the economic framework), involving:

(a) a decision-making component that reflects the Authority's interpretation of its statutory objective. This interpretation puts a focus for making decisions about distribution pricing on promoting efficiency in the electricity industry for the long-term benefit of consumers

(b) an economic component that establishes the Authority's preferred hierarchy of pricing approaches for distribution pricing. The economic component supports the objective of promoting efficiency in the electricity industry for the long-term benefit of consumers. In order of preference, the hierarchy of pricing approaches consists of:

(i) market or market-like charges

(ii) exacerbators-pay charges

(iii) beneficiaries-pay charges

(iv) alternative charging options.

8 A graphical representation of the economic framework is attached as Appendix B of this paper. The diagram illustrates how the Authority will make decisions about what represents an efficient pricing approach. An approach or package of approaches will need to be efficient, practicable to implement, comply with the Code amendment principles[7] (CAPs) and recover the costs of providing distribution services.

9 The Authority has made no change to the economic framework proposed in the May 2012 consultation paper. Although many submitters opposed the introduction of the economic framework, the Authority considers that the economic framework provides a comprehensive and durable basis for the Authority to make decisions that result in efficient distribution pricing.

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[6] Electricity Authority, May 2012, Decision-making and economic framework for distribution pricing methodology review consultation paper, available at http://www.ea.govt.nz/our-work/consultations/transmission/decision-making-economic-framework-distribution.

[7] The Authority's Consultation Charter outlines the Code amendment principles (CAPs) which the Authority will adhere to when considering Code amendments. The Charter is available at: http://www.ea.govt.nz/document/5133/download/about-us/documents-publications/foundation-documents/.

10 The Authority does not intend using the economic framework as ‘criteria’ for assessing the extent to which a pricing methodology aligns with the principles. Following feedback from some distributors on the consultation paper *Criteria for assessing alignment against the Information Disclosure Guidelines and Pricing Principles* dated 5 September 2011, the Authority’s 7 May 2012 consultation paper proposed that the economic framework could be used to provide further guidance, or ‘assessment criteria’, on how distributors could align their pricing methodologies with the principles. Most submitters did not support the economic framework being used as ‘assessment criteria’. For example, the Electricity Networks Association stated that the hierarchy does not add clarity or insight to the principles.

11 The economic framework will assist with decisions about whether a distribution pricing methodology, and associated pricing approaches and methods, are efficient, given a particular set of network circumstances, without the need for inflexible evaluation criteria.

Approach to review of distributors’ pricing methodologies

12 The Authority will shortly start the initial review of distributors’ pricing methodologies. The review will provide information about:

(a) the information that is disclosed by each distributor about its pricing methodology

(b) the extent to which each distributor’s methodology aligns with the principles

(c) whether a distributor’s pricing approaches and methods are efficient or inefficient, given a particular set of network circumstances.

13 The Authority will use the review outcomes to assess whether the voluntary pricing principles are resulting in distributors using efficient and pro-competitive pricing structures or whether alternative arrangements are needed to achieve efficient pricing methodologies. The Authority’s decisions about distribution pricing and the principles and guidelines will be informed by the statutory objective and the economic framework.

Decision-making and economic framework for distribution pricing

14 The Authority has established a decision-making and economic framework to provide a comprehensive and durable basis for making decisions that result in efficient distribution pricing arrangements. In particular, the Authority wants to clearly set out how its interpretation of the statutory objective underpins decisions about distribution pricing and how the Authority will determine the appropriate level of regulation of distributors’ pricing methodologies.

Decision-making component

15 The Authority considers that distribution pricing should focus on overall efficiency of the electricity industry for the long-term benefit of consumers. This reflects the Authority’s interpretation of its statutory objective and recognises that efficiency, and reliability, in the electricity industry involves facilitating:

(a) efficient investment in the electricity industry through providing incentives so that the right investments occur at the right time and are in the right place. These investments can be in distribution networks, the transmission grid, generation (including distributed generation), or in demand-side management (ie by electricity consumers)

(b) efficient operation of distribution networks, the transmission grid, generation (including distributed generation), and demand-side management. This means providing incentives so that the day-to-day operation of distribution, transmission, generation, and demand-side infrastructure involves an efficient trade-off between reliability and cost.

16 The Authority's CAPs provide guidance and structure about applying the statutory objective when considering amendments to the Code and how potential amendments to the Code should be assessed when quantitative cost-benefit analysis yields inconclusive results.

17 The decision-making component and the CAPs are complementary – the decision-making component provides additional guidance about how the statutory objective should inform the development and approval of the Authority's distribution pricing arrangements. The Authority will continue to apply the CAPs when considering any amendment to the Code in relation to distribution pricing.

Economic component

18 The Authority has identified a hierarchy of charging approaches that will be used to identify and assess the efficiency of charging options for distribution pricing. The hierarchy reflects the fundamental principle that prices are generally determined based on the private benefits that parties derive from a service. The hierarchy of charging approaches is, in order of preference:

(a) market or market-like charges

(b) exacerbators-pay charges

(c) beneficiaries-pay charges

(d) alternative charging options.

19 In applying the hierarchy the Authority will seek to ensure that distribution pricing arrangements lead to efficient and practicable outcomes, and enable distributors to recover their maximum allowable revenue.[8] The Authority recognises that distribution costs may be recovered through a combination of two or more charging approaches set out in the hierarchy.

Market or market-like (market-based) charges

20 The Authority's first preference is for market-based charging approaches for determining distribution prices. A market-based approach involves charges established by the interaction of willing buyers and willing sellers in a workably competitive market (ie a market approach), or charges that are likely to mimic or replicate the pricing outcomes achieved by a workably competitive market (ie market-like).

21 A market approach is efficient because buyers and sellers, in a workably competitive market, can seek to achieve efficiency gains whenever and wherever possible. Prices set through a market approach are agreed between parties that willingly participate in the transaction or between parties that have agreed to the process and to a formula for determining prices. Prices will not exceed the private benefit of the party to the transaction because a willing buyer would not be prepared to complete the transaction if prices exceed its private benefit. The main reasons a market option may not be a viable or efficient approach are: there is not workable competition, there are divergences between private and social costs and benefits (ie there are externalities), or there is potential for parties to free-ride (ie opportunities for parties to enjoy the benefits without paying).

22 A market-like approach may be appropriate where there is a market failure and workable competition is not possible. A market-like approach involves setting prices through a method(s) that seeks to replicate what would happen in a workably competitive market by identifying the parties to the transaction and each party's private benefit from the transaction. Prices should not exceed the private benefits of the parties to the transaction.

[8] Distributors' maximum allowable revenues for regulated businesses are set by the Commerce Commission under part 4 of the Commerce Act 1986.

Administrative approaches

23 An administrative approach to charging is preferred when a market-based approach is inefficient or impracticable or does not fully recover all the costs of distribution services. The Authority's preference for administrative approaches is:

(a) exacerbators pay. An exacerbator is a party whose action or inaction led to costs on others (ie an externality) and who could change its behaviour if they faced the cost of that action or inaction

(b) beneficiaries pay. A beneficiary is a party for whom the private benefits of distribution services exceed its share of the costs and who would be willing to pay for a portion of the service if that were the only means of acquiring the benefit

(c) alternative charging options. These are approaches where the costs are recovered from the users of distribution services in a way that least distorts use or investment, for example, a low-rate, broad-based charge.

Exacerbators pay

24 An exacerbator is a party whose actions or inactions lead to distribution costs and that party does not face the full, or any, cost of that action or inaction. In a distribution context, an exacerbators-pay approach would be used to address market failures resulting from externalities where distribution costs are not met by the exacerbator but are instead borne by other distribution customers.

25 The Authority considers that the exacerbators-pay approach will promote efficiency by making the party or parties whose actions or inactions lead to a particular distribution cost responsible for mitigating that cost. The charge that would apply to exacerbators would reflect the additional cost arising from the exacerbators' actions or inactions, such as the cost of augmenting the network over and above any already planned investments.

26 An example of an exacerbator on a distribution network is a commercial enterprise that uses low power factor equipment that results in excessive draw of reactive power from the network. This can require network investment to cope with network constraints, because, simply put, reactive power reduces the amount of real or useful power that can travel across a line. An exacerbators-pay charge reflecting the cost of the additional network investment would be efficient because other network customers would not face the costs of additional network investment, while the exacerbator might choose to use different equipment if it faced the cost of network investment needed due to its action.[9]

27 Implementing an exacerbators-pay charge relies on being able to identify exacerbators and on being able to set the charges at an appropriate level. The Authority recognises that there may be situations where the same party will be an exacerbator and a beneficiary. In that case, an exacerbators-pay charging approach should be preferred, provided this is efficient.

Beneficiaries pay

28 The Authority considers that the beneficiaries-pay approach will promote efficiency by requiring the party or parties for whom the private benefits of the investment exceed the costs to pay for that investment. A beneficiaries-pay charge is most likely to be required where the parties to a transaction will not self-identify or have the ability to free-ride or hold out, thereby making market-based approaches either not efficient or impractical (for example, due to transaction costs). The prices that apply to beneficiaries should reflect the lesser of the charge that will fully recover the costs of the distribution network being paid for by the beneficiaries or the anticipated (ex-ante) value to them of the services provided by the network.

9 As an example, Vector Limited, is applying a power factor charge, which appears to be an exacerbators-pay charge, from 1 April 2013, refer http://vector.co.nz/sites/vector.co.nz/files/FINAL_Vector_Electricity_2013_HV_customer_numbers.pdf.

29 The beneficiaries-pay approach involves using a method or methods to determine the parties that benefit from a distribution service, and each party's private benefit. Methods that are used for identifying beneficiaries/private benefit include economic models, flow-tracing or location-based approaches.

30 Implementing a beneficiaries-pay charge relies on being able to identify beneficiaries and on being able to set the charges at an appropriate level. Determining the extent to which a party benefits from an investment also requires considering the costs of any alternatives available because a party's willingness to pay should not exceed the cost of its next best alternative. The Authority recognises that a beneficiaries-pay charge may not be practicable if there are no practicable methods for identifying beneficiaries and their private benefit. The benefits of improved investment efficiency and durability can be compromised if beneficiaries cannot be cost-effectively and clearly identified.

Alternative charging options

31 The Authority considers that an alternative charging option may be needed when a market-based approach or exacerbators-pay and beneficiaries-pay approaches are not efficient, practicable or do not recover the full costs of distribution services. The Authority considers that the key principles for identifying an alternative charging option that is efficient are to:

(a) minimise, to the extent practicable, distortions from the efficient level in use of the network resulting from the imposition of the charge

(b) minimise, to the extent practicable, any distortion in network-related investment from the efficient level resulting from the imposition of the charge

(c) ensure the costs of providing the distribution network are recovered, consistent with the requirements of the Commerce Commission under Part 4 of the Commerce Act 1986.

32 An example of an alternative charging option is to use a low-rate, broad-based charge to recover the costs of maintaining, upgrading and extending the distribution network from the largest number of parties. This approach is commonly referred to as "postage stamp" pricing.

Clarification of the decision-making and economic framework

33 The Authority has not made any changes to the economic framework proposed in the May 2012 consultation paper. The Authority considers that the economic framework sets out how the statutory objective will underpin decisions about distribution pricing, including the matters the Authority might consider in deciding whether a pricing approach is efficient.

34 Many submitters did not support the Authority introducing the economic framework. This section of the paper is intended to respond to concerns raised by submitters by clarifying the Authority's intended approach to using the economic framework.

35 The main concerns raised by submitters were:

(a) The Authority has not followed a robust decision-making process and there is no need to introduce the economic framework. The Authority has not established that the economic framework responds to a particular 'problem' or that the current principles and guidelines approach is inadequate. No cost-benefit analysis was provided to support introducing the economic framework

(b) there are inherent differences between transmission and distribution which means that the economic framework for transmission pricing is not suitable for distribution pricing

(c) the economic framework and hierarchy of pricing approaches adds unnecessary complexity to distribution pricing arrangements, and that market-based, exacerbators-pay and beneficiaries-pay charging approaches are unworkable or impractical to implement

(d) the Authority should allow distributors time to review and revise their pricing methodologies to align with any new requirements, such as the economic framework, before any review of distributors' pricing methodologies.

Process for deciding on a regulatory approach to distribution pricing

The Authority needs to follow a robust decision-making process

36 Some submitters suggested that the Authority has not followed a robust decision-making process in developing the arrangements for distribution pricing. Submitter concerns include a 'piecemeal' approach to regulatory development, and the lack of a cost-benefit analysis to support introduction of the economic framework.

37 The Authority considers that introducing the economic framework is consistent with good administrative decision-making practices, in particular by providing further clarity about how the statutory objective will inform decisions about distribution pricing. The Authority understands submitter concerns about a 'piece-meal' approach to development of distributor pricing arrangements. Ideally, the economic framework would have been in place prior to the development of initiatives for regulation of distribution pricing, such as the guidelines and principles. However, the current arrangements were developed under a different regulatory framework with different objectives. The Authority considers that the economic framework provides clarity about decision-making for distribution pricing under the (new) statutory objective.

The Authority should establish that current pricing arrangements are inadequate before replacing them

38 Many submitters stated that the Authority has not established that the current principles and guidelines are inadequate, and that the need for change should be established before any new arrangements (ie the economic framework) are introduced. Some submitters suggested alternative approaches to confirming the framework such as amending the principles to refer to the statutory objective or ranking the principles according to the hierarchy.

39 The Authority will use the economic framework to guide decisions about distribution pricing, including about whether the principles and guidelines are achieving outcomes consistent with the long-term benefit of consumers.

40 The Authority does not yet have a firm view on the adequacy or otherwise of the principles and guidelines, but notes that regular reviews of distributors' pricing methodologies were intended to show whether the voluntary principles-based approach adopted by the Electricity Commission is promoting the use of efficient and pro-competitive pricing structures.

41 The Authority intends starting the review of distributor pricing methodologies now that the economic framework and approach to making decisions about distribution pricing is confirmed. The Authority expects the review to provide information about whether the current voluntary principles-based approach is delivering efficiency or whether an alternative approach is required to ensure that outcomes consistent with the Authority's statutory objective are delivered.

42 Should the review indicate that current arrangements are not adequate and a new approach is preferable, the Authority will adopt the standard code/market facilitation development process, which includes stakeholder consultation.

Differences between transmission and distribution

43 Although one submitter pointed out that the economic concepts that apply to transmission and distribution pricing were fundamentally the same, many submitters argued that due to differences between electricity transmission and electricity distribution, the economic framework that is workable for transmission pricing is not relevant for distribution pricing.

44 The economic framework is an interpretation of the Authority's statutory objective and is intended to assist the Authority to make decisions about distribution pricing. In particular, the economic framework will assist the Authority to make decisions about whether distribution pricing arrangements promote pro-competitive and efficient pricing structures.

45 The Authority considers the economic framework that was adopted for electricity transmission is equally applicable to electricity distribution as the Authority's focus for both transmission pricing and distribution pricing is overall efficiency.

46 Furthermore, the economic framework is not intended to be overly prescriptive. Rather the economic framework provides guidance on what approaches might be efficient via a hierarchy of preferred approaches. The Authority is not currently prescribing a distribution pricing methodology or requiring a particular approach be used. The Authority recognises that distributors use a range of possible approaches. For example, the economic framework provides that if a market-based or market-like approach, exacerbators-pay, or beneficiaries-pay approach do not lead to an efficient outcome, under the economic framework, an alternative approach, such as postage-stamp charging, would be employed.

Cost-benefit analysis

47 The Authority did not undertake a cost-benefit analysis of the introduction of the economic framework. This is because the economic framework is a decision-making tool for the Authority, and does not require changes to the Code and does not impose any new obligations on any party that were not already in place.

Decision-making component

Interpretation of the statutory objective

48 Most submitters agreed with the Authority's interpretation of its statutory objective. However, some submitters suggested that wealth transfers should be taken into account in some circumstances where the impacts of wealth transfers cause inefficiencies or outweigh efficiency gains. In addition, one submitter noted that focusing on overall economic efficiency may risk failing to take into account the impacts on different consumer groups.

49 The Authority's interpretation of its statutory objective takes a net-benefits approach to determining efficiency gains, but also accepts that efficiency effects arising from wealth transfers should be considered.[10] Further, the Authority has indicated that 'if wealth transfers seriously undermine confidence in the pricing process or in the electricity industry more generally, then that can inhibit efficient entry and investment decisions and these dynamic efficiency effects should be taken into account when evaluating proposals.[11] This may be relevant to decisions about distribution pricing.

[10] Electricity Authority, Interpretation of Statutory Objective, paragraph A25. Available at: http://www.ea.govt.nz/document/12803/download/about-us/documents-publications/foundation-documents/.

[11] Ibid. paragraph 31(b).

Economic component

Using the hierarchy of approaches as assessment criteria is not supported

50 The Authority does not intend using the economic framework as 'criteria' for assessing the extent to which a pricing methodology aligns with the principles.

51 Distributors involved in the 2011 assessment of selected distributors alignment against the guidelines and consideration of the principles gave feedback that the Authority should provide additional guidance or 'criteria' about how they might align with the principles and guidelines.[12] The May 2011 consultation paper proposed that the economic framework could be used as 'assessment criteria' on how distributors could align their pricing methodologies with the principles.

52 Most submitters did not support this approach. The ENA stated that the hierarchy is not useful as criteria and does not add clarity or insight to the principles. The ENA also noted that the review should be undertaken bearing in mind guidance prevailing at the time distributors' pricing methodologies were developed. Vector stated that the economic framework should only be used to assess the principles, not to assess alignment with the principles. TrustPower suggested the Authority assess distribution pricing based on overall efficiency rather than using detailed criteria. On the other hand, Powerco supported having criteria to help understand how the Authority will interpret the principles.

53 The Authority has decided not to introduce 'assessment criteria' for the principles or guidelines – the criteria that were consulted on in September 2011 have not been confirmed. The Authority will reconsider the need for providing distributors with further guidance about how to align with the principles, along with alternative approaches, based on information obtained through the upcoming review.

Increasing complexity

54 Submitters argued that introduction of the economic framework will create unnecessary complexity around the development of distributors' pricing methodologies by introducing new requirements which are additional to existing pricing principles, information disclosure guidelines, and other distribution pricing related regulations such as the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004.

55 The Authority notes that the economic framework is intended as a decision-making tool for the Authority to assist decisions about distribution pricing, including whether a pricing methodology, and associated pricing approaches and methods, are efficient, given a particular set of network circumstances. The economic framework does not impose any requirements on any participant that do not already exist.

Hierarchy of preferred approaches

56 Several submitters consider that the hierarchy of pricing approaches is not practical to implement, particularly the market-based and exacerbator pays approaches. Many submitters consider that a market-based approach is not practical for the monopoly distribution services market, except in the case of very large loads. One submitter defines the identification of exacerbators as a 'triumph of vocabulary over common sense'[13] and many submitters advise that it would be very difficult to measure exacerbators. Other submitters recognise the exacerbator approach is viable under certain situations, such as for irrigation.

57 The Authority notes that the economic framework does not require that all approaches in the hierarchy are workable in all situations. Rather, the Authority anticipates that a pricing methodology will comprise a package of pricing approaches that are, individually and collectively, efficient, practicable to implement,

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12 Information about the 2011 assessment is available on the Authority's website at, http://www.ea.govt.nz/our-work/consultations/retail/criteria-for-assessing-alignment-information-disclosure-guidelines/#background.

13 Orion, Submission on Framework for Distribution Pricing Review June 2012, 25 June 2012, page 4.

comply with the CAPs and recover the full costs of distribution services. The Authority expects that distributors will consider a range of pricing options, with market-based approaches being preferred to administrative approaches, according to the hierarchy. The Authority recognises that the framework will likely mean that costs are recovered using two or more of market-based, exacerbators-pay, beneficiaries-pay and alternative charging options, with each approach recovering a proportion of the total costs of distribution services up to the point that this is efficient.

Other pricing regulations are impediments to the framework

58 Some submitters recommended that the Authority consider the implications of other regulatory arrangements affecting distribution pricing. Submitters highlighted inconsistencies between the economic framework and other regulatory arrangements, such as:

(a) Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004

(b) provisions relating to connection of distributed generation in Part 6 of the Code

(c) the potential under section 113 of the Electricity Industry Act 2010 for the Government to make regulations about tariffs and other consumer issues, in particular, to regulate the rate of change in the prices charged by distributors to rural consumers on a network as compared with the rate of change in the prices charged to comparable non-rural consumers on the same network

(d) the Commerce Commission price quality regulation applying to some distributors.

59 The economic framework is intended as a decision-making tool to guide decisions by the Authority about whether distribution pricing arrangements are efficient and are promoting a long-term benefit to consumers. The Authority notes that decisions about distribution pricing are also influenced by other policy settings affecting distributors' pricing methodologies and practices.

Timing of introduction of economic framework

60 A number of submitters requested that distributors be provided with sufficient time from which to implement the economic framework before the Authority undertakes any review of pricing methodologies. One submitter advised that retailers would not be in a position to respond to distributor price changes until at least April 2014. Another submitter advised that implementation of the economic framework might result in a price shock in 2014.

61 The Authority considers that the confirmation of the framework does not impose any additional obligations on participants that do not already exist under the Electricity Industry Act 2010 and Code. If changes to existing distributor pricing arrangements are seen to be required, the Authority will address these changes in a separate process whereby participants will be provided with the opportunity to communicate their views via a consultation process.

Appendix A - Pricing principles and information disclosure guidelines

Pricing principles

(a)	Prices are to signal the economic costs of service provision, by: (i) being subsidy free (equal to or greater than incremental costs, and less than or equal to standalone costs), except where subsidies arise from compliance with legislation and/or other regulation; (ii) having regard, to the extent practicable, to the level of available service capacity; and (iii) signalling, to the extent practicable, the impact of additional usage on future investment costs.
(b)	Where prices based on 'efficient' incremental costs would under-recover allowed revenues, the shortfall should be made up by setting prices in a manner that has regard to consumers' demand responsiveness, to the extent practicable.
(c)	Provided that prices satisfy (a) above, prices should be responsive to the requirements and circumstances of stakeholders in order to: (i) discourage uneconomic bypass; (ii) allow for negotiation to better reflect the economic value of services and enable stakeholders to make price/quality trade-offs or non-standard arrangements for services; and (iii) where network economics warrant, and to the extent practicable, encourage investment in transmission and distribution alternatives (eg, distributed generation or demand response) and technology innovation.
(d)	Development of prices should be transparent, promote price stability and certainty for stakeholders, and changes to prices should have regard to the impact on stakeholders.
(e)	Development of prices should have regard to the impact of transaction costs on retailers, consumers and other stakeholders and should be economically equivalent across retailers.

Information disclosure guidelines

(a)	Prices should be based on a well-defined, clearly explained and published methodology, with any material revisions to the methodology notified and clearly marked.
(b)	The pricing methodology disclosed should demonstrate: (i) how the methodology links to the pricing principles and any non-compliance; (ii) the rationale for consumer groupings and the method for determining the allocation of consumers to the consumer groupings; (iii) quantification of key components of costs and revenues; (iv) an explanation of the cost allocation methodology and the rationale for the allocation to each consumer grouping; (v) an explanation of the derivation of the tariffs to be charged to each consumer group and the rationale for the tariff design; and (vi) pricing arrangements that will be used to share the value of any deferral of investment in distribution and transmission assets, with the investors in alternatives such as distributed generation or load management, where alternatives are practicable and where network economics warrant.
(c)	The pricing methodology should: (i) employ industry standard terminology, where possible; and (ii) where a change to the previous pricing methodology is implemented, describe the impact on consumer classes and the transition arrangements implemented to introduce the new methodology.

Appendix B - Flowchart to describe the framework

Decision-making and economic framework for transmission pricing