Ausgrid submission to AER
Connection charge guidelines consultation paper

5 August 2011

Ausgrid submission

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1 Introduction

Ausgrid is pleased to make this submission in response to the Australian Energy Regulator's (AER) Consultation Paper on *Issues and AER's preliminary positions - Connection charge guidelines: for accessing the electricity distribution network* (consultation paper). In addition to the issues raised in the consultation paper, our comments incorporate matters discussed at the AER's public forum on 11 July 2011. We also refer the AER to our response to the AER's information request for the development of a national connection charge guidelines under the new Chapter 5A (Electricity connection for retail customers) of the National Electricity Rules (Chapter 5A) dated 15 April 2011.

The Ministerial Council on Energy (MCE) endorsed new Chapter 5A forms part of the reforms aimed at achieving a national regulatory framework for electricity distribution and retail. The AER is required to develop and publish connection charge guidelines to codify how Electricity Distribution Network Service Providers (DNSPs) should charge new electricity customers for connecting to their networks. The AER guidelines are subject to the principles set out in Chapter 5A.

This submission is set out in the following structure:

- A high level summary of our key concerns
- Description of the contestable arrangements in New South Wales (NSW)
- Our understanding of the requirements under Chapter 5A
- Response to specific questions raised by the AER.

Developing the framework for connection charges in light of NSW contestability arrangements will require further work and consultation between NSW DNSPs and the AER. We would be pleased to meet with the AER to discuss any aspect of our submission in more detail.

2 Summary of key concerns

The AER's consultation paper sets out its preliminary view of the content of connection charge guidelines according to the principles provided in Chapter 5A of the Rules. The AER has provided a view as to how DNSPs may charge for connection services.

From the outset, we consider that the AER has taken a narrow and prescriptive approach to interpreting the requirements under Chapter 5A. This prescriptive approach is not appropriate at this early stage of implementing the National Energy Customer Framework (NECF) given the differences in the jurisdictional arrangements for connection charges. The AER's rigid approach has resulted in a direction that is not applicable to Ausgrid which operates in a fully contestable connection services market.

The key features of the AER's proposed approach include:

- A set of design criteria based on its interpretation of the Chapter 5A requirements
- A method for determining capital contribution – called the cost-revenue-test (and allowing a pre-calculated rate for basic and some standard connection offers for customers within the same class)
- Setting a threshold for determining which customers pay augmentation costs
- Setting a pre-determined per unit rate for shared augmentation costs.

The AER consultation paper contains a presumption that the DNSP will be constructing or will have some control over the connection works other than standard setting, certification and compliance. This is not the case in NSW where, as the AER is aware, there is a fully contestable market for constructing connection assets which is supported by an accreditation scheme for independent service providers.

The AER's presumption that the DNSP will undertake the connection and augmentation works reflects the approach taken in Chapter 5A. We draw your attention to:

- clause 5A.F.6 - which states that a DNSP must use its best endeavours to ensure that connection work is carried out within the applicable time limits fixed by the relevant provisions of the connection contract. This is not applicable under the NSW contestability arrangements because where a customer has engaged an accredited service provider the DNSP is not responsible for building the connection asset.

- clause 5A.E.4 payment of connection charges - which presumes that the DNSP will receive payment for a connection service. This is not the case under a fully contestable market where the customer pays the accredited service provider selected to undertake the works.

- Chapter 5A Schedule 5A .1 contains minimum content requirements for connection contracts which presumes that the DNSP will undertake the construction of the connection assets. This is not relevant in NSW.

For the most part, the AER's approach set out in the consultation paper does not apply to the circumstances under the NSW jurisdiction's full contestability arrangements for connection services. In particular, AER's cost-revenue-test is not able to be applied in NSW as the DNSP does not incur costs or receive any revenue for the connection assets. We note that at the public forum, the AER presented that in a contestable and competitive market (such as NSW) construction work costs will be outside the DNSP's connection offer. Therefore, the cost-revenue-test will not include construction costs.[1]

Overall, we have serious concerns about the AER's approach as set out in the consultation paper. In summary, they are:

- The AER consultation paper does not adequately address the application of the connection charge principles to the circumstances that exist in NSW. As currently drafted, the AER consultation paper does not provide Ausgrid with any relevant guidance on the applicability of Chapter 5A connection charge principles to the circumstances in NSW.

- In order to address the requirements under Chapter 5A, the AER needs to provide guidance that connection charges under contestability are competitively neutral. In this regard we refer the AER to the ring-fencing arrangements in NSW and the accreditation scheme for service providers currently administered by the NSW Department of Trade and Investment, Regional Infrastructure and Services (DTIRIS).

- The Rules clearly provide the AER with flexibility to take into consideration the specific arrangements in the different jurisdictions. We ask that the AER reconsider its approach in developing the connection charge guidelines. Specifically, we consider that the guidelines need to be more principle based and allow for the specific policies in each of the jurisdictions rather than adopt the one-size-fits-all approach as the AER has proposed.

- For example, the AER's proposal to establish predetermined thresholds in the connection guidelines is too prescriptive. A principles based approach, such as using the design criteria, would guide DNSPs in preparing connection policies that suited their circumstances.

- The AER has not satisfactorily considered the interaction between the pricing principles in Chapter 6 of the Rules and the application of the augmentation threshold.

- The AER design criteria neglects to include efficiency (allocative and dynamic) as a criterion. Given that the National Energy Retail Objective and National Electricity Objective are focused on achieving economic efficiency this is a serious oversight.

- The AER proposed approach of charging predetermined unit costs may be considered more equitable but it does not provide economic signals. The approach does not signal to customers a reflection of the capacity on the network nor does it signal actual future costs. We consider that DNSPs should have more flexibility in determining the most appropriate means for signalling future shared network costs rather than using a predetermined approach set by the AER. A more flexible approach is consistent with the principles in Chapter 5A.

We consider that the connection charge guidelines need to be more flexible and less prescriptive to accommodate the different arrangements in each of the jurisdictions. The implementation of the NECF is at the early stages and we consider that more a flexible approach that allows for different arrangements in each of the jurisdictions aligns better with the principles in Chapter 5A.

[1] Copy of presentation is at http://www.aer.gov.au/content/index.phtml/itemId/746777

Further, the direction taken by the AER in the consultation paper will result in high transitional costs across the participating jurisdictions but the AER has not explained what the benefits are of its approach. The high transitional costs resulting from the AER's proposed approach will make it more difficult and costly to make changes to connection arrangements should the MCE seek to encourage full contestability for connection services in the future.

The AER's approach set out in the consultation paper has no relevance to the circumstances in NSW. On this basis, our position is that the current NSW arrangements remain in place unless the AER makes significant changes to its approach.

The next section provides a description of the contestability arrangements in NSW.

3 NSW contestability arrangements

Our first issue concerns the extent to which the matters discussed in the AER's consultation paper are applicable to the circumstances in NSW. NSW has a fully contestable market for customer connection services supported by an accreditation scheme for service providers. The stated policy purpose of contestability in NSW is to promote competition and customer choice while ensuring safety, efficiency and reliability. We are concerned that the AER in preparing its consultation paper has not fully considered the implication of these contestability arrangements. As a result, the scope of the AER's consultation paper is too narrow and not applicable to the NSW circumstances.

We discuss the NSW contestability arrangements and IPART's capital contribution policy below and highlight the implications in light of the National Energy Customer Framework.

3.1 NSW arrangements

The NSW Government introduced contestability for particular electricity distribution network connection services in 1995. The Electricity Supply Act 1995 and the Electricity Supply (General) Regulation establish a framework for customers to choose a third party accredited service providers to undertake electricity connection works. This includes a process of accreditation so that only competent service providers may do this work. The Electricity Supply (General) Regulation 2001 sets out the detail for the framework and the accreditation process. The Code of Practice for Contestable Works outlines principles that underpin contestability, the type of work that is contestable (including work that is contestable at the discretion of a DNSP) and responsibilities of all parties. We are not aware of an intention by the NSW Government to transition away from the contestability arrangements in NSW for the purpose of the National Energy Customer Framework.

Where customers are required to fund new or augmented dedicated connection assets, customers engage directly with accredited service providers to undertake the works. In most cases, the accredited service provider can undertake the design work. The DNSP does not have a monopoly on the design or construction of connection assets. The NSW Code of Practice for Contestable Works sets out the range of works that are contestable and it extends to major network reticulation, high voltage sub-transmission and underground residential developments as well as smaller connections.[2] In cases of major connections, the customer funds an accredited service provider to construct major dedicated connection assets and undertake augmentation works.

The DNSP takes on ownership and responsibility for maintenance of assets once they are connected to the distribution network. The DNSP is responsible for inspecting the works to ensure compliance with the required standards.

The DNSP may choose to become an accredited service provider and may compete with other providers for connection works. In these situations, internal contracting businesses operated by DNSPs must be independently accredited and appropriately ring fenced in accordance with the NSW Independent Pricing and Regulatory Tribunal (IPART) guidelines. In some cases the internal contracting business of the DNSP acts as the provider of last resort. Tender prices are based on market conditions.

Ausgrid reported contestability information to the AER on 15 April 2011 as part of the Regulatory Information Notice. Of approximately 20,000 connections or changes to services in 2009-10 most of these were carried out by third party accredited service providers.[3] In limited circumstances, customers may ask Ausgrid to carry out the customer connection service. An internal ring-fenced business unit of Ausgrid offers contestable connection services but has carried out less than 3 percent of the total number of connection services in the last two financial years.

[2] NSW Government, Code of Practice Contestable Works, April 2007, page 4.

[3] The number of new connections is based on service line connections not metering point connections. For example, a block of 100 units would be counted as a single connection rather than 100 connections.

In 2009, the Better Regulation Office, Industry & Investment NSW and Department of Services, Technology and Administration conducted a review of the operation of the accredited service provider scheme. The review reported that since contestability was introduced and the accredited service provider scheme put in place, there has been a significant maturing of the market for electricity distribution network services. The value of contestable works undertaken has increased to an estimated $300 million each year, and there are currently over 1200 accredited service providers. [4]

The NSW contestability arrangements are supported by ring-fencing arrangements[5] and monitoring of the accreditation scheme by Government bodies. These arrangements ensure competitive neutrality in situations where the DNSP competes for contestable works.

The contestability framework in NSW is unique in Australia in that customer choose an accredited service provider to design and construct connection assets. In Victoria, there is a limited approach to contestability where a DNSP enters into a contract directly with a service provider, on behalf of a customer. The customer is given some choice of service provider as the DNSP is required to seek a number of tenders for the work and then allow the customer to select one of the tenders. In Victoria a DNSP has a contractual relationship with the service provider, rather than the case in NSW where a customer contracts the service provider directly.

In the consultation paper, the AER makes the comment that the DNSP should seek to mimic the outcomes of a contestable market where possible by using a tender price as their cost base. [6] In NSW, DNSPs do not need to seek to mimic the outcomes of a contestable market because in NSW the provision of new connection services is a contestable market. The AER's comment is an indication of the narrow scope of the consultation paper and shows a lack of consideration of the contestable circumstances in NSW.

3.2 Payment of capital contributions

The circumstance under which a customer pays for capital contributions is set out in accordance with IPART's 2002 capital contributions determination. [7] However, as contestability has evolved more types of construction works have become subject to contestability and consequently Ausgrid only occasionally receives capital contributions from customers.

IPART's guidelines were established following a comprehensive review and consultation process that took over two years. IPART took careful consideration of the geographical circumstances in developing the capital contribution determination. The AER needs to more carefully consider the existing capital contribution policy in NSW – as is required under Chapter 5A. A summary of the NSW capital contributions policy is set out here:

- The general rule is that a customer will pay for the direct costs of establishing the connection up to a defined point of connection to the network. These direct costs are those involved in providing and installing the lines and equipment that are dedicated to that customer. The distribution network service provider (DNSP) will pay for all other costs.
- The exceptions where capital contribution may be required are for customers in rural areas and large load customers. As well as paying connection costs, these customers may be required to contribute to the costs of upgrading network assets within the shared network (augmentation). The Tribunal has defined a large load customer as a customer whose expected demand for electricity is such that the customer would require more than 50 per cent of the capacity of the existing assets to be augmented.
- For multi-occupant developments the developer is to be considered as a single customer. The developer should pay for all low voltage (LV) assets dedicated to the development. The developer should also pay for any high voltage (HV) assets required to connect that development unless those assets are likely to be shared with other customers outside the development; or are capable of being relocated to serve another customer if they were no longer needed.

IPART's deliberations took into account the characteristics and economics of the shared network. Our response to the AER's information request dated 14 April 2011 provides a comprehensive summary of IPART's consideration of its capital contributions policy. From an historical perspective, the AER should consider the IPART determination and consider its direct relevance to the circumstances in NSW.

[4] Better Regulation office, Review of contestable services on the New South Wales electricity network, Final Report, page 3.
[5] Note the IPART ring fencing guidelines still apply by virtue of the Chapter 6 transitional rules- 6.17.1.
[6] AER Consultation Paper. page vii.
[7] IPART, Capital Contributions and Repayments for Connections to Electricity Distribution Networks in New South Wales, 2002.

3.3 Implications for connection charge guidelines

The arrangements in NSW have important implications for the applicability of the AER's connection charge guidelines. These include:

- Customers contract with an accredited service provider for the provision of connection works that are contestable. The DNSP has no control over the timeframe for engagement, design or construction including the commencement and completion dates for the provision of customer connection assets.
- The DNSP does not receive funding from customers for connection services that are contestable. This means that a cost-revenue-test as set out by the AER is not applicable or relevant in NSW.
- As the DNSP is not a party to the funding arrangements it will be difficult to administer a reimbursement scheme.
- The DNSP performs services that support the work being done by the accredited service provider and that facilitate the hand-over of assets to the DNSP. These regulated services are called monopoly services and are set out in the AER's 2009-14 regulatory determination for the NSW distribution networks. The services include site establishment, provision of design information, design checking, design certification and inspection services.
- The NSW arrangement implies that the contracts for the basic, standard and negotiated connection services will not contain details about building of connection assets. Ausgrid is currently developing the connection contracts to apply under NECF. (However we note that Chapter 5A Schedule 5A .1 contains minimum content requirements for connection contracts which presumes that the DNSP will undertake the construction of the connection assets. This is not relevant in NSW).
- Prior to the commencement of connection works the accredited service provider, on behalf of the customer, submits an Application for Connection form to Ausgrid. The retailer does not submit the application (as is presumed in Chapter 5A of the Rules).
- The connection assets are handed over to the DNSP who then owns and maintains the asset. New connections are not classified for the purposes of revenue regulation until they are handed over to the DNSP.[8]

As currently drafted, the AER consultation paper does not provide Ausgrid with any relevant guidance on the applicability of Chapter 5A connection charge principles to the circumstances in NSW. The AER has not considered the contestability arrangements in NSW nor has it considered the historical differences between networks.

In the next section we look at the requirements of Chapter 5A and discuss the implications for Ausgrid. We suggest matters for inclusion in the guidelines as per the connection charge requirements under Chapter 5A.

4 MCE's requirements

Chapter 5A sets out the connection charge principles and the requirements of the connection charge guidelines. We are seriously concerned that the scope and direction of the AER's consultation paper has not adequately considered the requirements under Chapter 5A. As a result the consultation paper has little relevance to the circumstances in NSW.

We ask that the AER reconsider its approach in developing the connection charge guidelines. Specifically, we consider that the guidelines need to be more principle based and allow for the specific policies in each of the jurisdictions rather than adopt the one-size-fits-all approach as the AER has done.

In this section of the submission we comment on the specific provisions in Chapter 5A where the AER has failed to meet the requirements.

[8] The assets that are gifted to the DNSP are added to the regulatory asset base at zero value and do not earn a return on or of capital.

4.1 Competitive neutrality

Chapter 5A sets out the purpose of the guidelines which includes the provision to ensure the connection charges are competitively neutral where the connection services are contestable. This provision is most relevant to circumstances in NSW. The AER consultation paper makes only a brief reference to competitive neutrality and the discussion is in the context of whether a cost-revenue-test would apply where contestability exists.

We agree with the AER's comments that where costs are borne by a third party that they should not feature in the cost-revenue-test. In NSW, services that are contestable (as set out in legislation) are funded by customers and the DNSP does not bear the cost of the connection assets nor receives the revenue in relation to those assets. This is one of the reasons why the proposed cost-revenue test is not applicable in NSW.

In order to address the requirements under 5A.E.3 (b) (4) the AER needs to clearly state that connection charges under contestability arrangements should be competitively neutral. In this regard we refer the AER to the ring-fencing arrangements in NSW and the accreditation scheme for service providers administered by the NSW Department of Trade and Investment, Regional Infrastructure and Services.

We consider that the AER has been too focused on developing a cost-revenue-test and has not fully addressed the requirements in Chapter 5A. The consultation paper has not distinguished between the degree of contestability (zero, limited and full contestability) and this lack of clarity has caused confusion and uncertainty about its application to Ausgrid.

4.2 Jurisdictional differences

In developing the guidelines, the AER must have regard to: (1) historical and geographical differences between networks; and (2) inter-jurisdictional differences related to regulatory control mechanisms, classification of services and other relevant matters; and (3) the circumstances in which connection services may be provided by persons other than Distribution Network Service Providers (and are therefore contestable).

We are concerned that the AER's consultation paper does not adequately consider these principles, particularly, with regard to review of historical differences and the existing contestability arrangements. In particular, we consider that the AER has not adequately discussed how it has had regard to the full contestability arrangements in NSW. The AER's scope is too narrow to adequately address the requirements under Chapter 5A.

Ausgrid had expected to see clearer guidance in the consultation paper on application of Chapter 5A to a fully contestable market rather than making the presumption, as the AER has done, that there needs to be some form of cost-revenue test for every connection. A cost-revenue-test may be suitable in Victoria and South Australia but it is not suited to the circumstances in NSW.

We suggest that the types of matters that the AER should have regard to include:

- Contestability policies in each of the jurisdictions;
- Capital contribution policies that have been developed in relation to the contestability arrangements; and
- Network pricing policies as developed by DNSPs and approved by the AER.

The Rules clearly provide the AER with flexibility to take into consideration the specific arrangements in the different jurisdictions. This implies that the guideline could be more principles based and provide guidance as to how the guidelines might apply to meet the circumstances in each of the jurisdictions and even among individual networks. Instead, the AER has taken the path of applying a one-size-fits-all approach to connection charges. This is clearly not appropriate given the very clear differences in contestability policies; capital contribution policies; and network charging approaches in each of the jurisdictions.

4.3 Circumstances for receiving a capital contribution

In accordance with Chapter 5A, the guidelines must also describe the circumstances (or how to determine the circumstances) under which a DNSP may receive a capital contribution, prepayment or financial guarantee from a retail customer or real estate developer for the provision of a connection service.

Ausgrid rarely requires capital contributions from customers as we have developed a range of methods for ensuring efficient and equitable pricing arrangements. These include allocation of augmentation costs to large customers in the distribution use of system charges; and guarantees of revenue.

We are concerned that the AER has not fully considered alternatives to up-front payments. Instead the AER has focused on the cost-revenue-test which is only one approach to customer funding of connection and augmentation services.

4.4 Ausgrid's circumstances

In Ausgrid's network, 97 percent of customer connection services are performed by third party accredited service providers. As described earlier, these services are funded by the customer and paid directly to the service provider. In the majority of these cases, Ausgrid will not seek a capital contribution from the customer because the work is contestable and funded directly by the customer. In these situations:

- Customers pay the actual cost of their connection.
- Costs are based on prices achieved in a competitive market.
- The competitive market ensures efficient outcomes.
- There is no cross-subsidy for connection services.

In the case of NSW, the circumstance under which a DNSP receives capital contributions from the connecting party is consistent with IPART's determination. In summary, the type of customers who may be required to pay capital contributions include rural and large load customers for network augmentations beyond the linkage point.

Ausgrid may, in some circumstances, require a guarantee from customers to pay a minimum amount of network revenue each year for a five to ten year period to make up any (potential) shortfall in their actual distribution use of system charges over the period. A guarantee of revenue is a financially binding legal agreement (deed) between Ausgrid and a customer who is applying for a major new connection, which requires substantial Ausgrid funded network augmentation works (initially only for the customer's benefit or where a customer's requested load profile brings forward planned network investment). The nominal period for the guarantee of revenue is five years but may be varied to up to ten years on a case-by-case basis.

The purpose of a guarantee of revenue is to minimise Ausgrid's investment risk e.g. where it is considered that customer's new business venture is at risk of failing and hence not achieve its anticipated load requirements.[9] Guarantees of revenue do not apply to large load or rural customers, as by definition these customers are required to fund any necessary network augmentation works. A guarantee of revenue attempts to recoup augmentation costs over a shorter period than the life of the asset and seeks to recover costs from the customer driving costs and therefore avoids cross-subsidies of connection costs.

A guarantee of revenue may be required for new customer connection projects where the Ausgrid funded network augmentation costs are more than $1million (less any contingencies and excluding the value of any free issue substation equipment).

In general, Ausgrid's pricing for large customers ensures that augmentations are paid for through distribution use of system charges. The AER guidelines need to consider the interaction between the pricing principles and network pricing proposal requirements under Chapter 6 and the new Chapter 5A requirements. Instead, the AER has taken a very rigid approach to setting thresholds and standard unit prices for augmentation. This rigid approach fails to consider efficiency which is the cornerstone principle of the National Electricity Objective. This issue is discussed in more detail in section 9.2.

Ausgrid has developed a comprehensive approach to ensuring that customers contribute to augmentation on a basis that is efficient and equitable and that works within the full contestability regime. In summary these include:

- Customer funded direct connection and extensions costs;
- Capital contributions for augmentations by rural and large customers in certain circumstances;

[9] A new customer connection which acts as the "final straw that breaks the camel's back" in terms of requiring a disproportionate level of network augmentation may be assessed as being exempt from the requirement for a guarantee of revenue. Such cases are considered on a case-by-case basis.

- Distribution use of system charges that take into consideration long run marginal costs and cost reflective prices for very large customers; and

- Accelerated payment of distribution use of system charges where the DNSP has funded augmentation greater than $1mllion using guarantees of revenue.

We consider that the AER's approach is too prescriptive and inappropriate and will not result in any benefits to customers. Our more detailed comments on this matter are set out in later in the submission.

4.5 Requirements for the connection guidelines

In our view, the AER connection charge guidelines should explicitly contain the following elements:

- In order to address the requirements under 5A.E.3 (b) (4) the AER needs to provide guidance where connection charges are contestable that they are competitively neutral. There is no mention of competitive neutrality in the AER paper. This is a more important guide for NSW than a cost-revenue test. In this regard we refer the AER to the ring-fencing arrangements in NSW and the accreditation scheme for service providers currently administered by the NSW Department of Trade and Investment, Regional Infrastructure and Services.

- A discussion that where customers fund the contestable connection works that the cost-revenue-test does not apply. In setting out a cost-revenue-test the AER has presumed that the DNSP will be incurring costs and receiving revenue for the provision of connection services. This is not the case in NSW and we consider that the AER needs to have greater consideration of fully contestable markets.

- A discussion of the circumstances where a customer may be required to provide the DNSP with a financial guarantee or prepayment.

- We consider that the AER needs to take into account the relevant matters such as jurisdictional policies.

We have further concerns about the predetermined approach taken by the AER in relation to the balance between up-front payments and distribution use of system charges and the setting of a threshold for augmentation. Our comments are set out in the following sections where the AER has asked specific questions about these matters.

The remainder of the submission addresses the specific questions raised by the AER.

5 Proposed definitions

The AER is seeking comment on the definitions of the components of a typical connection. The AER has proposed the following definitions:

- Direct Connection Assets - These are the premise's connection assets which run from the connection point to the point of supply and where applicable also include the consumer mains.

- Extensions - An augmentation that requires the connection of a power line or facility outside the present boundaries of the transmission or distribution network owned, controlled or operated by a Network Service Provider. The AER considers that an extension is a subset of an augmentation.

- Augmentation - Augmentation of a transmission or distribution system means work to enlarge the system or to increase its capacity to transmit or distribute electricity, caused by the need to connect a customer.

- Shared Network Augmentation—Augmentation of a transmission or distribution system to increase its capacity to transmit or distribute electricity. This is all augmentations other than extensions.

Further definitions are provided in Appendix A of the consultation paper.

The AER seeks comments on the above proposed definitions and those in appendix A for use in the connection guideline.

We note that the definition for "extensions" is consistent with the Rules and the definition for "augmentation" is consistent with the National Electricity Law.

We suggest that the AER explicitly acknowledge that there are other services provided by DNSPs that are supplementary to building connection assets. In NSW, these services are performed by the monopoly DNSP to support the work of the accredited service provider. These monopoly services include site establishment, provision of design information, design certification, design checking and inspection services. In NSW, the charges for these monopoly services are regulated by the AER.

In the case of NSW, it is important to ensure that these services are referred to in the AER guidelines given that, in the majority of cases, the services provided directly by the DNSP will be limited to the provision of these monopoly services. The connection contracts for basic, standards and negotiated contracts may need to refer to these services as required. However we are concerned that the connection contract model conditions may not adequately cover the payment of monopoly fees for all services a DNSP may undertake.

6 Design criteria

The AER seeks comments on its design criteria for the connection charge guideline.

The AER has proposed a set of design criteria based on the provisions set out in Chapter 5A of the Rules. The AER states that subject to and in addition to the conditions of Chapter 5A it is important to establish a policy framework to enable it to design the connection charge guidelines.

Ausgrid's main objective is to ensure that the AER design criteria are consistent with the National Energy Retail Objective and the National Electricity Objective and the principles in Chapter 5A. The National Energy Retail and National Electricity Objectives are aimed at promoting efficient investment in, and efficient operation and use of, energy and electricity services for the long term interests of consumers of electricity.

We note that the AER's proposed design criteria do not include a criterion that is based on economic efficiency, particularly, allocative efficiency. In light of the efficiency focus of the national energy retail objective it would seem appropriate to include an efficiency criterion. An efficiency criterion would provide guidance about minimising costs and ensuring efficient utilisation of the network.

Our comments on the AER's design criteria are set out below.

Criterion 1. Where possible, the connection charge should be reflective of the actual cost for providing the network extension attributed to the individual customers.

It is not apparent to us why this criterion refers only to extensions and not also to direct connections. It is generally possible to assess the actual costs of direct connection and extensions but this is not the case for shared network costs. In principle, Ausgrid supports connection charges for direct connection and extensions reflecting the actual cost.

In NSW, customers pay actual connection and extension costs to the accredited service provider they have selected to construct the connection assets.[10] The fully contestable arrangements in NSW achieve this criterion. We note that in contrast, the AER's averaged approach to the cost-revenue test does not meet its own criterion.

Criterion 2. Where suitable alternative service providers for construction works are available, the DNSP's charge should be reflective of the market price; where no alternative service providers are available, DNSPs must charge at a reasonable rate, which is reflective of the market price.

This criterion seems somewhat contradictory. Where there is no alternative service provider then presumably there is no market – therefore no market price. It is not clear what the AER intends by a market price in this context. We suggest that the AER refer to the requirements under Chapter 6 of the Rules as guidance to an appropriate price where there is no market. For instance, in assessing the DNSPs operating and capital expenditure forecasts, the AER must be satisfied

[10] The principle of the customer paying for direct connection and extensions was recently endorsed by the Australian Energy Market Commission in its decision on Scale Efficient Network Extensions. The AEMC determined that any party was able to fund the connection and extensions to a transmission network. The important element of the AEMC's determination is that customers of the shared network would not be required to pay for the Scale Efficient Network Extensions. Chapter 5A applies similar charging principles at the retail customer level. Refer to AEMC 2011, Scale Efficient Network Extensions, Rule Determination, 30 June 2011.

that the forecasts reasonably reflect the efficient costs that a prudent operator would be required to achieve.[11] The principles related to access to negotiated distribution services set out in clause 6.7.1 of the Rules provides further guidance.

We provide more detailed comments on this issue further on in this submission.

Criterion 3. Any cross subsidies between new and existing customers should be minimised. However, minimising cross subsidies should not be pursued at the expense of undue administrative costs.

We agree with the application of this criterion for costs that can be directly attributable to customers such as direct connection and extensions. This criterion is more difficult to apply to augmentation costs for the shared network. In relation to shared network costs, this criterion is focused on allocating sunk costs rather than achieving efficient pricing signals.

The identification of charges for the shared network augmentation on an actual cost basis is more difficult to determine due to the public good characteristics of shared electricity networks. While a customer may pay to augment the network, there is no ability to prevent third parties from benefiting from that augmentation. The use of the network is non-excludable (cannot prevent a connected party from using the network) and non-rivalrous (the use of the network by one party does not affect the use by another party - up to the capacity of the network). Because of these public good characteristics, property rights are difficult to assign to network customers. This makes the allocation of augmentation costs according to direct costs difficult to assign on an equitable basis.

Ausgrid has concerns about the approach taken by the AER in relation to thresholds and unit price approach for augmentation. Our comments are set out further on but generally we consider that the AER has taken an approach that is too rigid and may lead to uneconomic outcomes to the detriment of customers.

Criterion 4. Customers should not experience a large step change in capital contributions if they fall above or below the threshold for charging for augmentation.

For this criterion the AER states that it would be "unreasonable that the customer who happens to trigger the shared network augmentation should pay the full cost of this augmentation. Rather each customer who connects to the network should contribute an amount towards the cost of shared network augmentation reflective of the load they place on the network. Hence, the AER considers the shared network augmentation charge should be based on the per unit usage of each new customer, above the shared network augmentation threshold".

Ausgrid supports this criterion but the prescriptive approach taken by the AER in setting the augmentation threshold suggests that, in Ausgrid's case, there may be more small customers exposed to contributing to augmentation costs of the shared network.

The approach adopted in NSW provides for a limited number of customers to make a contribution to augmentation. These customers make an incremental contribution to augmentation based on their impact on the capacity of the network. The NSW approach is preferable to the AER's prescriptive approach. All other customers contribute to shared network augmentation costs through distribution use of system charges.

Overall, the AER's design criteria are reasonable with the exception that there should also be a criterion that refers to ensuring that connection charges provide an incentive for efficient investment in and use of the network.

The NSW contestability regime largely meets the AER's set of design criteria. Customers pay their actual direct connection and extension costs which are based on prices set in a competitive market. In NSW the number of customers paying up-front for incremental augmentation is limited to certain identifiable customers and developers. The NSW approach acknowledges the public good characteristics of the shared network and the difficulties in attributing sunk costs to any one connecting party. The NSW approach is a more efficient approach as it takes into account the capacity impacts that large customers have on the network. Overall we consider the NSW arrangements to be more efficient and equitable than the AER's proposal and should be retained as much as possible.

[11] Paraphrased from clauses 6.5.6 and 6.5.7 of Chapter 6 of the National Electricity Rules.

7 Method of determining capital contributions (cost-revenue test)

Under clause 5A.E.3(c) (2), of Chapter 5A, the AER's guideline must describe the circumstances (or how to determine the circumstances) under which a DNSP may receive a capital contribution, prepayment or financial guarantee from a retail customer or real estate developer for the provision of a connection service.

The AER states that it considers the primary determinate of the circumstances where a DNSP may receive a capital contribution for the provision of connection services is whether or not the customer's incremental cost of connection exceeds its incremental revenue provided from the connection.

The AER seeks comments on its preliminary position to apply a cost-revenue-test of the form CC = ICCS + ICSN – IR(n=X)

7.1 Concerns with AER's approach

Ausgrid considers that the AER needs to provide greater context to the circumstances under which DNSPs can receive up-front funds, prepayments or financial guarantees as required under the Rules. The circumstances are the factors that must be considered before a DNSP decides to seek an up-front payments or financial guarantees. This includes consideration of the following:

- contestability arrangements and whether or not the DNSP is involved in constructing the connection assets and receiving payment for the assets;
- managing financial risk that may arise from customer defaulting on payments; and the
- extent to which DNSPs recover augmentation costs through distribution use of system charges.

In our view the AER consultation paper does not provide sufficient context about the circumstances that DNSPs can seek up-front payments and financial guarantees. Instead, the AER has presumed that the DNSP is involved in constructing and receiving payment for the connection service and on this presumption sets out a method for determining a capital contribution.

In this context, the AER notes that where some costs are paid by a customer directly to a third party service provider, or where the customer performs some of the work (i.e. in the case of some developers), the application of a cost-revenue-test is less clear. We agree with the AER that the cost-revenue-test is not applicable in this context.

The DNSP does not incur any costs or receive any revenue (apart from the regulated monopoly services) for the connection assets. The customer pays an accredited service provider for the actual costs. Where customers pay for upstream augmentation they may also choose the service provider.

We consider that the AER should provide greater context to the circumstances where a DNSP may seek capital contributions, prepayments and financial guarantees (we provide further comments about financial guarantees in section 9.3). This will make the connection guidelines relevant to the fully contestable arrangements in NSW.

For example, this section would warrant greater discussion of the circumstances in which:

1. Distributors receive capital contributions where they are involved and receive revenue for constructing the connection, extension and augmentation assets.
2. In situations where the service is contestable and the DNSP does not construct the connection, extension or augmentation assets and does not receive capital contributions from the customer then the cost-revenue test is not applicable.
3. Distributors may receive financial guarantees where there is a risk that the customer may not be able to pay distribution use of system charges to cover the shared augmentation costs.
4. Some distributors may have made provisions for customer to contribute to augmentation costs through existing distribution use of system charges of a tariff applicable to the connections (as provided for under clause 5A.E.1(c) (6).

In NSW, customers pay the accredited service provider for the connection services. In some cases the DNSP competes as the accredited service provider. Where the DNSP is performing work as an accredited service provider the charge for the service is based on a market price achieved through the competitive tender process. A cost-revenue-test is clearly not applicable under these circumstances.

7.2 The formula itself

The AER considers that it is appropriate to implement a cost-revenue-test, whereby a customer will only be charged a capital contribution if its incremental cost exceeds the incremental revenue that the connection will provide over its life. The AER indicates that it does not have a preference for either charging an up-front capital contribution or obtaining contributions through network tariffs but rather seeks to limit cross-subsidies between new and existing customers.[12]

Under the AER approach customers whose actual or incremental connection costs are greater than the revenue received from that customer over the life of the asset would pay a capital contribution. Further, the AER suggests that for basic and some standard connection offers, the AER would allow the amount of capital contribution to be pre-calculated for all customers within a class. That is, the capital contribution would be pre-determined and not based on actual costs.

We have a number of concerns with the AER's predetermined cost-revenue-approach. These include:

- The predetermined cost revenue approach uses an averaged approach. Under this averaged approach there is limited (locational) signalling of the cost of connection to customers. This seems to defeat the purpose of having a cost-revenue-test and does not meet the AER's own criteria of applying actual costs.
- The averaged approach may be administratively simple but achieves simplicity at the expense of allocative efficiency. For instance, it is not efficient to charge an up-front capital contribution where there is excess capacity on the network.
- The predetermined approach embeds cross-subsidies rather than removes them.
- The AER's approach of not returning any excess incremental revenue to the customer means that, mathematically, the DNSP is receiving more revenue than is required to cover costs.

The AER's predetermined one-size-fits all approach does not achieve the design criteria and should not be applied in the AER's connection charge guidelines.

8 Incremental revenue

The AER considers that the four primary issues to consider in determining the appropriate estimate of total revenue to be used in the cost-revenue-test are:

- the appropriate measure of revenue;
- the appropriate time period over which to assume revenue for a particular connection is earned by the DNSP;
- the price path to assume beyond the current distribution determination and;
- the appropriate discount rate to use for calculating the net present value of the future revenue stream.

8.1 Appropriate measure of revenue

The AER proposes that its cost-revenue- test will apply to all capital and operational and maintenance costs borne by the DNSP due to the connection of the new customer. As such, the AER considers that distribution use of system (DUoS) is the appropriate measure of revenue to use because it compensates DNSPs for these costs.

The AER requests comments regarding whether DUoS is the appropriate measure of revenue to use in the cost-revenue-test.

[12] AER Consultation Paper, page.14.

DUoS is the most relevant measure to use. However, the AER has not provided any guidance about which tariffs should be applied to determine the revenue and how the DNSP should determine the customers' energy and demand usage.

The AER's necessitates estimations which will result in customers having an incentive to game the information. For instance, there is an incentive for customers to inflate the usage figures to increase the revenue. The higher the revenue relative to the cost, the less likely a customer will be required to pay a capital contribution.

This is shown in the table below:

	DUoS at $500 pa	**DUoS at $600 pa**
Cost of connection service (total)	$4000	$4000
Revenue over 15 years (NPV)	$3,803.04	$4,563.65
Capital contribution	($196.96) or zero under the AER's approach	$563.65

In the example above, the construction of a connection service costs $4000. The customer has an incentive to inflate the estimated revenue from $500 to $600 per annum to avoid paying a capital contribution. It is unclear how the AER intends to address this issue in the framework it has designed.

8.2 Appropriate time period

The AER requests comments on the appropriate assumptions regarding the connection period for new connections.

The AER requests comments on how much flexibility DNSPs, or new business customers, should have to alter these default assumptions.

The AER proposes that a default assumption for residential customers connecting for 30 years and business customers connecting for 15 years may be appropriate. The AER considers that it is appropriate for the assumption for residential customers to be set rigidly because there is unlikely to be substantial variance in the expected life of a dwelling. However, due to greater variance in the nature of business connections, the AER considers that DNSPs and business customers should have the flexibility to vary the assumed connection period taking into account the circumstances of the new connection.

The AER assumptions are reasonable. In particular, DNSPs should have flexibility to alter the default assumptions for business based on information provided by the business. Alternatively, the DNSP has an option to seek a financial guarantee from the customers as provided for under Chapter 5A (and as previously discussed).

8.3 Discount factor

The AER requests comments regarding whether the WACC is the appropriate discount rate to use in performing the net present value calculation.

The AER requests comment regarding whether it is appropriate to use a pre-tax WACC, or a post tax WACC with a separate adjustment for taxation. (*Note The AER is proposing to use a real WACC in the NPV calculation and as such it is not necessary to escalate the current price path in line with CPI. If a nominal WACC is adopted then it will be necessary to inflate DUoS revenue using CPI).*

The discount factor used in present value calculation reflects the opportunity cost of capital. On this basis, given that regulated returns are based on WACC, it seems to be an appropriate discount factor for the DNSP to apply.

8.4 Appropriate price path

The AER explains that the calculation of incremental revenue requires an assumption to be made regarding the price path of DUoS. The AER acknowledges that it becomes more difficult to accurately estimate the revenue the customer will be contributing after the active distribution determination. The four most obvious price paths to follow in subsequent periods are to continue the current price path indefinitely; a historical average growth rate; a trend prices in line with CPI; and a flat price path.

Due to the inherent difficulty in estimating the future price path, the AER's preliminary position is that it is appropriate to assume prices will remain flat for the period of the connection.

The AER requests comments regarding the appropriate assumption of future price path to use in the cost-revenue-test.

The AER has highlighted one aspect of the concerns held by Ausgrid about the difficulties in calculating incremental revenue for the cost-revenue test. Each of the methods set out by the AER will in all likelihood turn out to be incorrect in the long run. The aim should be to minimise the distortions in an already averaged approach. On this basis, Ausgrid considers that the AER's preliminary approach to assume flat prices will be the least distorting.

However, as raised earlier, it is not clear which future price path will be used. Will it be an average price? Or will it be based on a published tariff, and if so, which tariff. These are matters that are not clear from the consultation paper.

The issues raised here regarding uncertainty about the revenue estimations to be used in calculating contributions highlights the complexity and general lack of merit in the AER's cost-revenue-test approach. In contrast, IPART's relatively simple approach to capital contributions whereby a customer whose expected demand would require more than 50 percent of capacity of the existing assets is more appropriate.

9 Incremental cost

9.1 Direct connection and extension costs

The AER seeks comments on its preliminary view that an extension should (be) funded by the customer requiring the extension, subject to the cost-revenue-test.

The AER seeks comments on its preliminary view that:

- ***Subject to customer agreement, DNSPs should call tenders for connection works over $3000.***
- ***For works below this threshold, DNSPs should use pre-established period (standing) contract prices from qualified third party contractors as the basis for cost calculation.***

In NSW customer connections are fully contestable therefore the issues raised by the AER are not directly relevant to Ausgrid. However, other jurisdictions do not have full contestability and it is not clear from the comments made in the AER's paper how costs for connection services are to be calculated by the DNSP. For instance, the AER's consultation paper sets out several approaches to working out direct connection or extension costs. These include:

- Method 1 - actual costs (as mentioned in criteria 1).
- Method 2 – market price where independent service providers are available. Require a DNSP to call for tenders for work over a certain ($3000) threshold.
- Method 3 - market price where there are no independent service providers. DNSP to use pre-established period (standing) contract prices from qualified party contractors.
- Method 4 –where a service is classified as standard control the charges for direct connection should be based on efficient costs of providing the required service in accordance with the form of control applied by the AER in a distribution determination.

- Method 5 – schedule of fixed prices – based on cost reflective prices. This is for alternative control services.

We question whether some of the AER's proposed approaches to calculate connection and extension costs are feasible.

In jurisdictions where contestability has not been endorsed by the government, then presumably there are no independent service providers operating in that jurisdiction. There will be no parties able to provide pre-established contract prices (method 3). Consequently, the AER's proposal for a market price to be set or for a call for tenders is not possible.

Even if a DNSP was able to obtain standing prices from third parties, the costs would be averaged and would not necessarily reflect the actual cost.

The AER's suggestion that the DNSP should call for tenders for connection works over $3000 may not be appropriate. Under Chapter 5A, a service is contestable if the laws of the participating jurisdiction in which the service is to be provided permit the service to be provided by more than one supplier as a contestable service or on a competitive basis. The AER suggestion that DNSPs call for tenders would need to be sanctioned by the jurisdictional government.

In jurisdictions where there are no third party providers, the AER may need to establish a methodology to work out the cost of connection in non-contestable jurisdictions. A method approved by the AER may result in prices that are more reflective of the costs of the individual connection and thus more efficient and fair compared to a pre-determined set of prices. It would be sensible for this process to proceed as part of the revenue determination under Chapter 6 of the National Electricity Rules.

9.2 Shared network augmentation costs

The AER stated that in order to account for cost efficiency (charges reflective of actual cost), that some locational signal would be appropriate when charging for shared network augmentation. This will ensure customers face, and take account of the actual costs of providing connection services. A shared network augmentation charge limits cross subsidisation because the costs to the shared network resulting from a new customer will be paid by that customer and not other users.

The AER proposes the guideline should allow for flexibility in DNSPs' shared network augmentation charges to take account of network differences in actual costs.

The AER's preliminary view is that, a unit rate charge (option 1), should be adopted to calculate shared network augmentation charges. Customers above a threshold will contribute to augmentation costs. The shared network augmentation charges would only be applied to a customer's peak demand in excess of the shared network augmentation threshold level and the demand measure should be consistent with the threshold—and thus the charge should be levied on peak demand.

The AER proposes to base the augmentation charge on a unit rate (based on the approach in South Australia). To support this approach the AER comments that requiring a customer who triggers the shared network augmentation to pay for the full cost is not equitable. Further, that such an approach would lead to large impediments to investment where the utilisation of the network is reaching capacity.

We note that the Chapter 5A states that the intention is to exclude deep system augmentation charges for retail customers.

> ***The AER seeks comments on its preliminary view to charge for shared network augmentation on a per unit rate based on the calculation method outlined in the South Australia Guideline No. 13.***

In NSW, shallow augmentation along with direct connection and extensions is generally contestable. Therefore customers pay the actual connection and augmentation costs. This ensures that customers do face locational costs signals and this encourages customers to:

- 'Right size' the connection asset because they are paying actual costs; and
- Avoid paying augmentation charges by locating in areas that have spare capacity.

The AER's approach of an up-front and averaged augmentation charge is not applicable in NSW given that customers generally pay an accredited service provider for connection and augmentation assets that are attributable to them. Again we consider that the NSW approach is a more efficient and equitable approach compared to the AER's proposals. The

proposed unit price approach for shared augmentation may lead to outcomes that are contrary to allocative efficiency principles.

Ausgrid is concerned at the AER's approach that certain customers should contribute an augmentation charge on a per unit basis. There are a number of matters that need to be considered. For instance:

- In situations where there is excess capacity on a network, it is not allocatively efficient to charge a potential new customer an up-front augmentation charge. The aim should be to encourage new connections where there is excess capacity and an up-front augmentation charge may be a disincentive for a new customer to connect. The AER's approach may lead to inefficient outcomes.

- A per unit charge will be an averaged charge that does not reflect actual costs. This unit charge approach therefore contradicts the criteria of using actual costs and reducing cross subsidies.

The AER's approach has implications for pricing design and approaches to cost recovery. The AER needs to consider its approach under Chapter 5A with the requirements under Chapter 6 of the Rules. We note that the approach taken by the AER shifts the balance between costs that are collected up-front as a capital contribution and those that are recovered from DUoS. However, we question whether the AER has had sufficient regards to requirements under Chapter 5A. We note that Chapter 5A contains the provision that:[13]

> *however, a capital contribution may only be required in the circumstances described in subparagraphs (1) to (5) if provision for the costs has not already been made through existing distribution use of system charges or a tariff applicable to the connection.*

Therefore a capital contribution is not required in the situation where the investment cost has already been appropriately reflected in the X-factor applying over the regulatory control period. This is the case under both a Revenue Cap and a Weighted Average Price Cap because:

- The efficient cost of this investment has already been reflected in DUOS prices. To require a capital contribution to be made in this circumstance will result in an over-recovery of distribution costs from end-customers.

- There is no economic welfare loss as DNSPs are required to comply with the pricing principles in Chapter 6 of the National Electricity Rules to ensure that the new and existing customers receive economic price signals in relation to their network capacity use resulting in an economic efficient use of the network. This is particularly the case for new large loads that are assigned to a Cost Reflective Network Price (CRNP) tariff, rather than a highly averaged published tariff.

It is important that the AER takes into proper consideration when developing its position on capital contributions of the important inter-relationship between capital contributions, the different form of price regulation and the requirements under Chapter 6 of the Rules to convey efficient network prices to customers from both a cost recovery perspective and an economic price signal perspective.

Ausgrid believes that the pricing principles under Chapter 6 of the Rules are more than adequate in ensuring that existing and new customers receive network tariffs that are economically efficient in the sense that they appropriately reflect the long run marginal costs of providing network capacity and remain free of economic cross subsidies at the tariff class level. In terms of the recovery of efficient network augmentation costs, Ausgrid wishes to point out that this is generally achieved through setting the X-factor to apply during the regulatory control period. The extent of this dependency is related to the form of regulation. For example, under a Weighted Average Price Cap (WAPC) the DNSP will always receive incremental DUOS revenue from new unanticipated large loads. This will ensure that economic cross-subsidies are avoided because Chapter 6 of the Rules ensures network prices are efficient, particularly in the case of customers assigned to an individually-calculated Cost Reflective Network Price (CRNP) tariff, rather than to a highly average published tariff. In contrast to the WAPC, the recovery of efficient network augmentation costs is not assured under a Revenue Cap because the incremental revenue from the new unanticipated large load may not be retained by the DNSP if it results in a breach of the revenue cap.

We support the continuation of the IPART determination in NSW given that the AER's approach is not relevant to a fully contestable framework. Contributions should be based on actual costs and negotiated dependant on the use of the augmented assets.

Note that Ausgrid does have individual cost reflective tariffs for customers greater than 10MW (consume more than 40 GWh over a 12 month period). The individual charge reflects the customer's specific usage patterns and is intended to ensure that customers pay their fair share of network costs given their location and usage patterns (i.e., avoid economic

[13] Chapter 5A, Clause 5A.E.1(c) (6).

cross subsidies) and receive efficient price signals regarding the economic cost implications of their network usage decisions.

The AER's proposed approach of charging predetermined unit costs may be considered more equitable but it does not provide economic signals. The approach does not signal to customers the higher costs of connecting to a constrained part of the network nor does it signal actual future costs. We consider that DNSPs should have more flexibility in determining the most appropriate means for signaling future shared network costs rather than being obliged to use predetermined approach set by the AER. A more flexible approach is consistent with the principles in Chapter 5A.

10 Capacity threshold for shared network augmentation charge

In accordance with Chapter 5A, the AER must establish principles for establishing a shared network augmentation threshold. The intention under the Rules is that customers below a certain threshold will be exempt from making a contribution to augmentation.[14]

The AER's preliminary position is that it is appropriate to provide some locational signal to potential new connections to encourage efficient use of the network. We note that the AER states that DNSPs could have some flexibility under the new guideline to take account of the historical and geographical differences in networks, in setting shared network augmentation charge thresholds.[15]

After discussing two methods for setting the threshold, the AER has proposed that setting a fixed threshold based on demand rather than one based on percentage capacity use would provide more certainty to the market if a shared network augmentation threshold was set at a fixed amount.

The AER proposes to set the demand threshold at the higher of either:

- the level of customer demand in each DNSP's network that would result in approximately 10 per cent of new customers paying for specific shared network augmentation (based on existing customer demand information); or
- 70 kVA (equivalent to 100 Ampere 3-phase low voltage supply).

The AER seeks comments on its preliminary view to set a fixed demand threshold rather than a threshold dependant on local capacity. (p.33)

The AER seeks comments on its preliminary view to set a threshold for most areas of networks on the greater of:

- ***the level of customer demand in each DNSP's network that would result in approximately 10 per cent of new customers paying for specific shared network augmentation (based on existing customer demand information); or***
- ***70 kVA (equivalent to 100 Ampere 3-phase low voltage supply).***

The AER seeks comments on its preliminary view to allow DNSPs to nominate less developed areas of the network where a different threshold would be more appropriate.

In its discussions about setting an augmentation threshold we consider that the AER has not correctly interpreted the requirements under Chapter 5A. To support this claim we refer to the following clauses:

- Clause 5A.E.3(c)(4) states that the guidelines must establish principles for fixing a threshold below which retail customers are exempt from paying for an augmentation; and further
- Clause 5A.E.1 (b)(2) whereby a retail customer cannot be required to make a capital contribution towards the cost of an augmentation if a relevant threshold set in the DNSPs connection policy is not exceeded.

[14] Refer to clause 5A.E.3(c) (4).
[15] AER Consultation Paper, page 29.

It is clear from these provisions, that the MCE intention was for the AER to set principles for the augmentation threshold and that the DNSP apply these principles to set the threshold in its connection policy – which is submitted to the AER for approval. We strongly argue that the AER was not required to set a predetermined augmentation threshold. Setting these thresholds is contradictory to the AER's statement that there needs to be flexibility to account of the historical and geographical differences in networks.

The AER's approach of setting predetermined thresholds is at odds with the requirements under the Rules that the AER is required to have regards to historical and geographical differences.

In our view, it would be preferable for the AER to set principles, along the lines of the design criteria that the DNSP could use to develop its own set of augmentation thresholds as part of its connection policy. This would allow DNSPs to take into account historical and geographical differences, contestability arrangements and the historical split between capital contributions and distribution use of system charges. A principle based approach is preferable given the range of historical and geographical differences amongst the DNSPs. It could also accommodate the long standing arrangements in NSW that have evolved under the contestability arrangements.

The AER's proposal to establish predetermined thresholds in the connection guidelines is an example of where the AER has taken a narrow and prescriptive approach which is not consistent with the principles in Chapter 5A. We ask that the AER take a more principle based approach on this issue.

In response to the thresholds that are proposed we are concerned that attempting to apply a threshold that charges 10 percent of customers a connection charge is administratively difficult. In Ausgrid's situation the number of connections and the demand is influenced by a complex range of factors. We do not know ahead of time how many connection applications will occur in any annual period and what the demand will be.

The AER's approach of seeking about 10 percent of customers to pay for augmentation up front seems to be arbitrary. There does not appear to be an economic efficiency argument for selecting 10 percent. A more efficient approach should be to consider the capacity of the network. This is the approach taken in NSW and we believe is more allocatively efficient than the AER's fixed demand approach. We consider that the capacity based approach also be allowed under the AER's guidelines.

The 100 amps low voltage threshold is not appropriate in Ausgrid's circumstances given the contestability arrangements. Historically our approach has been to use 200 amps as the threshold to demarcate between capital and contestable augmentation works in urban areas. Using 200 amps as the threshold allows those customers who utilise less than 50 percent of the nominal rating of a distributor to have any augmentation of LV network paid by Ausgrid and those customers who utilise more than 50 percent to pay for the augmentation themselves. This is the manner in which has Ausgrid implemented the IPART capital contributions determination since around 2002. The approach works and is well understood by NSW customers and developers. A 200 amps threshold is more appropriate for the characteristics of the Ausgrid network.

The reduction to 100 amps as suggested by the AER will lead to delays in connecting customers with additional administration, processes and funding complexities. Ausgrid's planners now move and re-arrange the LV network freely in order to best utilise the capacity available. A reduction to 100amp threshold under the NSW contestability arrangements would limit this ability to manage the LV network and could become restrictive due to customers contributing to the LV augmentation. Ultimately it may lead to a loss of some control by Ausgrid over the LV system.

The AER's approach is likely to have implications on the amount of shared network costs recovered up front from capital contributions compared to distribution use of system charges. This is contrary to the AER's comment that it is not seeking to change the balance between capital contributions and distribution use of system charges.[16]

We suggest that if this is the AER's intention then it would be preferable that the threshold remain the responsibility of the DNSP. Ausgrid suggests that the AER should adopt a more principle based approach to setting a threshold that allows for DNSPs to develop a threshold appropriate to its circumstances.

> ***The AER seeks comments on its preliminary view that it will be difficult to verify and enforce a customer's peak coincident demand and therefore the threshold should be a set based on peak demand. (p.34)***

Ausgrid concurs that it would not be possible to set a threshold based on coincident peak demand. Given that coincident peak demand is dynamic it is not clear how the AER proposed that this would be calculated. Other issues include whether it would be measured at the distribution centre level, zone substation level or system level. The proposal to set a threshold on coincident peak demand is administratively difficult.

[16] AER Consultation Paper, page.14.

The AER seeks comments on its preliminary view that the approach outlined in ESCOSA's Guideline No. 13 is a fair and practicable approach for estimating peak demand that should be adopted. (p.35)

The AER outlines that in South Australia, it is the customer's responsibility to specify its maximum demand. But when agreement cannot be reached between the customer and ETSA, a provisional value will be used. After three years the appropriate demand value will be reconsidered and there is a corresponding refund or additional charge based on it and the actual DUoS charges.

This approach used by ESCOSA is administratively complex and is not supported.

How to charge for shared network augmentation

The AER seeks comments on its preliminary view that a customer who is required to pay for shared network augmentation, would pay for shared network augmentation on the amount of their peak demand above the shared network augmentation threshold. (p.35)

The AER notes that in some jurisdictions, such as South Australia, customers only pay shared network augmentation charges on their demand which is above the shared network augmentation threshold. The AER states that this approach would reduce step changes in connection charges for customers near the threshold. In this case, the AER has given more weight to its design criterion 4—to remove customers experiencing large step changes depending on whether they fall below or above the shared network augmentation charge threshold.

This approach seems equitable but we maintain that the DNSPs should be allowed to develop their own thresholds to take account of the circumstances in their jurisdictions. Rather than setting the threshold, the AER should apply a principles based approach such as using design criterion 4 as the principle that needs to be met in developing an augmentation threshold.

Embedded generators

The AER seeks comments on its proposal that embedded generators should fund specific network shared network augmentation to remove constraints on their outputs due to limits of the existing network. (p.36)

The AER explains that there may be situations where the existing network does not have the capacity to provide the power transfer capability to accept the entire proposed output of a new embedded generator or upgrades to an existing generation system. If a specific generator wants to avoid this constraint, parts of the existing network need to be augmented. The AER considers that—similar to transmission connected generators and other registered participant generators—embedded generators should pay for this user specific cost for removing output constraints, unless there is a demonstrable net benefit to other network users.

In situations where an embedded generator affects the performance of the network then it should be required to fund the augmentation. In Ausgrid's case these works are contestable.

11 Other issues

11.1 Security fee (financial guarantees) scheme

The AER seeks comments on whether its connection guideline should have an option for DNSPs to implement security fee schemes.

Ausgrid considers there needs to be an option for DNSPs to implement security fees schemes. Note that clause 6.21.1(b) of the Rules states that the prudential requirements for connection service and/or distribution use of system service are a matter for negotiation between the DNSP and the embedded generator or distribution customer. Ausgrid seeks financial security in the form of guarantees of revenue from customers that are a revenue risk. This is in relation to the ongoing supply of distribution network services. For instance, multi-storey buildings that were not fully tenanted would represent a revenue risk and Ausgrid may seek a guarantee of revenue from the developer.

Ausgrid requires guarantees of revenue for major customers where their connection request triggers significant network investment which only the DNSP can perform and which affects shared assets, such as an additional transformer at a zone substation, a new zone substation or a busbar extension. The works are funded through their network charges but there is a risk to the business if they do not meet their usage target.

Given that the majority of connection work in NSW is contestable, there is no/limited requirement for a security fee scheme in relation to the majority of connections.

11.2 Refund of connection charges for extension assets

The IPART capital contribution determination includes a reimbursement scheme. However under the contestability regime, the monopoly DNSP does not receive the funds for the connection assets.

In order to address the requirements under the IPART determination, Ausgrid allows the original connecting party to opt into the reimbursement scheme. A customer that opts in to the scheme provides information on the cost of the connection to Ausgrid. In the event of a third party wishing to connect to the customer funded connection, then the new customer will provide a reimbursement to the original connecting party. There are a number of practical issues that have arisen.

These include:

- The contract details held by Ausgrid are for the original connecting party who in the meantime may have sold the property.
- A reimbursement is made to the original party but could arguably be made to the current owner of the property depending on the price they paid. However, Ausgrid may not have the details for the new owners.

Ausgrid does not support an extension of the reimbursement scheme beyond the current circumstances for rural and large load customers. An increase in the scope of the reimbursement scheme would be time consuming, administratively complex and result in a significant increase in costs to DNSPs.

The AER seeks comments on its preliminary view that the assets subject to a rebate scheme should be depreciated over a 20 year term.

Twenty year depreciation period for the rebate scheme seems to reasonably balance the interests of the original connecting party and any new connecting party.

The AER seeks comments on its preliminary view that a rebate scheme should have regard to the length of an extension and the capacity of the assets used by subsequent customers.

This seems to be a reasonable starting point but further guidance is required to reduce the scope for disputes.

The AER seeks comments on its preliminary view that a $500 refund threshold strikes an appropriate balance between a DNSPs' administrative costs and the materiality of a refund.

The AER's proposed threshold of $500 is reasonable.

The AER seeks comments on its preliminary view on customer payments when the network is built to a greater standard than a customer or group of customers would otherwise require, if the DNSP did not consider it more efficient to build the network to a greater standard based on forecast load growth.

The customers should only pay for their requirements as long as they are with the regulated reliability standards for the jurisdiction.

The AER seeks comments and alternative approaches to deal with the costs allocation issues where a DNSP provides a network extension on request of a single customer, to a standard greater than that customer requires due to the DNSP's network planning process.

Again we consider that the customers should only pay for their requirements as long as they are within the regulated reliability standards for the jurisdiction. In NSW customers have the choice of installing assets that are a higher standard than the DNSPs requirements at their cost. These are constructed by their selected accredited service provider.