

# **ELECTRICITY DISTRIBUTION NETWORK PLANNING AND CONNECTION**

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**A National Framework for Electricity  
Distribution Networks**

MCE Standing Committee of Officials  
Policy Response

15 December 2008

## **Stakeholder consultation**

The Ministerial Council on Energy (MCE) Standing Committee of Officials (SCO) policy response is presented in three parts:

- Part 1 – National framework for electricity distribution planning and expansion.
- Part 2 – National framework for electricity distribution connection arrangements.
- Part 3 – National framework for connection charge/capital contribution arrangements.

For the reasons outlined in this document, Part 1 (national framework for electricity distribution planning and expansion) will be progressed via an MCE-directed review by the Australian Energy Market Commission (AEMC). The MCE terms of reference for the review has been released at the same time as this document.

Parts 2 and 3 (national framework for electricity connection and connection charge arrangements) will be progressed as part of the same legislative package as the National Energy Customer Framework (NECF). SCO invites stakeholder comments on the draft policy response in respect of Parts 2 and 3 of this document.

### **Timeframe for consultation**

Parts 2 and 3 of this document have been released for stakeholder consultation.

Stakeholder submissions are sought by Friday **30 January 2009**. A stakeholder **workshop** will be held in the **week beginning 19 January 2009**. Details of the workshop will be made available to stakeholders shortly.

SCO will release a statement with the exposure draft of Rules changes indicating where the policy changed following consultation.

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# Introduction

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This document presents the Ministerial Council on Energy (MCE) Standing Committee of Officials' (SCO) policy response to the joint report prepared by NERA Economic Consulting (NERA) and the Allen Consulting Group (ACG) of August 2007 titled *Network Planning and Connection Arrangements – National Frameworks for Distribution Networks*.

In formulating this response, SCO has considered stakeholder submissions on the NERA/ACG report, the work of the MCE Retail Policy Working Group (RPWG) with respect to the development of the National Energy Customer Framework (NECF), and other relevant reviews including the Australian Energy Market Commission's (AEMC) National Transmission Planning Function review.

The development of a national framework for electricity distribution allows for the possibility of harmonisation of the access-related frameworks governing this sector. At present, there are different jurisdictional arrangements that govern the economic planning, connection and connection charge arrangements. These differences are highlighted in the Appendices to the NERA/ACG report.

A national framework minimises inconsistency in the regulatory arrangements across jurisdictions, reduces unnecessary regulatory barriers for cross-border operators, and establishes consistent investment signals and incentives across the National Electricity Market (NEM).

# Background and context

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## Australian Energy Market Agreement

The 2006 amended Australian Energy Market Agreement (AEMA) sets out a number of energy market regulatory functions that governments agreed would be transferred to the national regulatory framework. Reforms undertaken by the MCE in relation to a number of these functions, such as economic regulation of transmission and distribution networks, have already been transferred to a national framework.

This paper addresses the national framework for items 4, 5 and 8 in Annexure 2 of the AEMA, namely the following functions for electricity distribution:

- Connection and capital contribution requirements – new connections charges and capital works contributions;
- Distribution network expansion – determining when extensions are part of a regulated service and how charges are levied; and
- Distributor interface with customers and embedded generators – determining the nature of distributor-embedded generator relationships including use of system.

## NERA/ACG report

In early 2007, SCO commissioned NERA/ACG to provide advice on a national framework for electricity distribution planning, connection and connection charge arrangement. In August 2007, NERA/ACG presented its final report.

In August 2007, SCO publicly released the consultant report for stakeholder consultation. A public forum was held on 21 September 2007. In response to the NERA/ACG report, 23 submissions were received (a list of written submissions received and summary of issues is provided at **Attachments A** and **B** respectively).

## Developments since release of report

Since the development and release of the NERA/ACG report, there have been a number of reviews and developments in the market which impact the electricity distribution planning and connection framework. These developments have been considered in the context of developing the SCO policy response to the NERA/ACG report.

The key developments include:

### The development of the NECF

The NECF is intended to put in place a national customer framework for the supply of energy (both electricity and gas) to all retail customers. A SCO policy response paper, including a comprehensive table of recommendations, was released in June 2008 for consultation. That document outlined the framework for distributors' contractual relationship with retailers and small customers where a physical connection to the network exists.

The connection framework is the key area of overlap between the AEMA 4, 5 and 8 work-stream and the NECF. Considerable work is being undertaken to determine the appropriate legal architecture to ensure that all customers - both retail and non-retail - will be comprehensively covered by the combination of the upcoming national Law and Rules for the NECF and other amendments to the National Electricity Rules (NER). Following finalisation of policy, the connection and connection charge framework will be implemented as part of the retail package.

#### Transmission network reforms including planning and regulatory investment test

On 22 July 2008, the AEMC published its Final Report to the MCE on the National Transmission Planning Arrangements Review. The AEMC Final Report sets out the recommendations for the establishment of a National Transmission Planner and a Regulatory Investment Test for Transmission to replace the current Regulatory Test. The AEMC Final Report also recommends that the current regulatory test continue for Distribution Network Services Providers (DNSPs). The MCE response to this report was released on 6 November 2008.

One of the key issues in light of the AEMC National Transmission Planning Arrangements review is what is the appropriate planning and regulatory test framework for electricity distribution networks. This issue has been considered in the context of developing the policy response to the NERA/ACG report recommendations.

#### Demand Side Participation (DSP) in the National Energy Market

On 23 October 2007, the AEMC wrote to the MCE advising of its intention to investigate the potential for amendments to the NER in order to better facilitate DSP in the NEM. Stage 2 of this Review has particular relevance to this SCO policy paper. Stage 2 of the Review focuses on the following aspects:

- the economic regulation of networks;
- network planning;
- network access and connection arrangements;
- wholesale markets and financial contracting; and
- using DSP for reliability purposes.

The AEMC intends to publish its report and present findings to MCE on any NER changes that might be required by December 2008.

#### Carbon Pollution Reduction Scheme (CPRS) and Renewable Energy Target (RET)

The Australian Government committed to introduce a CPRS and increase the RET to 45,000 GWh by 2020, so that 20 per cent of Australia's electricity supply is generated from renewable sources by 2020.

The creation of the national framework for electricity distribution networks planning and connections arrangement in part seeks to ensure a level playing field for the role of embedded generation in delivering Australia's energy needs. It is therefore important to remain mindful of the context of climate change policies in forming the policy response to the NERA/ACG report.

In addition, the AEMC is currently undertaking a review which will consider what if any amendments are needed to the energy market frameworks to better prepare the energy sector for the CPRS and RET. The AEMC is scheduled to report the findings of its review, including proposed rule amendments, to the MCE in September 2009.

### **Draft Code of Practice for Embedded Generation**

Prior to the MCE regulatory reforms, work was undertaken to reduce the barriers to renewable and embedded generation. This work focused on increasing clarity and consistency between the different jurisdictional regimes through a voluntary framework. As part of that work stream, a discussion paper on the Impediments to the Uptake of Renewable and Distributed Generation and a draft Code of Practice for Embedded Generation (CoPEG) were developed by the Utility Regulators Forum. This work was released for consultation in February 2006.

Part way through this process (in November 2005) MCE agreed on a framework for the transfer of specified distribution and retail economic regulatory functions to a national regulatory regime. Given this significant change in context, work on the impediments to embedded generation was expanded to cover demand side response and integrated into the development of the national framework (which is binding, rather than voluntary).

As part of the economic regulatory package, MCE officials commissioned an independent review of incentives and barriers to demand side response and distributed generation<sup>1</sup>. Approximately 15 recommendations (including a demand management incentive scheme) were adopted in the final NER, which commenced on 1 January 2008.

This current work on the non-economic aspects of the national regulatory framework, including electricity distribution network planning, expansion, connection and connection charge arrangements, continues to draw on earlier work on barriers to embedded generation and demand side response.

The NERA/ACG report considered the draft CoPEG and subsequent stakeholder comments as a key input, using it to define terminology relating to embedded generators and to inform relevant recommendations. SCO considers that, while not all recommendations of the draft CoPEG have been adopted or are proposed to be adopted, the scope of previous recommendations would be covered by the January 2008 amendments to the NER and remainder by the proposed positions in this connections and planning paper.

Table 1 documents those aspects of the draft CoPEG that were considered as part of the January 2008 amendments to the NER, and those that were considered in the NERA/ACG report and therefore considered in this SCO policy paper.

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<sup>1</sup> NERA Economic Consulting, April 2007: *Distribution Rules Review – Network Incentives for Demand Side Response and Distributed Generation*.

**Table 1: Status of aspects of the CoPEG**

<b>Policy area</b>	<b>Status</b>
Connection process	Considered in this paper
Technical requirements	Considered in this paper
Network charges	Considered in January 2008 NER amendments
Connection agreements	Considered in this paper
Payment to embedded generator	Considered in January 2008 NER amendments
Reimbursement of capital contributions	Considered in this paper
Treatment of network losses	Considered in January 2008 NER amendments

As part of the NERA/ACG report, consideration was given to electricity distribution network losses. As part of the economic package, the function of network losses policy and oversight was transferred to the national framework and regulatory institutions. SCO considers that these issues can be progressed by stakeholders via the rule change process.

# **PART 1: National framework for electricity distribution network planning and expansion**

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## **Introduction**

This section presents the SCO policy considerations underlying the responses to the NERA/ACG report recommendations (**Recommendations 1-9 of Attachment C**) in regard to the development of a national framework for electricity distribution network planning and expansion.

## **Purpose and aim of electricity distribution network planning and expansion framework**

The National Electricity Law (NEL) objective seeks to promote efficient operation and investment in the NEM for the long term interest of consumers from the perspective of reliability, price, safety and quality of electricity services.

The electricity network infrastructure (both transmission and distribution) plays a critical role in delivering services to consumers and driving efficient and competitive outcomes in the wholesale and retail segments of the market. Unreliable infrastructure which does not meet the needs of the community will have significant adverse effects on the public and the economy. An appropriate planning process is essential to ensure ongoing efficient and reliable supply of electricity.

Electricity network infrastructure exhibits natural monopoly characteristics. In these circumstances, a well designed access framework looks to put in place appropriate incentives and processes to limit the extraction of monopoly rent. The network planning and regulatory frameworks should effectively work together to ensure efficient outcomes for the long term interest of consumers. In developing such a framework, a balance must be struck between putting in place obligations on DNSPs to deliver efficient outcomes while considering the potential regulatory costs that may be imposed.

In this context, the specific outcomes intended to be achieved by the network development and planning and expansion arrangements include the following:

- Ensure DNSPs have a clearly defined and efficient planning process which provides certainty in relation to approval of network expansion and augmentation to maintain the reliability of the electricity supply to consumers.
- Ensure DNSPs develop the network efficiently. This includes addressing a perceived failure by DNSPs to look at non-network alternatives (such as embedded generation, energy efficiency and conservation measures) in a neutral manner when making distribution augmentation assessments.
- Ensure appropriate information transparency to allow network users to plan where best to connect to the network and provide an appropriate regulatory environment to facilitate this. The need to provide this information emerges from the asymmetry of information between DNSPs and connecting users regarding the future timing and location of network constraints. Decisions about timing and location of connecting

users are also important in the context of the connection charge arrangements – i.e. the extent to which the connecting users contribute to upstream augmentation requirements.

- The availability of appropriate information is important to allow for efficient planning by parties that may offer alternative, more cost-effective solutions to network augmentations to address emerging constraints.

The principal means for achieving these objectives is to require DNSPs to undertake regular and comprehensive forward planning, and where appropriately triggered, conduct a robust economic assessment of alternatives. Information transparency regarding analysis and decisions made, and recourse to dispute decisions where appropriate, are also viewed as being paramount to ensure compliance and accountability.

The abovementioned drivers for network development and planning arrangements are also important within the context of the creation of a consistent national framework, which will look to:

- ensure a level playing field for all regions in terms of attracting investment and promote more efficient decisions, in that the same overarching regulatory framework applies across the NEM; and
- reduce the regulatory compliance burden for participants operating in more than one region in the NEM.

## **Policy Considerations**

Table 3 (see **Attachment C, Recommendations 1-9**) presents the SCO policy response to the report of NERA/ACG on the national framework for electricity distribution planning, taking account of stakeholder submissions.

In the context of the overarching objectives and aims identified in the previous section, and the recent and current major developments in the NEM discussed above, it has become apparent that further consultation and analysis is required to develop a national framework for electricity distribution network planning and expansion.

Given the recent review undertaken by the AEMC in relation to electricity transmission network planning, it is considered appropriate that the AEMC be directed to conduct a review, in consultation with stakeholders, and advise the MCE on the appropriate national framework for distribution network planning and expansion.

The terms of reference for the AEMC review has been released at the same time as this report. High level policy guidance regarding the broad parameters of the national framework for planning and expansion of electricity distribution networks has been provided by the MCE in the terms of reference.

## **Next Steps**

As noted above, the AEMC will be tasked to provide advice, including proposed rules, for the development of a national framework for electricity distribution network planning and expansion. The AEMC will conduct this review consistent with its obligations in the NEL.

# **PART 2: National framework for electricity distribution network connection arrangements**

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## **Introduction**

This section presents the SCO policy considerations to the NERA/ACG report recommendations in regard to the development of a national framework for electricity distribution connection arrangements.

SCO invites stakeholder comments on this section of the SCO policy response. SCO will consider stakeholder comments prior to finalising its policy positions.

## **Purpose and aim of the electricity distribution connection framework**

As part of the broader access framework, the electricity distribution network connection arrangements seek to prevent a DNSP from exerting its monopoly power in the provision of network connection services. Specifically, through limiting barriers to the efficient provision of network connection services. At the same time, the intent is to establish balanced connection arrangements which are not overly prescriptive – only regulating when it is deemed necessary and recognising distributors’ incentives to gain new customers under price regulation.

The potential for a DNSP to limit access to the network may be influenced by, amongst other things:

- the substantial bargaining power of the DNSP, given its monopoly position and asymmetric access to information, which may result in the prospective user being denied access, delayed or inappropriately frustrated during the connection process;
- the prospective user's technical requirements relative to the DNSP's minimum and standard access requirements; and
- the assets that must be constructed to effect connection and the cost of connection.

It is also recognised that the right to access an electricity network must be balanced against the responsibility of the DNSP to operate a safe and reliable network.

A connection arrangement therefore looks to put in place appropriate processes and arrangements which enables the timely and efficient provision of reliable network connection services. In addition the proposed arrangements look to put in place a framework for standard and negotiable connection arrangements, commensurate with the bargaining position of the connecting user. The connection arrangements also look to provide efficient location signals while taking into account the specific technical and safety constraints of the network.

## **National framework for electricity distribution connection arrangements**

Table 3 (**Attachment C, Recommendations 10-24**) presents the SCO draft policy response to the report of NERA/ACG on the national framework for electricity distribution

connection arrangements, taking account of stakeholder submissions. In developing the response to these recommendations, SCO is mindful of the framework already put in place in the economic package, specifically the framework for the classification of distribution services.

The following section broadly outlines the connection arrangements as covered comprehensively by a combination of the new national connection framework and the NECF.

#### Policy objectives of the proposed connection framework

The connections framework seeks to achieve the following broad policy objectives:

- To provide a national framework to harmonise network connections arrangements between jurisdictions;
- To integrate regulation of non-price elements of connections with the Australian Energy Regulator's (AER) economic distribution regulation powers;
- To simplify, where possible, the connections arrangements pertaining to embedded generators and the process of connection for customers; and
- To provide for a framework for negotiation between users of all sizes and distributors where appropriate, and to make this process as user-friendly as possible while delivering certainty to all parties.

#### Services definition issues – new, modified and existing connection scenarios

For the purposes of the connection framework, the following scenarios are distinguished and covered in the framework:

- Existing connections: premises occupied by a *retail* customer where *only energisation is required* will be covered by the NECF, except in so far as any ongoing standards or technical and/or safety requirements may be governed by the NER or by continuing jurisdictional standards and/or requirements.
- New connections: where there are services required to establish a *new physical connection to the premises of a customer seeking electricity supply or embedded generator*, these are the connection services that are under discussion in this paper, and will be governed by the NER.
- Modification to existing connection: where there are services required to *modify (extend or augment) a physical connection to the premises of a customer seeking electricity supply or embedded generator*, these may be subject to similar or related requirements as for new connections, in other words as set out in the NER.

This paper seeks to outline a national framework for new connection and modifications to existing connections. The NECF has outlined a national framework for existing (i.e. energisation) connections. However, all three aspects will be implemented as part of the NECF legislative package.

### The proposed model for connection

The connection process applies to new and modified connections for energy supply as well as for embedded generation. Connection arrangements will be based on the size of the customer's proposed new load and/or embedded generation capacity.

There will be two types of connection contract options available under the connection framework, which are available to all customers, regardless of the classification of their service under Chapter 6 of the NER. That is, there are only one of two processes which will apply to the development of any new or augmented connection, a 'standard connection process' or a 'negotiated connection process'. Figure 1 on page 15 below depicts these processes.

1. **Standard connection process** – will apply to all standard connections as defined by the DNSP and agreed by the AER.
2. **Negotiated connection process** – will cover negotiated connections.

A schedule to Chapter 5 of the NER will list the minimum terms and conditions that all contracts are required to cover. These may be based on or a modified version of existing Schedule 5.6 of the NER, which is reproduced in **Attachment D**. Further technical and legal advice is being sought prior to consultation, to determine an appropriate schedule.

### Standard connections for small load customers and micro embedded generation

For supply connections, DNSPs will be required, by the NER, to specify at least one (1) standard connection service. For embedded generation, distributors will likewise be required to develop a standard connection service for micro embedded generation (micro EG), corresponding with the technical requirements for this class set out in the NER for which standard connection arrangements will apply. While the NERA/ACG report recommended including a comprehensive range of customer definitions in the NER, a range of stakeholder concerns led SCO to reject this proposal – instead only agreeing to define micro EG to support the requirement for standard connection services, a proposal for which stakeholders were supportive.

Standard connection arrangements would take the form of standard terms, conditions, technical specifications, timeframes and charges for connection in the form of a 'standard connection offer', compliant with the previously mentioned schedule to Chapter 5. Such a connection offer would be made subject to a contract entered into with a customer at the time of application. Stakeholders on the whole were generally supportive of the NERA/ACG recommendations relating to standard connections in their written submissions.

Standard connection arrangements, thus proposed, would be subject to AER approval as part of a distribution pricing review. These standard arrangements may provide for a standard connection asset to be offered to customers (for example, but not limited to, a network span to a premises, or metering equipment) and associated charges (discussed further in Part 3 of this paper under Capital Contributions).

There will be the requirement that DNSPs must, at a minimum, provide one standard connection service contract for small load customers. The definition of 'small load' would be for the distributor to propose based on technical capabilities and historic practices, but there would be an expectation that the AER should approve a definition which covers the majority of residential and comparable small business customers in the DNSPs service area.

#### Additional standard connection contracts

DNSPs may develop standard connection contracts for other customers which are defined by a set of technical requirements, but are not obliged to do so. The DNSP would be required to seek AER approval of these additional standard customer connection contracts.

DNSPs may, for large load (i.e. non-generation) customers, utilise the provision under the NECF for the AER to approve alternative deemed distribution contracts for large customers, in order to develop integrated additional standard arrangements for connection and ongoing supply to large customers. This range of standard services created by the DNSP, should the DNSP choose to do so to streamline its connection procedures. However, this does not preclude any customer from negotiating its own terms and conditions with the DNSP.

#### Negotiated connections

If none of the standard offers match a particular customer's technical requirements then the negotiated connection process used to negotiate a unique or individualised contract for connection.

A revised connection negotiation procedure set out in Chapter 5 of the NER will govern the process of arriving at a connection offer. This route of connection will also be open to non-load customers (i.e. embedded generators) and non-retail customers as per the current NER processes. Both standard and negotiated connection offers would be required to conform to specifications in the previously mentioned schedule to Chapter 5 of the NER.

#### Classification of connection services

The connection process models set out in this paper are not intended to limit or direct the AER in classification of services under Chapter 6 of the NER. Rather, the connection process models are best thought of as placing an 'obligation to offer connection' on the DNSP. The form of regulation to apply would be determined by the AER according to the principles currently set out in the NER.

This is to ensure that the connection framework as established in Chapter 5 of the NER remains consistent with Chapter 6 of the NER. However, it is worth noting that, similarly consistent with the existing provisions under the NER, price will not be subject to negotiation for a connection classified as a 'direct control service'.

### Timeframes for connection

SCO acknowledges that the NERA/ACG recommendations relating to the timeframes for various stages in the connection process received a mixed reaction in the written submissions from stakeholders. However while some concessions have been made, for example removing the cooling-off period, on balance SCO believes that providing certainty and timeliness of response to connecting users through imposing timeframes on DNSPs (in the main on standard connections) is important, especially given the obligation to connect exists.

The connection process at Figure 1 shows both the standard and negotiated connection procedures with the applicable timeframes.

A DNSP is required to respond to specific connection enquires and provide the appropriate technical information within 5 business days. General enquiries by prospective customers, at times referred to as 'a pre-enquiry phase' by DNSPs will not be regulated.

The connection process commences when the DNSP receives a completed application by the customer containing all the relevant information that allows the DNSP to determine if the type of connection required is a standard connection as defined by the DNSP or will have to be negotiated. If a standard connection service is applicable, the DNSP must provide the standard connection contract and applicable distribution contract within 5 business days of receiving a completed standard application form.

Finally, SCO recognises that in a number of situations construction and electrical contractors may assist customers with the connection process. Hence, the NER will allow these third parties, including the customer's retailer, to apply for a connection on the customer's behalf.

### **Stakeholder Comment**

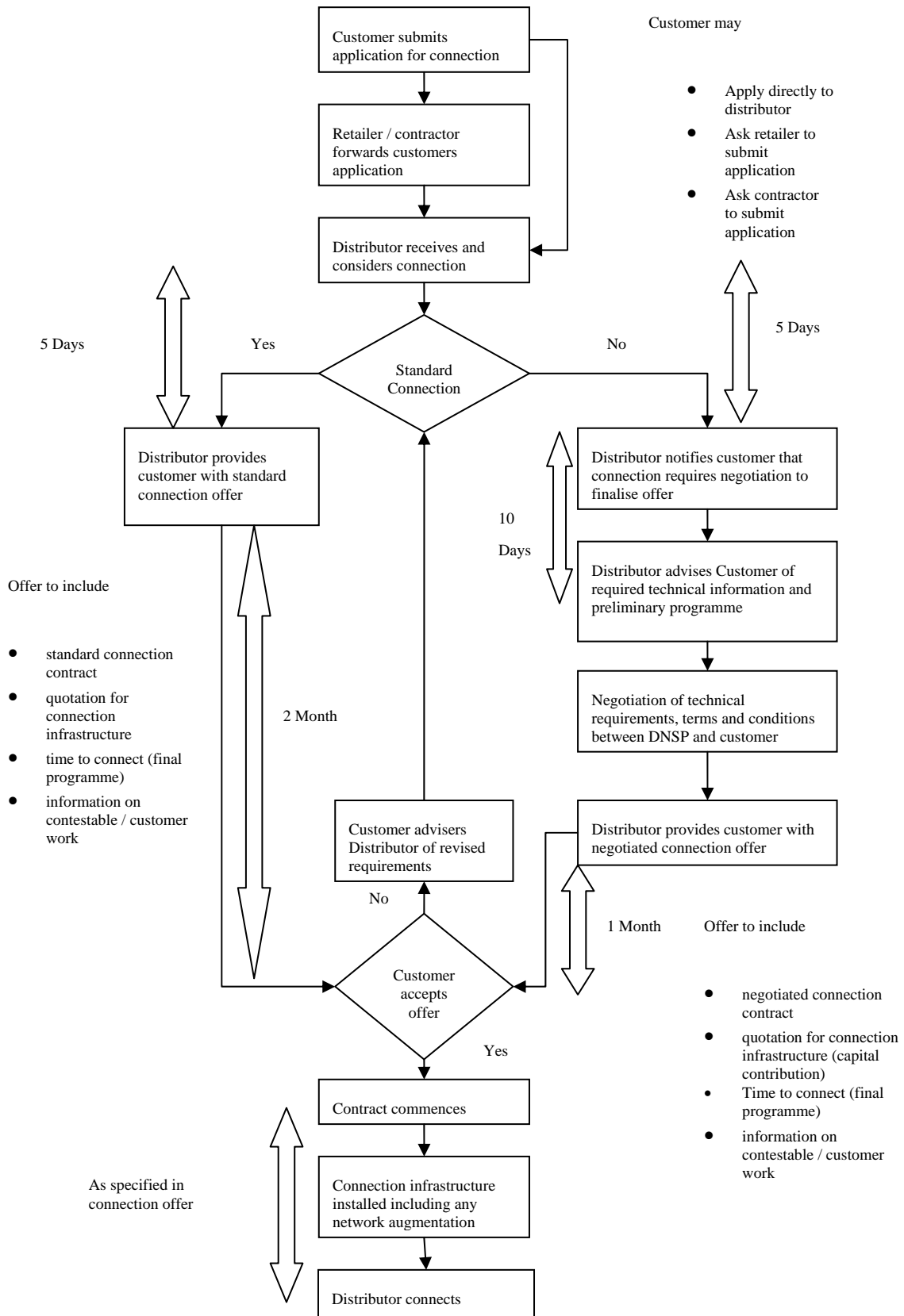
Stakeholders are requested to provide comment on the proposed timeframes to apply to the standard and negotiated connection procedures.
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### Scope/coverage of standard and negotiated connection contracts

The connection related requirements described above pertain to the establishment only of either a new physical connection or modification of an existing physical connection. Once the connection work is completed then those requirements are fulfilled. Ongoing distribution services (customer energisation and supply) are governed by the relevant customer distribution contract under the NECF.

There are differing approaches in jurisdictions to the contractual model as between initial connection and ongoing supply services. In some jurisdictions there is a single contract for both phases, and in others there are separate contracts. SCO invites comments from stakeholders on the regulatory design aspect of the requirements for new connections. In particular, whether there should be two separate contracts (one for the initial connection phase and one for ongoing services) or a single distribution contract governing both initial connection and ongoing services.

**Figure 1: connection procedure: the proposed application of the various contractual arrangements to users under the proposed connection process.**



## Summary of proposed model

In summary, the connection framework includes:

### 1. Standard connections:

- a. **Common standard connection contract** – The NER will provide that every DNSP will have at least one (1) common standard connection contract. The DNSP will define this connection type based on the nature of their network. It is envisaged that this contract will capture, for example, the majority of common urban small load connections for which minimal extension or augmentation works are required, and the associated technical requirements. The AER will approve this contract.
- b. **Standard connection contract for micro embedded generators** – The NER will define a micro embedded generator, and require each DNSP to offer a standard connection service for this customer type. The NER will set out technical requirements for this connection type.
- c. **Additional standard connection contracts** – In addition to the ‘mandated’ common standard connection, a DNSP will have the option to propose any number of additional connection contracts for other standard connection types or groups of customers. These additional standard contracts will be available to classes of customer defined by a set of technical requirements which will be developed by the DNSP and are also to be approved by the AER.

2. **Negotiated connection contract** – this connection service is one which falls outside of the standard class(es) of customer specified by the DNSP, and is provided by virtue of a negotiated contract agreed between the DNSP and connecting party. This can apply to all customer types.

The DNSP is required to gain approval from the AER of a common standard connection definition (and associated technical requirements) and the **common standard connection contract** and the **additional standard connection contracts** for their distribution network. The AER will apply a ‘fair and reasonable’ test to the definitions.

These standard contracts, even when applicable, do not displace the rights of customers to negotiate connection in the appropriate circumstances should they wish to do so.

The proposed connection process is outlined in Figure 1 above.

### Stakeholder comments

Stakeholder comments are sought on the proposed national framework for connection. Specifically, comments are sought on the proposed framework for connection contracts, the connection procedure and links to Chapter 6 of the NER (in particular classification of services and the negotiation framework).

## Interaction with National Energy Customer Framework

The key area of overlap between the AEMA 4, 5 and 8 work-stream and the NECF is the area of connection. The AEMA 4, 5 and 8 work stream looks to outline the national framework for pre-connection and physical connection services work for all energy customers and the NECF looks to provide for the energisation of and supply to retail customers' premises.

One of the emerging issues identified by stakeholders in response to the NECF SCO policy response, released in June 2008, was how the national framework for connections interacts with the NECF and how the two work streams are to be co-ordinated and progressed in developing the new national connection requirements. Submissions also commented that the artificial split between the two work streams risks gaps or internal inconsistency between them.

Considerable work is being undertaken to determine the appropriate legal architecture to ensure that all connection applicants – both retail and non-retail – are appropriately covered by the combination of the NECF and NER. It is intended that the national connection arrangements will be aligned and implemented with the NECF package to ensure both frameworks work in a consistent and effective manner.

### Connection applicants

The NECF deals only with the treatment of retail load customers seeking energisation of an existing connection. The connection framework covers all new or modified connections, both load and generation. There are circumstances where a customer will be connecting in both a new or modified physical sense and also seeking subsequent energisation through that connection. The following table outlines the variety of customer connection and ongoing supply scenarios:

Customer category	NECF Framework	Connection Framework
Small retail customers <sup>2</sup> seeking standard connection only	Bulk of these customers will be supplied via a standard distribution contract that is deemed to apply, but subject to relevant connection-related pre-conditions.	Standard connection process to apply. Either a 'common standard' or 'additional standard' connection contract may be used depending on nature of the connection.
Small retail customers seeking 'non standard' connection	Envisaged that standard distribution contract to apply with modifications as may be necessary to address the specific requirements.	Negotiated connection process to apply and a negotiated contract used.
Large retail customers seeking standard connection	Distributor has the option to propose to the AER standardised contracts for these customers, otherwise the standard distribution contract would be deemed to apply.	Standard connection process to apply. The "additional standard" connection contract developed for the connection type sought by customer is used.

<sup>2</sup> Please note that 'small customer' is a defined term under the NECF, and is distinct from 'small load [customer]' under the connections framework for technical reasons.

Large retail customers seeking non-standard connections (May include large customers with embedded generation equipment)	As above, the NECF allows for AER approved distribution contracts to apply to these customers for supply. However, for this category of large retail customer, a workable negotiate/arbitrate regime is necessary as part of any national connection regime.	Negotiated connection process to apply. Negotiated contract is used.
Micro EG customers	Mainly small retail customers with some form of standard generation equipment on the premises, would be supplied via the standard distribution contract and standard connection arrangements are proposed.	Standard connection process to apply. 'Standard contract for micro embedded generator' is used.
Other embedded generation customers	These customers would not necessarily be consumers of energy at the relevant connection point and therefore would not necessarily take ongoing supply under the NECF standard distribution contract or be subject to other provisions of the NECF.	Other embedded generation (non-retail customer) would be able to seek connection through an 'additional standard connection' service as defined by a DNSP or alternatively negotiate connection under the NER.

### **Impending national framework for gas connections**

SCO will develop a policy paper for establishing a National Framework for Gas Connections (NFGC), which will address AEMA Annexure 2 items 2 and 4 (connection component only) for gas.

Connection arrangements for gas distributors vary more between jurisdictions than in electricity, with some jurisdictions not imposing an obligation to connect customers. The NFGC will have to be mindful of the degree to which gas is seen to be an essential service, but will attempt to harmonise the procedural aspects of connection. The NFGC will also be consistent, where possible, with the approach taken for electricity.

The NFGC will be developed by SCO and a draft policy paper for stakeholder consultation is planned for the first quarter of 2009. It is intended the NFGC will be implemented as part of the NECF legislative package and included in the NECF exposure draft. Refer to Part 4 for implementation of the gas connections work.

# **PART 3: National framework for electricity distribution capital contribution arrangements**

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## **Introduction**

This section presents the initial SCO considerations on the NERA/ACG report recommendations in regard to the development of a national framework for connection charge/capital contribution arrangements.

SCO invites stakeholder comments on this section of the SCO policy response. SCO will consider stakeholder comments prior to finalising its policy positions.

## **Purpose and aim of the capital contributions framework**

Similarly to connections arrangements, and as part of the broader access framework, the electricity distribution network capital contributions arrangements seek to prevent a DNSP from exerting its monopoly power in the provision of network connection services, specifically through limiting barriers to the efficient provision of connection network services at a fair price.

Current jurisdictional approaches vary quite markedly in terms of:

- the basis of charges;
- the refund mechanisms; and
- the form of regulation used.

The new framework seeks to develop and apply a nationally consistent approach to the determination and application of capital contribution charges for connection to distribution networks in the NEM.

## **Policy Considerations**

Table 3 (**Attachment C, Recommendations 25-30**) presents the SCO policy response to the report of NERA/ACG on the national framework for electricity distribution capital contribution arrangements, taking account of stakeholder submissions.

SCO was principally guided in its response to the NERA/ACG report recommendations by the key objective of cost reflectivity. Given this, the policy rationale for responses was influenced by a range of issues as outlined below.

### Contestability of services

SCO's response to the capital contributions recommendations takes into account the fact that there are both contestable and non-contestable connection services across the NEM. That is, contestability of services exists in some situations which means that a connecting user may in some instances pay charges to an entity other than the DNSP in the connection process, with resultant competitive pressure on prices.

In some situations where there is contestability for connection services, this covers the connection asset, extension assets, and immediate augmentation requirements. Where

there is contestability, the DNSP may quote for undertaking the work. The connecting customer is also able to obtain their own quotes from accredited service providers.

For non-contestable services (i.e. entirely carried out by the DNSP), the DNSP has a regulated charge which it applies to the connection services. Where relevant, the application of charges due to the forecasting of future augmentation requirements being brought forward is calculated as the net present value (NPV).

A third case is where services are not contestable for provision direct to the customer, but distributors must tender for works to be undertaken for projects of a certain size.

### Network augmentation

Written submissions received were particularly critical of the NERA/ACG recommended approach to augmentation costs, which was that a compulsory connection asset charge would not include the cost of any shared network augmentation required.

SCO does not support NERA/ACG recommendation that augmentation costs are not borne by a connecting user whose connection directly necessitates augmentation of the shared network. It is considered that it is inequitable that the entire network of users should subsidise the connecting user's requirements in this way.

SCO instead proposes that the connecting user will pay, in the same way it pays for its connection and extension assets, for any necessary augmentation to the shared network. The exceptions to this rule will be small customers as defined in the NECF (for which any cost will be recovered through the Distribution Use of System (DUOS) charges) and micro EG connections. SCO notes that a user pays approach to augmentation costs should act as a positive incentive for demand management, micro EG and energy efficiency initiatives – to lower potential augmentation costs.

There is a valid argument regarding the issue of competitive neutrality between generators connecting to transmission or distribution networks – with the former not paying augmentation costs as part of a new connection. SCO considers that the locational signals provided by requiring payment of augmentation costs as part of a new connection outweighs the issue of competitive neutrality as this encourages efficient location and investment decisions. Furthermore, the transmission framework is currently being reviewed by the AEMC, including inter-regional charging, as part of the climate change review.

It is further noted that there will be an augmentation charge determined by the regulator, taking into account both immediate and future network needs. As such, SCO proposes that the AER will develop a guideline detailing the methodology associated with the calculation of the augmentation component of a connection charge. Given that augmentation charges may be associated with revenue resets and distribution network usage tariffs, the implementation and commencement of the new capital contribution framework will be aligned with regional revenue resets to facilitate a smooth transition to the new arrangements.

### AER Guideline for Calculating Capital Contribution Charge

The NER will outline a basic set of principles for the calculation of capital contributions.

These principles include:

- large customers (including large embedded generators) will be required to pay a capital contribution for the cost of any network extension and augmentation assets required to connect the customer and for the cost of dedicated connection assets;
- small customers (as defined in the NECF) and micro EG will be required to pay a capital contribution for extension and dedicated connection assets. Augmentation costs for these customers will be recovered, where appropriate, through DUOS; and
- customers will receive a repayment of capital contribution payments for previously dedicated assets (including augmentation assets for large customers) proportional to new customers' utilisation of that asset.

Subject to these express principles, the NER will require the AER to develop a Guideline, based on the key objective of long run cost reflectivity. This Guideline will contain further details regarding the determination of connection asset charges, including the requirement that there will be a standard small customer connection asset which will be provided by a DNSP for a standard charge where there is no contestability, and a definition of the relevant connection point. In developing the Guideline the AER is to consider existing connection charge arrangements in jurisdictions or regions and the transition to the proposed capital contribution arrangement for small customers.

Where a contestable market for the service does not exist, there will be a requirement that a standard small connection asset will be provided for a standard asset charge. The definition of a standard asset will be a matter for each DNSP to determine and define for its own network(s) with AER approval.

### **Stakeholder comments**

Stakeholder comments are sought on the proposed national framework for connection charge/capital contribution arrangements.

## PART 4: Implementation

The national connection and connection charge arrangements for electricity distribution networks will be implemented as part of the NECF package to ensure both frameworks work in a consistent and effective manner. Therefore, the exposure draft and consultation processes will be aligned with the NECF (see table below).

There would not be a permanent 'split' between the connection framework and the NECF, although the NECF will progress through its earlier exposure draft stages ahead of the complete connection framework.

The intention is that the NECF first exposure draft will present basic connection arrangements for small customers who do not require a 'negotiating' framework as such, but can be accommodated via the obligation to connect, and the standardised requirements under the NECF. Other parts of the connection framework would be included in the second exposure draft of the NECF package.

### Key Milestones

	Electricity connection and connection charge arrangements	Gas connection arrangements
<i>Policy finalisation</i>		
December 2008	Release of SCO Policy Paper 'Electricity Distribution Network Planning and Connection'	
January 2009	Stakeholder workshop on the connection and connection charge arrangements.  Written stakeholder submissions invited on the connection and connection charge by 30 January 2009.	
February 2009		Release of National Framework for Gas Connection (NFGC) draft policy paper for stakeholder consultation.
March/April 2009		6 week consultation period. Stakeholder workshop 2 weeks before the close of written submissions.
May 2009		Release of final NFGC SCO policy response.
<i>Drafting implementation and exposure drafts</i>		
Retail Package timetable	Release of exposure draft of the NECF. Include broad connection arrangements. SCO release a statement with the exposure draft for electricity distribution connection and connection charge	Release of exposure draft of the NECF. Include gas connection arrangements.

	arrangements indicating where the policy changed following consultation.	
As above	Release of 2nd exposure draft of NECF. An exposure draft of Rules relating to electricity distribution connection and connection charge arrangements will be released.	Release of 2nd exposure draft of NECF. An exposure draft of Rules relating to gas connection will be released.
As above	NECF and Rules on connection and connection charge arrangements introduced into South Australian (SA) Parliament.	NECF and Rules on connection arrangements introduced into SA Parliament.

SCO will release a statement with the exposure draft of Rules changes indicating where the policy changed following consultation.

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## **ATTACHMENT A: List of stakeholder submissions**

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1. ActewAGL
2. Adjunct Professor Alan Pears (AP)
3. Alinta Ltd (Alinta)
4. Aurora Energy
5. Australian Energy Regulator (AER)
6. Citipower
7. Consumer Utilities Advocacy Centre (CUAC)
8. Electricity Transmission Network Owners Forum (ETNOF)
9. Energex
10. Ergon Energy (Ergon)
11. Energy Australia (EA)
12. Energy Networks Association (ENA)
13. Energy Response (ER)
14. Energy Users Association of Australia (EUAA)
15. Essential Services Commission Victoria (ESCV)
16. Essential Services Commission of South Australia (ESCOSA)
17. ETSA Utilities
18. GridX Power (GridX)
19. Griffith University
20. Integral Energy (IE)
21. Major Energy Users (MEU)
22. Total Environment Centre/Alternative Technology Association/Ethnic Communities Council of NSW (TEC/ATA/ECCN)
23. United Energy Distribution (UED)

## **ATTACHMENT B: Summary of stakeholder submissions**

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This section presents a summary of stakeholder comments in response to the NERA/ACG report.

### **Part 1 – Electricity Distribution Network Planning**

#### Recommendation 1

There was general in-principle support for publicly available five year planning reports. However, a number of distribution network stakeholders question the proportionality of the recommendations for the annual planning report's proposed form, in that they believe that the compliance costs outweigh the benefits delivered (Alinta, Energex, ENA, UED).

#### *Publication and high level content requirements*

There was broad in-principle support for publicly available, centrally stored reports but several stakeholders maintain that there should be a distinction between more general information available to the public, and more detailed information to genuine embedded generation/demand side response (DSR) proponents (Alinta, UED). ENA recommended consideration of a more balanced approach to information disclosure which aligns costs with beneficiaries, through high level information requirements, and detailed information provided on a fee-for-service basis.

With regard to the amount of detail and range of topics outlined in the recommendation, there was a widely held belief amongst distribution network stakeholders that the regime does not balance costs imposed on businesses by the proposed release of highly detailed information versus the usefulness or relevance of the information to be provided to market participants. EA and ENA further noted that the costs will be ultimately borne by customers, and this impact has not been considered by the consultant report. Some stakeholders considered that the current requirements are sufficient in terms of forecasting, including description of major network improvements (Energex).

#### *Constraint solution estimates*

It was suggested by Aurora to round estimated constraint solution costs to the nearest \$million – in that attempting to make the amount any more detailed than that creates unnecessary burden and inaccuracies.

#### *Loss factors*

A number of submissions were concerned with the reporting of longer-term forecast distribution loss factors. It was noted that network losses are a very complex issue, are only calculated annually and can be influenced in a number of ways (Alinta, Aurora, Energex, EA, UED). EA argued that reporting losses is unlikely to have any impact on a distributed generator's (DG) decision about their location to connect or the viability of their business case.

## *Compliance*

Alinta noted that the NERA/ACG report emphasises proportionality in terms of costs and benefits, but that, contrary to this objective, the imposition of the regulatory test in the reporting of compliance with planning-related obligations is excessive. Alinta submitted that there is a case for applying a distribution specific test to distribution businesses rather than the regulatory test which is designed to apply to transmission. The AEMC would be the appropriate body for testing this potentiality. Rather than being presented with information which is not focused on specific projects, Alinta considered that embedded generation proponents would benefit more by dealing on a one-to-one basis with distributors in order to determine site-specific distribution loss factors.

On the other hand, CUAC and Griffith University propose penalty provisions for DNSPs which provide deficient, insufficient or inaccurate information. TEC and Griffith University note performance against the plan needs to be assessed so each planning report should also include reporting against the previous year's plan to ensure it is a genuine planning document. This assessment should refer to more than just the regulatory test, but rather report on all actions and, in particular should report on the extent of non-network solutions that have been taken up.

Others (EUAA and GridX) supported the additional requirements outlined, in that they will reduce the information disparity between DNSPs and end users.

## Recommendation 2

The submissions expressed strong in-principle support for a nationally consistent standard format (Energex, EUAA) but emphasise this approach must be balanced against likely costs and effectiveness of the extent and details of such disclosure (Alinta). The planning reports should disclose sufficient detail to enable end users and DSR/ DG proponents to assess potential impact of network loading on end user sites and identify opportunities for offering DSR and network support. To this end, it was suggested that these proponents be consulted in finalising the exact format (AP).

Energex suggested that the NER should only include high level obligations and the AER should develop specific statements of requirements in accordance with the consultation process outlined in the draft National Electricity (Economic Regulation of Distribution Services) Amendment Rule 2007 (the draft NER), released in April 2007. However many other stakeholders, such as Alinta, TEC, UED and EA, argued that the AER's role should be limited to enforcing the content requirements as expressly set out in the NER, and seeking further information where necessary.

With regard to outlining current and emerging constraints, it was suggested in a number of submissions (Aurora, Citipower) that the scope of constraints needs to be clearly defined. TEC points out that the standard format should be developed in reference to necessary contents, not just for applications of the regulatory test. The point is further made that the test is both under review, and it is very unclear how the test can be usefully applied to assess demand side management (DSM) and DG benefits. ETNOF agreed in principle with reporting on excess network capacity – but at the same time states that there would be difficulties in reality with accurately reporting it given that distribution networks are meshed.

CUAC and Griffith University emphasised the need for penalty provisions which would apply to DNSPs for failing to fully and accurately disclose planning information including costs in their annual reports.

#### Recommendation 3 & Recommendation 4

The submissions indicated an overall agreement in principle with these recommendations, except for the proposed thresholds. There was only minor commentary on the other elements of these two NERA recommendations.

CUAC supported the need to consult on alternatives to network solutions, but argues that this process of undertaking an economic cost-benefit assessment and perhaps a request for proposal (RFP) would need to be coupled or tied in with other arrangements that perhaps consequently review the published reports and integrate knowledge into future assessment of network and non-network upgrades. Similarly AP suggested that a timeframe for the response to the RFP should be specified, along with reviews of published reports, together with penalties for failure to comply. Some submissions argued that reporting immediately after an assessment is too onerous – and that instead all assessments should be reported in an annual report, and as a contrast/benchmark ESCOSA points out that their publication requirements are 6 months after analysis has been undertaken.

MEU agreed with the recommendation, subject to the terms of the cost-benefit assessment being clearly defined. The AER should be involved in the process, and at least receive a copy of the cost-benefit assessment. TEC argues that to define 'economic cost-benefit assessment' is too narrow – in that the full range of benefits of DSM/DG may not be realised from a purely economic assessment. TEC agreed with the recommendations but argue that it fails to address the barriers and lack of incentives faced by DM and DG proponents as the cost-benefit assessment will be used in a hard economic sense without a stronger emphasis, in the outlined approach, of wider benefits.

Overwhelmingly the thresholds proposed were an issue with almost every stakeholder. Framed in a cost-benefit analysis, it was argued that the thresholds are set far too low, thereby they capture too many projects and increase the costs of those projects – therefore imposing higher operating costs on DNSPs, which in turn, will lead to unreasonable higher costs for consumers. It is argued in numerous submissions that the imposition of these processes hampers DNSPs' ability to build and secure networks in an efficient and timely manner, especially in an environment of ever-increasing demand (Alinta, Aurora, ETNOF, Energex, EA, ENA, Citipower, UED) and that the likelihood for time lags has the potential to significantly impact a DNSP and its customers in terms of network performance and customer service levels (Energex, Citipower).

It is argued that the \$2million threshold is not sufficiently high to warrant the expense of conducting a full-scale economic cost-benefit analysis with consultation and RFP. If this threshold is maintained, Aurora suggests that the analysis/consultation process be scaled up or down according to project value.

Aurora proposed increasing \$2million threshold to \$5million – to be closer to an existing NER threshold of \$10million. To even more of an 'extreme', ETNOF stated that their experience suggests that the existing network asset thresholds in the NER should be increased even further. They state that this view was supported by the AEMC in its Draft

Rule Determination on Transmission Network Replacement and Reconfiguration. As part of that consultation the AEMC indicated that it considered the existing thresholds were too low. It should be noted that this was a transmission view, not distribution. Aurora further argues that the upper limit for no formal ex-post reporting requirements should be \$2million (as opposed to \$500K). The ex-ante requirement to identify emerging constraints that will require correction projects of less than \$0.5 million dollars should be removed, as it creates an excessive DNSP work-load to provide public notice of projects of vanishingly small return.

Alinta suggested that there would be little or immaterial non-network response to these proposed processes & associated thresholds, in that the RFP process is not beneficially utilised – there should be a mechanism to facilitate a swift upwards revision of the thresholds to remove/reduce an unnecessary burden on DNSPs. Several submissions also suggested indexation of thresholds in accordance with the Consumer Price Index (Aurora, Energex, MEU).

A number of submissions are strongly supportive of the objective of these recommendations, and even going so far as to suggest that \$2million is too high (GridX). The EUAA accepted that the RFP process is costly and not suitable for all augmentations; however they argue that DNSPs should be required to consider any offer of a non-network option in an appropriate cost-benefit assessment (or investment analysis) irrespective of the value of the augmentation requirement as non-network alternatives can be used effectively to achieve greater network benefits and defer augmentations.

TEC is concerned that small network projects added together can have a large cumulative result – together they could trip various thresholds, but an individual projects they fall beneath them. They claim there has been insufficient exploration of options which can be applied to smaller schemes and projects which, when multiplied, can have incremental impact.

Concerned with the same issue, ESCV stated that given that DNSPs' augmentation works often involve multiple related works rather than stand alone projects, the AER must develop guidelines for ensuring consistency in the level of detail that must go into the planning reports. For example, a DNSP may need to increase the size of a number of discrete sections of a 100 km high voltage line to meet specific localised demand increase and at the same time undertake pole-top insulator renewals. The works are typically undertaken over a long period of time and in stages. The DNSP may group the whole augmentation works as one project or separate the works into small packages.

### Recommendation 5

Submissions were quite critical of this recommendation, and many of the concerns they raise are also relevant to the previous two recommendations in that they question the overall objective and applications of RFPs.

Many of the stakeholders (Alinta, ENA, UED and Energex) questioned the effectiveness of issuing RFPs as a basis for “discovering” non-network solutions. They claim that DNSPs and proponents are already aware of where a non-network solution is viable or not. In this context they argued that the RFP requirement should be imposed on demand-related constraints/augmentations only – not for ‘run of the mill’ network maintenance or replacement of assets or the connection of large customers (Alinta, Aurora, UED).

ESCOSA stated similarly that customer-initiated augmentations should not be subject to the RFP requirement, and that RFPs should only be issued for projects where a prima facie case (in terms of economic viability and technical feasibility) exists for demand management alternatives, as is used in South Australia.

On the other hand, and in support of the recommendation, GridX makes the argument that DNSPs are not informed enough about DSM to judge whether DSM is appropriate or not, in addition to the fact that there is a historical and structural bias against non-network solutions. Also in support of the recommendation, ER pointed out that mandating RFPs in SA has not resulted in an increase in the use of non-network solutions, instead saying the real issue is with the format of the documents used. Therefore ER supports the use of standard documentation for RFPs, to help ensure that the requirements of RFPs can be structured in such a way that DSR proponents can actually access and address them.

Energex supported the use of the RFP to encourage transparency and agrees that the AER should develop guidelines for the contents and details of the RFP process in accordance with the consultation process outlined in the draft NER (April 2007). However it believed that the report does not adequately consider the requirement of DNSPs to meet jurisdictional obligations. In this context, it proposes that the responses to an RFP process must comply with the NER, DNSP-specific and jurisdictional requirements for reliability, security and technical standards.

As an alternative to RFPs, and discussed in the context of cost, TEC proposed that standard offers for small projects can alleviate the burden on both the DNSP and alternative proponents in developing proposals. In the case of small works, an RFP can place too great a cost burden on small businesses that are forced to develop a tender and a standard offer could be more appropriate, that is, the transaction costs may be too great in relation to the scale of the business, particularly in contrast to DNSPs which are essentially large, geographic monopolies. They propose that the AEMC develop, via public consultation, examples of standard offers and mandate a calculation procedure.

TEC suggested a compromise that the level of detail required be relative to the urgency of the constraint, that is, the more likely the constraint is to occur in the near future, the greater the level of detail required for reporting on both the constraint and the potential solutions. This could be a useful technique for easing the reporting burden on the DNSPs as well as assisting with the provision of information for potential non-network proponents.

ENA raised an interesting intellectual property issue – as the proposed information disclosure regime, including requirements to issue RFPs, does not recognise the significant investment that network businesses have made, and are continuing to make, in research and development to increase their understanding of demand management opportunities and risks. The proposed approach essentially requires network businesses to provide its intellectual property to other potential service providers, with the likelihood that these providers will use this information to offer a more expensive option back to the service provider.

### *AER role*

EA argued that the AER should not be conferred with guideline making powers in relation to matters which are clearly appropriate for NER. They are concerned this will create a further regulatory process burden which is unnecessary and will inevitably result in regulatory creep due to the AER seeking to regulate beyond the matters contemplated in the NER. Similarly Alinta argued that the issue of regulator involvement in specifying RFP processes needs careful consideration. If the basic incentives for discovering the most efficient solutions are not available to both distributors and external proponents, then no amount of regulatory direction will add anything to the discovery process.

Some submissions have raised concerns with the timelines that might be imposed by the AER. For example, Energex states that when establishing the minimum timelines for the RFP process, consideration should be given to the impact a prolonged project evaluation process would have in a rapidly growing dynamic environment such as Queensland. From an RFP respondent point of view, CUAC expressed concerns over the effects of imposing rigid timelines on the development of non-network responses/solutions to RFPs – as DG and DSR projects are more complicated than straight network upgrades, and proponents often have to consult with numerous customers to ascertain the viability of a project as opposed to network businesses which typically just make a technical assessment on a network upgrade.

### Recommendation 6

#### *Need for a test*

Most submissions agreed with the application of a test to distribution investments. There are, however, a range of views on the scope of the test, its relationship to the regulatory test for transmission investments, the process for developing the test, and the thresholds where it must be applied. These are outlined below.

#### *Process for developing the test*

ENA suggested that the analysis of the case for a new test, as well as the development of NER for the test, should be conducted by the AEMC, at the same time as it reviews the current proposed amendments to the transmission-focused regulatory test. SCO considers that an approach of providing broad policy direction and a draft Rule to the AEMC will allow the AEMC to integrate work streams as appropriate.

#### *Relationship of test for distribution with that for transmission*

Distribution businesses generally considered that there should be a test specifically applicable to distribution networks, rather than applying the existing regulatory test. They consider that the existing regulatory test was designed for application to transmission networks and is therefore inappropriate for distribution. They also consider that the revised test being developed by the AEMC (merging the reliability and market benefits limbs) will make the test less applicable to distribution, because the market benefits will seldom be relevant.

Many submissions considered that distribution networks were unlikely to affect market outcomes in the same way as transmission, and therefore should not have to go through the same test. ENA did, however, note that there would be a small number of cases where market benefits would be relevant to distribution investments.

### *Thresholds where test is required to be applied*

EnergyAustralia considered that the new economic regulation regime applying to distribution networks has a very strong incentive for NSPs to ensure that their capital expenditure is efficient. DNSPs will need to demonstrate a robust assessment of options and a process for assessing least-cost alternatives to meet reliability obligations as part of the regulatory determination process. In light of this, they suggest increasing the threshold above which the regulatory test is required. The implication is that below that threshold DNSPs could develop their own methods to assess options and demonstrate to the AER that these are appropriate and robust.

On the other hand, ER submitted that a standard model comparing network and non-network options would be helpful, as at present a wide range of different models are used by different network companies. CUAC also submitted that consideration must be given to standardising key variables (such as discount rates and future assumptions around peak demand growth rates) in the regulatory test. These submissions support more standardisation in the methods applied to assessing the efficiency of investment options.

### *Scope and nature of test*

AP submitted that the test “should include consideration of the multiple benefits of DG and DSM such as improved reliability and diversity”. In a report published separately from the submission process, ENA has recognised that DG and DSM options have different characteristics than network build options, and can sometimes be used to improve reliability.<sup>3</sup>

## Recommendation 7

All submissions commenting on this Recommendation express support, with the proviso from EA stating that it is vital to remember that a vast majority of the projects are necessary to meet reliability standards and ensure essential supply to customers and the timing of such requirements should not be jeopardised through any administrative process.

## Recommendation 8

There is generally strong support from the submissions in that there is a need recognised/acknowledged for a dispute resolution mechanism. However there are some areas of disagreement relating to the details. The main concern raised by a number of stakeholders (Aurora, CUAC, GridX, Griffith University, TEC) was that the proposal of maintaining the existing threshold of \$10million would mean that the threshold for dispute resolution would be significantly higher, therefore somewhat ineffective as a method of enforcement, than those outlined in the cost-benefit analyses requirements Recommendations (3 and 4). CUAC further suggested that smaller cases could be referred to/dealt with by a specialised independent body rather than AER to combat the notion of higher costs/more complex process for what may be a relatively small value project (\$2million) compared with the original \$10million threshold. However it should be emphasised that part of the recommendation does specify that the AER would adopt a low cost process.

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<sup>3</sup> Energy Networks Association, February 2008, p7. ENA Policy Paper: Demand Management Regulatory and Policy Framework. [www.ena.asn.au/udocs/ena\\_022208\\_121824.pdf](http://www.ena.asn.au/udocs/ena_022208_121824.pdf)

Some stakeholders (Energex and EA) expressed a concern that with the scope of review broadened, that the planning process would be appeal-able at any and every stage and has the potential to be drawn out/frustrated. A possible method to combat this type of 'vexatious litigation' could be to adopt Aurora's proposal, that there could be a mechanism to award costs to DNSPs to protect them. An alternative approach would be to allow the dispute resolution body the discretion to not hear disputes if they considered them vexatious.

A final concern is that the dispute resolution mechanism is a 'toothless tiger' – i.e. there is no real effect of decision or penalties imposed (Aurora, GridX, AP). It is acknowledged that the effect of the mechanism is a subtle one, and linked to the transparency-acting-as-enforcement objective and theme that runs throughout the proposed planning framework. Further to this a stronger but also indirect incentive is the prospect of the influence of the disputes when it comes time for reset determinations – i.e. in the situation where a DNSP going ahead with a project which was explicitly contrary to a dispute resolution decision, the cost of that project may be excluded from the allowable network revenue as inefficient or inappropriate capital expenditure.

### Recommendation 9

This recommendation has strong support from a range of stakeholders. Energex is concerned that the structure of the annual process appears to treat DG/DSR projects preferentially, pre-empting the outcomes of a thorough cost benefit analysis. Whilst it is acknowledged that DG/DSR projects can provide an efficient alternative to network investment in certain circumstances, the NERA report does not recognise demand management initiatives that have been established by DNSPs.

ENA, CUAC, ETNOF and EA are of the opinion that the additional information provision and planning measures outlined in the NERA report will not necessarily address the problem identified – i.e. the lack of real consideration of non-network alternatives when planning to overcome constraints and reliability issues – and that other incentives should be considered instead to tackle that particular issue directly. ESCV similarly warns against reliance on the use of planning reports to ensure efficient investment and development of networks, and states that instead the regulatory framework should contain the appropriate incentives to encourage efficient investment and penalties for not delivering an acceptable outcome, in a way similar to the S-factor and GSL scheme in Victoria.

Cultural barriers and a lack of DNSP knowledge were identified as an impediment to the efficient uptake of DSR solutions in NERA's review of distribution network incentives. DSR/DG trials will improve DNSP knowledge of DSR alternatives and enable DNSPs to better evaluate DSR solutions.

## **Part 2 – Network Connections**

### Recommendation 10

There is overall agreement with this recommendation amongst all stakeholders. Some submissions had concerns relating to the determination of connection costs, which are considered in the section on capital contributions.

## Recommendation 11

There was general support for this recommendation, but with some qualifications. Energex disagreed with the inclusion of these technical requirements in the NER and argued instead for the AER developing guidelines around them. EUAA argued for standardising micro DG connection requirements to the extent that complex connection procedures could be avoided, allowing a qualified technician to install to specified network standards without specific agreement of the distributor.

### *Definition of embedded generator classes*

TEC stated that without knowing how each type will be defined and classified, it is difficult to comment in an informed way about the following connection recommendations. The CoPEG defined DG unit sizes as in Table 2 below.

**Table 2: Definitions of embedded generator classes**

<b>Technical definition</b>	<b>Classification band</b>
Having a nameplate (electrical) rating not greater than 2kW <i>or</i> AS4777 compliant <i>and</i> connected to the LV network	Micro
Having a nameplate (electrical) rating greater than 2kW but not more than 1MW <i>and</i> connected to the LV network but not compliant with AS4777	Small
Having a nameplate (electrical) rating greater than 1MW but not more than 5MW <i>or</i> not greater than 1MW but connected to the HV network	Medium
Having a nameplate (electrical) rating greater than 5MW	Large

Submissions from EA, TEC, Griffith University and CUAC suggested using an alternative specification, put forward during the consultation to the CoPEG. This would involve revising the recommended Micro threshold up to 5kW and adding a new Mini classification for units between 5kW to 100kW. It is argued that increasing the Micro threshold will help to ensure all residential solar units are captured by this definition.

The definitions, with accompanying reasoning, proposed in the relevant submission (CANA) are as follows:

- *Micro EG* - up to 5kW. Applicable to predominantly domestic applications such as roof-top solar photovoltaic (PV) systems, and attracting standard grid-connection arrangements recognising the homogenous nature of these systems.
- *Mini EG* - between 5kW and 100kW. This would cater for embedded co-generation units in the commercial sector. Such systems would require little, if any, alteration to connection assets or additional network augmentation to facilitate their connection, would be readily available plug-and-play type systems, and would typically be owned and operated on the premises by the individual or business with the connection. These systems should be covered by a greater degree of standardised connection arrangements than the larger systems covered in the 'small EG' category.

- *Small EG* – between 100kW and 1MW. Typically, these larger systems would still be either larger commercial embedded co-generation or aggregated residential systems connected to the 11kV network. Their proponents could be expected to have a greater degree of understanding of the electricity market and as such would be subject to negotiated connection agreements. Limited impacts on the distribution network could be expected from these systems.
- *Medium EG* – between 1MW and 5MW. Such systems would be commercial ventures and would have a larger degree of impact on the distribution network, potentially requiring the negotiation of network augmentation to facilitate their connection.

#### *Process to develop technical requirements*

A number of stakeholders (Alinta, ENA) noted that the Report does not specify the exact content of the proposed new NER, and suggest that the AEMC should determine them.

#### Recommendation 12

There was general support for this recommendation. EUAA also noted that the mandate of appropriate technical requirements such as AS4777 for installation (i.e. Recommendation 11) would mean that network reliability and security are not impacted by this option, and also create the further benefit of freeing up DNSP resources in that installation could be outsourced through licencing.

However there is also some disagreement and some concerns expressed.

Alinta is concerned that the actual Rule content has not been specified, and that this is something the AEMC should undertake, including their standard consultation. EA disagreed on principle – arguing that the NER should be focussed on Registered Participants only. With establishment of the NECF and the transfer of jurisdictional distribution regulation to the national framework, this restriction is no longer appropriate. UED argued that a ‘one size fits all’ policy is too prescriptive. This view can be accommodated by allowing network users to negotiate non-standard connections using an alternative process, with the standard connection service expected to meet the majority of needs for the smallest DG.

ESCV noted issues concerning the ownership of residentially-installed micro DG and the potential nullification of connection agreements if/when a property is sold. A requirement to re-establish a connection each time this occurs may further increase the administrative burden on a DNSP. This may be reduced by allowing for the installation and operation of micro DG under standard connection services. Micro DG could then potentially form a part of any deemed connection agreement arrangements, nullifying any administrative burden on the part of the DNSP.

#### Recommendation 13

There is strong unanimous support for this recommendation, with the qualification made by Alinta that as the actual content of the NER has not been outlined in the NERA recommendation; they propose that the AEMC is the appropriate body to undertake the task of drafting.

There is some discussion in submissions about standard connection contracts. ETNOF emphasised that standard contracts may differ for different sized users.

#### Recommendation 14

There is strong support for this Recommendation, however Alinta and Aurora reserve full support until the details of the minimum content are known. As with previous recommendations lacking Rule detail, Alinta proposes that the AEMC be tasked with specifying the content of the new NER.

EA is the sole dissenting stakeholder, arguing that the NER should include a standard contract rather than outlining minimum content. The AER noted that flexibility is important with regard to the development of both negotiated and standard contracts. Specifying minimum content in the NER provides some certainty but allows for flexibility.

#### Recommendation 15

A number of the stakeholders support this recommendation.

Griffith University, MEU and CUAC agreed strongly with the recommendation, and emphasised the need to address the inherent negotiating power imbalance between DNSPs and consumers, particularly proponents of small scale DG, and in this context several stakeholders propose to go even further with the application of penalties for non-compliance. MEU proposes the ability for the user to seek input from AER to resolve issues where the users consider the DNSP is being unreasonable.

TEC, ENA and EUAA support in principle the process of aligning connection processes across all NEM jurisdictions, including specifying key attributes, steps and timing for 'standard' and 'non-standard' connections and negotiation process. However, they believe it is also clear that the resulting uniform process will remain complex and time consuming for end users, particularly for 'negotiated connection' arrangements. They assert that there are aspects of the negotiation framework which have unclear and uncertain meanings.

However the remaining submissions are particularly critical of this recommendation. Their concerns and issues raised are summarised as follows:

##### *Direct control v negotiated services contradiction*

Alinta noted a statement made in the Report stating that "one implication of this recommendation is that for some DNSPs the negotiating framework would cover some services which are regulated as direct controlled services because the terms and conditions for those services are not pre-determined by other application of other regulatory instruments". Alinta, Energex, EA and UED argued strongly that this comment, hence the overall Recommendation intention, does not appreciate the nature of the distribution regulatory framework developed by SCO, which has specifically rejected any concept of categorising services in the NER, instead relying on the regulatory process to do this. They argue that a mandatory requirement to produce a negotiating framework for a direct control service (which does not involve any major negotiation) appears contradictory to this framework. EA argued that if the outcome of this process is that every connection to the network is a negotiated service and subject to NER separate from direct control services, the result would be devastating for DNSPs and customers alike.

### *"Reasonable endeavours"*

The recommendation proposes that the DNSP use “reasonable” endeavours when considering a network application. GridX believes, as a result of the experience of itself and others, that a more effective requirement would be to further detail the requirements to be considered, that the requirement should be “best” endeavours, and that the DNSP must provide written reasons when requested.

### *Cooling off period*

It is argued by Aurora that the introduction of a ‘cooling-off’ period places the DSNP at risk of incurring expenditure which must be borne on either the DNSP’s ‘bottom line’ or the DSNP’s customer base because the original connection has been terminated.

EA’s submission goes into further detail regarding this issue. It argues that it is not apparent why a cooling-off period would be required in relation to these arrangements if they do not apply to small retail load customers. However, it is clear that some applications for connection will come from people who are small retail load customers – for example seeking to have micro DG connected. EA argued that even if they do apply to small retail load customers, there is no justification in the paper for the application of a cooling-off period to connection arrangements. Unlike retail contracts these are not contracts which are entered into on the spot or under any type of pressure, the arrangements entered into would be largely standard and most likely to be contestable. In the unlikely event that the DNSP would be seeking to levy a charge, these would be either with subject to some form of regulation or subject to arbitration if negotiated.

The likelihood of connection services being contestable suggests that there may be commercial pressure for DNSPs to encourage customers to accept offers quickly, even where the rules specify a minimum period of validity for the offer. For small customers, a requirement for a cooling-off period can ensure that agreements are not entered into without proper informed consent.

### *Time periods specification*

ETNOF considers that negotiation of commercial terms and conditions, charges and technical terms to connect are important components in the process to connect. Connection timelines are clearly matters that should be commercially settled, and are not a matter for the NER to specify. Therefore, ETNOF cautions against requiring the DNSP to commit to a date by which the connection will be effected. However as explained in the Report, it is acknowledged that these timelines will vary according to a range of factors (intensity of negotiations, different classes of users, alternative connection arrangements), the timeframes may be flexible – the AER will assess each timeframe within each framework for reasonableness given the unique set of factors in play.

### Recommendation 16

The submissions commenting on this recommendation are supportive. As with previous recommendations lacking Rule detail, Alinta proposed that the AEMC be tasked with specifying the content of the new NER.

EA objects to the inclusion of Non-Registered Participants.

### Recommendation 17

MEU, TEC, CUAC and GridX agreed with the recommendation, with the latter two stakeholders proposing that it should go further and have penalties/ramifications for non-compliance.

Alinta and UED noted that this recommendation overlaps with the work of the NECF. They state that they not only disagree with elements of these recommendations (17-28) and NECF direction but that in having two separate connections packages that inconsistencies will arise. The remaining dissenting submissions outline two major issues:

#### *Time periods*

Energex and EA argued that five business days does not reflect commercial realities and is insufficient time to process new connection inquiries, which require personalised, measured responses. It pushes for a response time of 'as soon as practicable' with a requirement that should the response be anticipated to take longer than 30 days, then the DNSP has 10 business days to notify the user of this extended response time.

Citipower agreed that five business days is appropriate for a standard connection agreement, however should the connection be more complex (a combination of different sized users in one connection) then a longer time frame would be needed. Energex suggested that further consultation on this issue is required to determine realistic and workable timeframes that meet both the needs and abilities of both users and DNSPs.

#### *Contestability*

EA argued that a distinction needs to be drawn between negotiating the contestability of building the actual connection asset and negotiating the terms and conditions of the long term services (provision of electricity) delivered via the connection. In other words the need for negotiation at the time of connection does not mean that a negotiated service is being provided. EA makes the point that it is likely that there will need to be some element of negotiation of technical issues with respect to all contracts, however the general terms and conditions of the ongoing service provision could be fairly standard – therefore in this sense it should be a standard contract. In response to this concern, and in close examination of the wording of the Recommendation, it is asserted that the issue of contestability is not directly linked to the classification of a service as being negotiated.

### Recommendation 18

No specific comments provided.

### Recommendation 19

The only submission commenting directly on this Recommendation simply pointed out if a user is being informed by one DNSP that their connection will be handled by another DNSP, then the original DNSP would not be the one required to provide the user with technical information.

### Recommendation 20

The response amongst stakeholders is divided. CUAC, MEU and TEC supported the recommendation, however EA, Energex and ENA strongly opposed the 20 day turnaround time proposed – stating that it is too prescriptive to place a timeframe in the

NER, and also that the timeframe proposed in this particular instance is unrealistic and does not reflect the commercial realities and complexity of some generator connections.

#### Recommendation 21

The response amongst stakeholders is divided. CUAC, MEU and TEC supported the recommendation. On the other hand Alinta, EA and GridX argued that the time should be negotiated on a case by case basis between DNSP and the user, with both Alinta and GridX concerned that the offer should be open longer than 2 months as extraneous circumstances often come into play indirectly, such as negotiation periods between property developers and local government authorities.

#### Recommendation 22

The stakeholders' views about this issue are mixed. CUAC, MEU and TEC fully support the recommendation. Alinta, Energex and EA on the other hand argued that this response time is commercially unrealistic. EA described their concerns in a more detailed way, including issues with contestability and ownership of connection assets, their regulatory treatment and the overall economic arrangements associated with distribution connection. However given that the 10 business day limit is already enshrined in the NER, it is considered that this recommendation is not imposing any new or additional burden on DNSPs.

#### Recommendation 23

While CUAC, MEU and TEC supported this recommendation, the remaining (majority) of submissions raise serious concerns. Alinta and ENA both point out that the requirement to develop a negotiating framework even if none of its services are negotiable is in direct opposition to the MCE SCO decision not to specify the nature of services in the NER – rather that this is the role of the AER (ie to determine whether services are direct control or negotiable). ENA recommended that the development of these NER amendments be referred to the AEMC for further consideration and development. GridX has serious concerns relating to the lack of discussion of prudential requirements in the consultation for the Report.

#### Recommendation 24

The response amongst stakeholders is divided. CUAC, MEU and TEC supported the recommendation. On the other hand Alinta, EA and Citipower argued that the time should be negotiated on a case by case basis between DNSP and the user, rather than mandated in the NER. Citipower stated that a mandated minimum acceptance period is undesirable because an open connection offer may impact other connection applications. It argued that if it is necessary to mandate any acceptance period a 21 day period would be more appropriate.

### **Part 3 – Capital Contributions**

#### Recommendation 25

The submissions are broadly supportive of the notion or principle of DNSP recovery of dedicated connection asset costs. However, there were some points of disagreement on the form of regulation that should apply to connection assets. EA strongly disagreed that a

different form of regulation should apply to connection assets compared to the rest of the network. This is because they believe that this approach will create orphaned assets with different regulatory arrangements, despite the connection assets becoming part of the network upon completion.

ENA and ETNOF argued that it is important that the approach to connection charges should be consistent, where possible, between transmission and distribution networks – in order to avoid unnecessary and unfair discrimination between different types of generators. ETNOF also proposes that rather than the asset forming part of the network, that the customer is responsible for its operating, maintenance and replacement costs.

Numerous submissions criticise the recommendation as being too high level, seeming to merely replicate Recommendation 10 (Energex, EA, CUAC, TEC, EUAA). Energex and EA further argued that it does not consider the complexity of capital contribution frameworks, which are multifaceted as contributions currently vary greatly between jurisdictions. EUAA proposed that the NER bind the AER to accept the principles based on economic efficiency outlined in the Report in respect of the treatment of costs for connection assets, extension assets and shared network assets, in order to avoid uncertainty.

ENA, TEC and MEU disagreed with the recommended approach on the basis that it goes against previous reviews which have recommended that the costs of standard connections to small customers be included in shared network costs rather than being charged to the individual customer. In response to this concern, SCO notes that Recommendation 28 addresses this very issue.

Whilst TEC supported the recommendation in principle, it emphasised the need for open and transparent provision by the DNSP of both the potential connection costs and the mechanism used to calculate these costs. The AER's role in overseeing these arrangements should address this concern.

### Recommendation 26

The submissions largely disagreed with the proposed terminology in Box 4.1. It is noted in the submissions that the proposed terminology is not consistent with that used by the AEMC for transmission pricing (ENA, UED) and hence has the potential to create confusion between the various connection processes for transmission and distribution networks. ENA points out that while it would be inappropriate to use the transmission definitions, distribution terminology needs to be developed to reflect the correlation between the two types of network.

Alinta is of the view that the terminology expresses only the consultant's view of network charges and is skewed towards the report's particular views on capital contributions, and therefore recommends using more neutral terminology. EUAA and Citipower are of a similar view, and also consider the terminology to be cumbersome, confusing and thus recommend that the issue be assigned a rating of high materiality.

TEC noted that the terminology is acceptable, however, this is conditional upon whether the recommendation conflicts the existing terminology contained in the NER.

## Recommendation 27

Submissions received largely disagreed with this recommendation.

Whilst some submissions supported the recommendation (CUAC, EUAA, ETNOF), other submissions raise the concern that the proposed framework places risks on distributors in terms of network augmentation, especially in a case where augmentation costs arise directly as a result of a connection applicant (Alinta, Energex) and do not contribute to efficient outcomes for both distributors and end use customers. Similarly, ESCOSA is concerned about the potential impact of 'smearing' the cost of augmenting the distribution network to meet a particular customer's requirements, and hence does not support the recommendation.

Citipower raised the concern that the rationale for a distinction between augmentation assets and extension assets is not clear. In that charges are contemplated and provided for in terms of extension works but expressly not allowed for augmentation works – yet in both cases they are pertaining to charging for the connection of new loads.

EA and UED disagreed with this recommendation as the proposal to not include shared network costs in connection related augmentation charges are new, contrary to past reviews and contrary to current jurisdictional practice and regulation. UED believes that the impact of the proposal on distribution prices paid by users could be significant and that the proposal is inequitable and inefficient.

ENA considered the recommendation to be a “constraint” approach that is inappropriate for network connected generators. This is because it will create an obligation on distribution businesses to manage constraints in the same way as transmission connectors without the existence of a dedicated market operator and effective compliance regime. EA argues similarly, in that they propose imposing an obligation in the NER for connecting generators to comply with constraint management contracts – i.e. that it constitutes a breach if they do not comply. ENA argued that the approach has the potential to undermine competitive neutrality between transmission and distribution connected generators – due to the differences in constraint management between the different network types. Like other submissions, ENA also considered the recommended approach impractical as it would impose significant costs on the community through increased risk faced by DNSPs, expected increases in outages and the cost of inefficient connections. While these concerns outlined seem valid and are issues that must be managed – they do not bear on the direct point of the recommendation ie allocating cost of network augmentation for new connections.

Whilst ESCV supported the approach to an extent (ie for small customers); they raised the concern that the approach may create unfair competitive advantage to large embedded generators if a DNSP is required to provide the required network capacity regardless of the economic efficiency of the chosen location for the generator. ESCV points out that generators connecting to a transmission network are treated in a different way. Similarly ETNOF, in partially agreeing with the recommendation, supports the adoption of consistent pricing principles for both transmission and distribution networks. It is of the view that these costs are subject to the regulatory test and are investments which should be made by the DNSP or TNSP where justified, and if justified under the regulatory test, costs should be attributed in the normal manner. That is, there should not be a special allocation of shared network costs.

However in the same submission, ETNOF pointed out that the current regulatory framework specifies that generator connections are shallow connections, but that where a generation or load proponent requires a higher standard then the NER directs that the proponent will fund this augmentation. Therefore it would appear that the recommendation is, from ETNOF's point of view, inconsistent with the current approach in the NEM.

At large, the submissions oppose the recommendation as it contributes to inequitable and inefficient outcomes for distributors and the larger energy using community. ENA and UED propose that the AEMC should examine this issue in greater detail, and in the context of being consistent with transmission arrangements.

### Recommendation 28

The submissions broadly agree (CUAC, MEU, Griffith University, Alinta, ESCV) with the AER developing a guideline for the determination of connection asset charges. However, certain concerns were raised.

Whilst ESCV supported the approach, this is subject to the location factor being taken into consideration when setting up a 'standard small customer connection' - in that a small customer connecting in an established urban environment is markedly different in terms of infrastructure costs to a small customer connecting in a rural setting.

EA believes that the recommendation does not recognise the fact that sometimes even though a connection charge will not be levied, the customer will be required to engage an accredited service provider to carry out the works to connect to the network. That is, there is no direct money transaction between customer and DNSP, however, the customer does pay for the dedicated connection asset, and then it is vested with the DNSP who operates and maintains the asset as part of the network.

ENA believes that the recommendation does not recognise the different approaches to dedicated connection charges across jurisdictions, and the significant changes that some jurisdictions will have to make if a nationally consistent approach is preferred. In some jurisdictions the customer funds the dedicated assets but the connection service is contestable. Across a number of other jurisdictions, connections are charged on the basis of the net incremental connection costs minus the incremental revenue expected from the connection. ENA thus recognised that implementing a nationally consistent approach would mean significant changes for some jurisdictions. Therefore, ENA proposes that the AEMC should determine the appropriate approach.

### Recommendation 29

The majority of submissions support this recommendation in principle, but most propose further industry consultation and more detail of the exact arrangements, as the paper does not make specific recommendations (Alinta, Aurora, CUAC, ENA, MEU, UED, EUAA). A range of concerns are raised about certain aspects of the recommendation.

EA believes that this approach will vastly complicate administration and the regulated income if applied to all connection assets, as the new customer may not be liable to pay anything under recommendation 25, leaving DNSPs exposed. EA suggested that this

approach is acceptable only if it operates in a similar way to New South Wales, where a customer who bears costs for upstream augmentation receives payment from the later connecting customers through the DNSP.

ENA and EUAA recommended that this approach be subject to further consideration and consultation with industry, and that the AER be permitted to review all aspects related to determining the 'fair and reasonable' share of extension asset costs, and lastly noting that seven years is "somewhat arbitrary". EUAA is concerned about future connecting users to a previously dedicated asset impacting on service quality.

TEC argued that the AEMC could develop the Guideline through public consultation that is then inserted in the NER. TEC argues that there seems to be no reason to introduce a new dispute resolution procedure for this particular situation. Any dispute resolution procedure developed should be designed to incorporate a range of likely scenarios.

### Recommendation 30

There are mixed views, with the majority supporting the proposal (CUAC, MEU, GridX and TEC accept the proposal so long as other recommendations are met) then a couple of dissenting submissions.

As with its response to numerous preceding recommendations, Alinta argued that the recommended approach places large risks on distributors, and leads to inefficient outcomes. ENERGEN also specifically does not support the proposal to remove the good faith negotiation requirement Rule.

**TABLE 3: SCO response to stakeholder comments on the joint report of NERA/ACG on the National Framework for Network Planning and Connection Arrangements**

The table below sets out the response (on a no prejudice basis) of the Ministerial Council on Energy Standing Committee of Officials (SCO) to submissions on the joint report prepared by the NERA Economic Consulting (NERA) and the Allen Consulting Group (ACG) on *Network Planning and Connection Arrangements – National Frameworks for Distribution Networks*, dated August 2007.

No.	NERA/ACG recommendations	Draft SCO Policy Response
<b>A NATIONAL FRAMEWORK FOR NETWORK DEVELOPMENT AND PLANNING ARRANGEMENTS</b>		
<i>Annual Planning Processes</i>		
1	<p>The Rules should require DNSPs to undertake an annual planning process and publish an annual planning report that sets out the outcomes of that planning process. The annual planning report should include:</p> <ul style="list-style-type: none"> <li>▪ a five-year forecast of potential constraints, together with preliminary estimates of the costs of network solutions;</li> <li>▪ a forecast of areas of substantially under-utilised existing transfer capability;</li> <li>▪ a forecast of average and marginal distribution loss factors for different points in the network over the planning horizon; and</li> <li>▪ a description of the DNSP’s compliance with their planning-related obligations, including: <ul style="list-style-type: none"> <li>– a summary of case-by-case applications of the regulatory test completed in the previous year, and on the status of the relevant projects (and the status of any projects from previous years); and</li> <li>– the results of applying the regulatory test to projects below the</li> </ul> </li> </ul>	<p>The MCE has tasked the AEMC to conduct a review, including proposed rules, on a national framework for electricity distribution network planning and expansion (See MCE terms of reference).</p> <p>The terms of reference for the AEMC review has been released at the same time as this report. High level policy guidance regarding the broad parameters of the national framework for planning and expansion of distribution networks has been provided by the MCE in the terms of reference.</p> <p>The AEMC will conduct this review consistent with its obligations in the NEL.</p>

<b>No.</b>	<b>NERA/ACG recommendations</b>	<b>Draft SCO Policy Response</b>
	<p>threshold for a case-by-case process but that meet the threshold for transparent reporting and the status of the relevant projects (and the status of any projects from previous years).</p> <p>The annual planning reports (and any other planning-related information) should be made public and available from a single point (such as the NEMMCO website).</p>	
2	<p>The AER should be required to produce a statement of specific requirements that is given effect by the Rules that sets out the standard format and required contents of the annual planning report.</p> <p>The Rules should set out the matters the AER’s statement of specific requirements is permitted to address, which should include:</p> <ul style="list-style-type: none"> <li>▪ requiring an accessible summary of where and when constraints are expected to emerge over the planning horizon and of the value of deferring the associated network augmentations (e.g. in \$/kVA per annum terms);</li> <li>▪ requiring an accessible summary of the extent of surplus capacity at different points in the network;</li> <li>▪ requiring an accessible summary of the magnitude of current and forecast average and marginal distribution loss factors at different points in the network; and</li> <li>▪ requiring a standard format for reporting on applications of the regulatory test.</li> </ul>	As noted in response to Recommendation 1.

No.	NERA/ACG recommendations	Draft SCO Policy Response
<i>Individual Project Assessment</i>		
3	<p>For any project to alleviate a network constraint for which the network solution would require an estimated capitalised expenditure of \$2million or more, DNSPs should be required to perform an economic cost-benefit assessment of that project (see recommendation 6). As part of this assessment, the DNSP should be required to consult publicly and be required to issue an RFP from potential providers of non-network solutions to the network constraint. The DNSP should be required to report publicly the results of its assessment immediately after its assessment has been completed, and also to summarise the outcomes of the assessment in its annual planning report (see Recommendation 1).</p>	As noted in response to Recommendation 1.
4	<p>For any network constraints for which the network solution would require an estimated capitalised expenditure of \$0.5-2m, DNSPs should be required to undertake an economic cost-benefit assessment of the project and publish the results in the annual planning report, without being required to issue an RFP or consult on the options.</p> <p>We observe that for network constraints for which the network solution would require an estimated capitalised expenditure of less than \$0.5m, there would be no formal ex post reporting requirement: DNSPs would not be required to undertake an economic cost-benefit assessment of the project, to issue an RFP or to consult on the options. The ex-ante requirement to identify emerging constraints in the annual planning report would, however, apply to projects of this magnitude.</p>	As noted in response to Recommendation 1.
5	<p>The Rules should require the AER to issue a statement of specific requirements that sets out the contents of a Request for Proposals for non-network solutions to address an emerging network constraint and that sets out the process to be followed in issuing such requests.</p> <p>The Rules should require the AER statement to require the RFP to include, at a minimum:</p> <ul style="list-style-type: none"> <li>▪ the technical requirements that the non-network solution would need to meet;</li> <li>▪ the estimated range of costs for network solutions and an indication of the resulting annual cost that a non-network solution would need</li> </ul>	As noted in response to Recommendation 1.

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	<p>to better in order to be selected; and</p> <ul style="list-style-type: none"> <li>▪ an indication of whether the DNSP considers non-network alternatives to be a feasible solution for the project.</li> </ul> <p>The Rules should require the AER statement to require the RFP process at a minimum to:</p> <ul style="list-style-type: none"> <li>▪ provide sufficient time for proponents of non-network solutions to prepare their cases while allowing the DNSP, in the absence of a committed non-network project, to implement a network solution after a cut-off date; and</li> <li>▪ ensure that the RFP process is be capable of being brought to closure, with the non-network solution either committed (and bound) to deliver in a reasonable period of time, or the DNSP free to select an alternative option.</li> </ul> <p>The Rules should require all RFPs to be published in the same central location as the annual planning reports.</p>	
6	<p>DNSPs should be required to apply the standard regulatory test (rule 5.6.5A) when undertaking a cost-benefit assessment of alternative projects (requiring amendment to clause 5.6.2(g)) so long as it continues to provide the flexibility for the test to be applied in a manner that is proportionate to the size and scale of the project.</p>	<p>As noted in response to Recommendation 1.</p>
<b><i>Dispute Process and Enforcement</i></b>		
7	<p>The DNSP's obligations to undertake the annual planning and reporting activities, and to undertake project evaluations, should be Rules obligations and able to be enforced through standard Rules-enforcement processes.</p>	<p>As noted in response to Recommendation 1.</p>

No.	NERA/ACG recommendations	Draft SCO Policy Response
8	<p>A dispute resolution regime based on rules 5.6.6(j)-(n) should exist in relation to the DNSP's conduct of a cost-benefit assessment (and associated RFP for non-network options) for particular distribution projects, which should have the following features:</p> <ul style="list-style-type: none"> <li>▪ <i>threshold</i> – should be limited to projects that are new large distribution assets (currently projects whose total capitalised cost is \$10m and above);</li> <li>▪ <i>parties to the dispute</i> – extend to parties directly affected, which would include proponents of non-network options, end-users and agents on their behalf;</li> <li>▪ <i>scope of the dispute</i> – should not be significantly limited;</li> <li>▪ <i>dispute resolution process</i> – the AER should have the role of hearing the dispute and adopt a low cost process for this; and</li> <li>▪ <i>effect of the dispute</i> – the current <i>effect</i> of the mechanism, whereby the DNSP cannot be directed in its activities, should be maintained.</li> </ul>	As noted in response to Recommendation 1.
<b><i>DSR/DG Trials</i></b>		
9	<p>The Rules should ensure that DSR/DG trials and risk sharing arrangements are encouraged in order to build trust and communication between DNSPs and proponents of non-network alternatives.</p> <p>In addition, the regulatory framework should be reviewed to determine whether insufficient incentives are provided to DNSPs to invest efficiently in research and development, warranting the development of a specific incentive mechanism in the Rules.</p>	<p>Noted</p> <p>SCO notes that in the previous economic reform package incentive schemes were put in place for DSR/DG, including the demand management incentive scheme. Chapter 6 of the NER already appropriately permits DNSPs to contract with third parties to manage the financial risks associated with service performance incentive schemes. SCO further considers that there is an inherent danger in expressly allowing for certain classes of expenditure, in that it can by implication exclude other classes of expenditure.</p>

No.	NERA/ACG recommendations	Draft SCO Policy Response
<b>A NATIONAL FRAMEWORK FOR DISTRIBUTION NETWORK CONNECTION</b>		
10	<p>Specify in the Rules the connection requirements that must be met by a user which include the requirement for users to:</p> <ul style="list-style-type: none"> <li>▪ pay the DNSP for the construction of any dedicated connection assets (where the construction of these assets is not contestable) and any extension works to the distribution system required to effect the connection; and</li> <li>▪ comply with technical and safety requirements in relation to the customer’s installation or equipment, ie, payment for extension assets, dedicated connection assets and compliance with technical and safety matters.</li> </ul>	<p>Partially Accepted.</p> <p>SCO recognises that there may be contestability of services in certain circumstances which means that a connecting user may pay charges to an entity other than the DNSP in the connection process.</p> <p>Therefore SCO proposes that the NER will provide that distribution network users are required to pay all applicable connection charges as determined in accordance with SCO policy response to Recommendations 25-30.</p> <p>SCO further notes that the augmentation charges, as contemplated under the proposed capital contribution framework, are also required to be paid by the connecting user.</p> <p>SCO agrees that the NER will also provide that distribution network users must comply with all technical and safety standards in relation to their connection.</p>
11	<p>Schedules to Chapter 5 of the NER should be amended to include a definition of the technical requirements for small load, large load, micro, small and medium DGs.</p>	<p>Partially Accepted</p> <p>SCO accepts that the schedules to Chapter 5 of the NER should include a definition of the technical requirements for micro embedded generators only (see response to Recommendation 26 regarding terminology). Furthermore, the NER will require that every DNSP will <u>at a minimum</u> define a standard connection service (which essentially would be intended to cover most small load customers for which minimal extension or augmentation works are required) and the associated technical requirements, seeking the AER's approval for such a standard service. Figure 1 in the explanatory material depicts the ‘standard connection’ process that will apply to this type of service.</p> <p>A DNSP would not be precluded, for the purpose of streamlining its own processes, from defining additional standard connection services for other classes of customers or connection types, should they wish to do so. SCO notes that these additional services once developed by DNSPs, are to be approved by the AER.</p> <p>SCO considers that it is only necessary to define the technical requirements of micro EG for the purposes of creating standard connection applications, services and contracts. SCO considers the remainder of market participants and connection applicants (ie large load, and small and medium embedded generators) are considered either large or diverse enough to warrant negotiating terms and conditions and</p>

No.	NERA/ACG recommendations	Draft SCO Policy Response
		connection requirements individually with the DNSP using the revised negotiating framework. However, the negotiating framework is available to all customer types.
12	The NER should define the standard connection services to apply to micro EGs.	<p>Accepted.</p> <p>SCO agrees that the NER should define "micro EG" and require a DNSP to develop and publish the standard connection requirements applicable to micro EG, which will be approved by the AER, for these services. The 'standard connection process' depicted in Figure 1 in the explanatory material will apply to these connections.</p> <p>Standard connection services for micro EG customers should provide for the installation of metering and other necessary equipment provided for by the DNSP to enable small amounts of electricity to be exported from the connection point to the network.</p> <p>SCO further agrees with the proposal from Essential Services Commission of Victoria that the connection agreement for micro EG should transfer on transfer of ownership of the premises. In the interests of customer safety, where an existing supply point has micro EG services and a new customer/owner seeks energisation or moves in to those premises, DNSPs will be required to specifically make the new occupant aware that there are terms and conditions associated with micro EG for that supply point. This requirement will be implemented under the NECF via direct obligations on DNSPs in the relevant rules.</p>
13	The NER should set out the minimum content for standard applications in a schedule to Chapter 5.	Accepted.
14	<p>The NER should:</p> <ul style="list-style-type: none"> <li>▪ set out the minimum content for standard connection contracts in a schedule to Chapter 5 including a requirement for the DNSP to specify the number of days after the finalisation of the agreement that the standard connection will be effected;</li> <li>▪ require the AER to approve the content of the standard application form and the terms and conditions specified in the standard contract and require the AER to apply the 'fair and reasonable' test when determining whether to approve the proposed standard contracts.</li> </ul>	<p>Partially Accepted</p> <p>SCO agrees that the minimum contents of a connection contract, for both common standard and negotiated connections, should be set out in a Schedule to Chapter 5 of the NER, including a requirement for the DNSP to specify the number of days after a finalisation of agreement that a connection will be constructed.</p> <p>SCO acknowledges and emphasises, as stated in its responses to previous recommendations, that aside from micro EG (as defined by NER), it will be DNSPs which will define the connecting customer classes to which standard connection services apply. However where any connection service (and associated contract) applies, the NER will outline the minimum requirements for those contracts.</p> <p>Minimum content requirements for connection agreements are already contained in</p>

No.	NERA/ACG recommendations	Draft SCO Policy Response
		<p>Schedule 5.6 of the NER (see <b>Attachment D</b>). Stakeholder comments are sought on whether the existing Schedule 5.6 is appropriate with amendments to cover the construction or modification of a connection, or whether a new Schedule to Chapter 5 should be developed to contain minimum content for customer connection contracts. Expert advice will be sought on this issue, which will be made available to stakeholders.</p> <p>DNSPs will be required to submit the standard connection contracts to the AER for approval as part of a standard connection service. The AER is to apply the fair and reasonable test when determining whether to approve the proposed standard connection contracts.</p> <p>Distributors may propose additional standard contracts to the AER for customers which do not fall under the standard connection definition as defined by the DNSP. The AER must determine whether these contracts (with their attendant connection procedures and forms) are fair and reasonable.</p> <p>SCO agrees that DNSPs will develop and publish a standard application form for new and modified connections for their distribution networks. SCO proposes that the AER will not be required to approve the standard application form since it is the DNSP's interest to develop a form that meets its needs whilst being a useable document from a customer perspective.</p> <p>Ongoing customer distribution services (eg, supply and connection (energisation) - related services) will be part of the contractual arrangements between retail customers and distributors under the NECF<sup>4</sup>. Provisions relating to connection of retail customers with standard connections will be developed and integrated within the NECF.</p>
15	<p>The NER should state that the negotiation framework developed in accordance with Draft Rule 6.7.5 as modified should apply in the negotiated connection application process.</p> <p>Rule 6.7.5(c) should be modified to include the following additional provisions which would require the DNSP to specify:</p> <ul style="list-style-type: none"> <li>▪ a requirement for the exchange of technical as well as commercial</li> </ul>	<p>Partially Accepted.</p> <p>SCO acknowledges stakeholder concerns around the distinction between direct control and negotiated services, and notes that distribution services including connection services are classified by the AER in accordance with Rule 6.2.1.</p> <p>SCO notes that Rule 6.7.5(c) ensures that the negotiating framework applies to a negotiated service only, not a direct control service. Stakeholder views are sought on</p>

<sup>4</sup> The NECF includes a procedure in the rules for customers seeking supply at existing supply points to be energised and a model standard distribution contract which will apply to small customers.

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	<p>information between the two parties;</p> <ul style="list-style-type: none"> <li>▪ a requirement that when considering a connection application the DNSP is to use its reasonable endeavours to provide the user with the service it requires in accordance with the reasonable requirements of the user, including without limitation, the location of the proposed connection point and the level and standard of power transfer capability that the network will provide (currently Rule 5.3.6(d));</li> <li>▪ any offer pertaining to a negotiated distribution service to be fair and reasonable and consistent with the safe and reliable operation of the power system in accordance with the NER and consistent with the technical requirement schedules contained in Chapter 5 (as applicable) and must not impose conditions on the user that are more onerous than those contemplated in these technical schedules (currently Rule 5.3.6(c));</li> <li>▪ the cooling off period that will apply to any contract negotiated with vulnerable users;a requirement that when considering a connection application the DNSP must consult with any affected Distribution Network Users and NEMMCO (where relevant) if the DNSP believes, in its reasonable opinion, that compliance with the terms and conditions of those connection agreements will be affected, in order to assess the application to connect and determine: <ul style="list-style-type: none"> <li>– the technical requirements for the equipment to be connected;</li> <li>– the extent and cost of augmentations and changes to all affected networks;</li> <li>– any consequent change in network service charges; and</li> <li>– any possible material effect of this new connection on the network power transfer capability including that of other networks (currently Rule 5.3.5(d)); and</li> <li>– the time periods for the commencement and finalisation of negotiations relating to negotiated connections once a completed application form is submitted to the DNSP for the alternative types of users and connection requirements.</li> </ul> </li> <li>▪ The time periods for the commencement and finalisation of</li> </ul>	<p>whether this is appropriate in the context of connection services.</p> <p>SCO accepts all other recommendations with the exception of the cooling-off period. Given the concerns with this provision raised by some stakeholders combined with the fact there are other recommendations (21 and 24) granting a customer contemplating connection either one or two months under a negotiated or standard contract respectively, in which to accept the connection offer, this provision is considered to be unnecessary.</p>

No.	NERA/ACG recommendations	Draft SCO Policy Response
	<p>negotiations relating to negotiated connections once a completed application form is submitted to the DNSP for the alternative types of users and connection requirements.</p>	
16	<p>Schedule 5.6 of the NER should be amended:</p> <ul style="list-style-type: none"> <li>▪ to ensure that it can be utilised in contracts negotiated with small users, large users, micro, small and medium DGs;</li> <li>▪ to include a cooling-off period for those contracts negotiated with small users; and</li> <li>▪ to include provisions which enable the connection agreement to be modified over time where both parties agree to changes in non-price terms and conditions (including technical conditions which may require NEMMCO involvement) and where those changes have no associated cost effects.</li> </ul>	<p>Partially Accepted</p> <p>The relevant schedule(s) of the NER will be amended to ensure connection agreement terms and conditions provide for:</p> <ul style="list-style-type: none"> <li>• all network users including all embedded generation; and</li> <li>• the modification of non-price connection and service terms and conditions where there is agreement by both parties.</li> </ul> <p>SCO notes that where there is disagreement, there is already an access arbitration process as established in the NEL.</p> <p>As with recommendation 15, SCO does not agree with the recommendation regarding the cooling-off period. Given the concerns with the nature and impact of a cooling period raised by some stakeholders combined with the fact there are other recommendations (21 and 24) granting a customer contemplating connection either one or two months under a negotiated or standard contract respectively, in which to accept the connection offer, this provision is considered to be unnecessary.</p>
17	<p>The NER should require a DNSP, within five business days of receiving a user's initial enquiry:</p> <ul style="list-style-type: none"> <li>▪ to advise the user whether there is a standard connection service that would encompass its connection requirements and if so: <ul style="list-style-type: none"> <li>– supply the user with the relevant standard contract and application form; and</li> <li>– inform the user that they have the option of using either the standard connection service or negotiating an alternative connection service.</li> </ul> </li> <li>▪ to provide the user with a copy of the negotiation framework it has developed in accordance with Rule 6.7.5 and that has been approved by the AER which will come into operation if the connection service is to be negotiated;</li> <li>▪ to inform the user of whether any aspects of the connection service</li> </ul>	<p>Partially Accepted</p> <p>The NER will provide that a DNSP must, within 5 business days of receiving a new connection enquiry:</p> <ul style="list-style-type: none"> <li>▪ advise the enquirer of the process and information required for the submission of a connection application;</li> <li>▪ advise whether any aspects of their connection are likely to be contestable; and</li> <li>▪ advise of any additional information requirements.</li> </ul> <p>SCO notes that the customer enquiry phase requirements may involve/apply to both/either standard and negotiated distribution connection services.</p>

No.	NERA/ACG recommendations	Draft SCO Policy Response
	<p>are contestable;</p> <ul style="list-style-type: none"> <li>▪ to inform the user of any additional information required which is of the kind specified in Schedules 5.4; and</li> <li>▪ to inform the user of the indicative value of the loss factor applying in the area within which the user is seeking connection.</li> </ul>	
18	<p>The NER should require a user in the connection enquiry phase to advise the DNSP whether it will be seeking connection via the standard connection service route or the negotiated connection service route.</p>	<p>Accepted</p> <p>The Rules will provide that any user may seek a common standard connection service, an additional standard connection service or a negotiated connection service when making a connection enquiry. However, as the DNSP has set the requirements for a standard connection, the DNSP will advise the customer if their connection application complies with those requirements upon application.</p>
19	<p>The NER should state that where a user selects the standard connection application route the DNSP must:</p> <ul style="list-style-type: none"> <li>▪ advise the user as soon as practicable, and no later than five business days after receiving advice from the user that it will be seeking the standard connection service route, if the application should be processed by another DNSP; and</li> <li>▪ within five business days provide the user with any technical information necessary to process the application in accordance with the technical schedules in Chapter 5 to the extent that it holds such information.</li> </ul>	<p>Partially Accepted</p> <p>SCO accepts the recommendations with some clarifying amendments/additions.</p> <p>The NER will provide that within five business days of user <b>submitting a completed application</b> indicating that they will be utilising the standard connection service route, the DNSP shall:</p> <ul style="list-style-type: none"> <li>• advise the user if the application will be processed by another DNSP; or</li> <li>• advise whether the desired connection is a standard connection or a non-standard connection (or otherwise invalid); and</li> <li>• the DNSP will provide the user with necessary technical requirements information (i.e. second dot point will only apply to the DNSP actually processing the user's application).</li> </ul>
20	<p>The NER should require the DNSP to issue a connection offer and a standard connection agreement within twenty business days of receiving a completed standard application form.</p>	<p>Partially Accepted</p> <p>SCO agrees that the NER should require a DNSP to issue a standard connection offer and contract within five business days of receiving a completed standard application form.</p> <p>However, if the customer's application does not conform to the parameters of a standard connection service or is an invalid application for any other reason, the DNSP must advise the customer within 5 days of receiving the application form.</p>

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21	<p>The NER should allow a user (utilising the standard connection application route) two months to accept the offer otherwise the offer should be deemed to have lapsed unless the DNSP agrees to extend the offer.</p>	<p>Accepted</p> <p>The NER will provide that a user has a time limit/period of two months to accept a standard connection contract offer, unless the DNSP agrees to extend the period of offer. SCO notes that the two month timeframe also serves as a 'cooling-off' period to protect smaller users.</p>
22	<p>The NER should state that where an application is for a negotiated connection service the DNSP must within ten days:</p> <ul style="list-style-type: none"> <li>▪ advise the user if the application should be processed by another DNSP; and</li> <li>▪ provide the user with any technical information necessary to process the application in accordance with the technical schedules in Chapter 5 to the extent that it holds such information.</li> </ul>	<p>Noted</p> <p>The NER will be amended to provide that a DNSP must, consistent with the decision on a common standard connection respond to a connection application within five business days if the connection is not a standard connection type and the negotiation process applies. The DNSP must advise the customer of the required technical information to progress the application within fifteen days of receiving a completed application.</p> <p>The existing NER require a DNSP to advise the customer within ten days of receiving a connection enquiry if the application should be processed by another DNSP.</p>
23	<p>The NER should:</p> <ul style="list-style-type: none"> <li>▪ combine the technical, price and non-price negotiation phases currently set out in the application for connection and offer to connect phases;</li> <li>▪ remove any provisions which will be captured in the negotiation framework specified in Rule 6.7.5;</li> <li>▪ require the DNSP to commence negotiations with the user as soon as it submits a completed application form; and</li> <li>▪ require both the DNSP and user to negotiate in good faith;</li> <li>▪ state that any negotiation relating to access standards must: <ul style="list-style-type: none"> <li>– be no less onerous than the minimum access standard contained in the relevant schedules in Chapter 5;</li> </ul> </li> </ul>	<p>Partially Accepted</p> <p>SCO accepts this recommendation which outlines the requirements pertaining to the development of an offer in a negotiated connection service. SCO acknowledges stakeholder concerns around the distinction between direct control and negotiated services, and notes that distribution services including connection services are classified by the AER in accordance with Rule 6.2.1.</p> <p>SCO notes that Rule 6.7.5(c) ensures that a negotiating framework is able to be applied to a negotiated service only, not a direct control service. In other words, if a connection service is deemed to be a direct control service, then the service is, <i>by definition of this regulation, not negotiated</i> and therefore not subject to a negotiated development of offer. Stakeholder views are sought on this issue.</p>

No.	NERA/ACG recommendations	Draft SCO Policy Response
	<ul style="list-style-type: none"> <li>– not adversely affect power system security;</li> <li>– not adversely affect the quality of supply for other users; and</li> <li>– involve NEMMCO in an advisory capacity and accord NEMMCO twenty business days to inform the parties in writing of any advisory matters arising as a result of the proposed negotiated access standard.</li> </ul> <ul style="list-style-type: none"> <li>▪ require the DNSP to develop an offer to connect which contains the information specified in Schedule 5.6 and specifies the outcome of any negotiation relating to access standards, connection charges, prudential requirements and any other terms and conditions within the time specified in the preliminary program or later if the access standards have been negotiated.</li> </ul>	
24	<p>The NER should allow the user (utilising the negotiated connection application route) two months to accept the offer otherwise the offer should be deemed to have lapsed unless the DNSP agrees to extend the offer.</p>	<p>Not Accepted</p> <p>Given that the negotiated route by nature involves a negotiation process, SCO considers that a two month standing offer period the same as for a standard contract offer, is unnecessary. Therefore SCO proposes that the NER should provide that a distribution network user has a period of one month to accept a negotiated connection service offer, unless the DNSP agrees to extend the period of offer.</p>
<b>A NATIONAL FRAMEWORK FOR DISTRIBUTION CONNECTION CHARGES</b>		
25	<p>The NER should allow, subject to a decision by the AER as to the form of regulation to apply to the provision of connection assets, a DNSP to recover from connecting users the cost of dedicated connection assets as well as extension assets for the sole use of a new connection that, but for the new connection, would not have been incurred – a connection asset charge.</p>	<p>Partially Accepted.</p> <p>SCO's response to the capital contributions recommendations will reflect the fact that there are both contestable and non-contestable services across regions. In other words, the fact that contestability of services exists in some jurisdictions means that a connecting user may in some instances pay charges to an entity other than the DNSP in the connection process.</p> <p>In situations where there is contestability for connection services, this covers the connection asset, extension asset, and immediate augmentation requirements. Where there is contestability, the DNSP quotes their charge for undertaking the work. The connecting customer is able to obtain their own quotes from accredited service providers.</p>

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		<p>Where non-contestable services exist (i.e. entirely carried out by the DNSP), the DNSP has a regulated charge which they apply to the connection. The application of charges due to the forecasting of future augmentation requirements being brought forward is calculated, where currently applied in some jurisdictions but not all, as the NPV.</p> <p>Therefore in response to this recommendation, SCO proposes that the NER will provide that distribution network users are required to pay <i>all applicable connection charges</i> covering all connection assets in accordance with the parameters established by SCO's policy response to Recommendations 27-29.</p>
26	The NER should adopt the terminology in Box 4.1 for the purposes of calculating a connection asset charge.	<p>Noted.</p> <p>To the extent necessary, the NER will appropriately define the terms. It is accepted as a valid concern that terminology used throughout both transmission and distribution networks should be as consistent as possible to avoid confusion. SCO proposes that the existing terminology used in the NER should be used to implement the recommendations and their principles – otherwise by inserting a new set of terms and definitions specifically for capital contributions, there would be confusion created by possibly conflicting or overlapping terms and definitions used in the NER. For example, SCO notes that the NER already refers to embedded generators whereas the NERA/ACG report refers to distributed generation or DG. SCO considers that any necessary changes to terminology would become apparent in the rule change/legislative drafting process, and should necessary changes arise they will be dealt with appropriately during this process.</p>
27	A compulsory connection asset charge should not include the cost of any shared network augmentation that may be required to service the load/generation output arising from a new connection. However, a connection applicant may also choose to fund shared network augmentation by negotiation between the DNSP and the connection applicant.	<p>Not Accepted</p> <p>SCO disagrees with the NERA/ACG recommendation that augmentation costs are not borne by the connecting user, whose connection directly necessitates augmentation of the shared network. It is considered that it is inequitable that the entire network of users should subsidise the connecting user's requirements in this way. SCO therefore proposes that the connecting user will pay, in the same way it pays for its connection and extension assets, for any necessary augmentation to the shared network. The exceptions to this rule will be small customers as defined in the NECF and micro EG connections for which any cost will be recovered through the Distribution Use of System (DUOS) charges.</p> <p>SCO also notes that a user pays approach to augmentation costs should act as a positive incentive for demand management, micro embedded generation and energy</p>

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		<p>efficiency initiatives – to lower potential augmentation costs.</p> <p>SCO notes that there is a valid argument regarding the issue of competitive neutrality between generators connecting to transmission or distribution networks – with the former not paying augmentation costs as part of a new connection. SCO considers the locational signal provided outweighs the issue of competitive neutrality. Furthermore, the AEMC is considering transmission issues including inter-regional charges, as part of its climate change review.</p> <p>SCO notes that there will be an augmentation charge determined by the regulator, taking into account both immediate and future network needs. As such, the NER will require the AER develop a guideline detailing the methodology associated with the calculation of the augmentation component of a connection charge. Given that augmentation charges may be associated with revenue resets and distribution network usage tariffs, the implementation and commencement of the new capital contribution framework will be aligned with region revenue resets to facilitate a smooth transition to the new arrangements.</p>
28	<p>The NER should require the AER to develop a Guideline for the determination of connection asset charges. The Rules should provide that the Guideline include:</p> <ul style="list-style-type: none"> <li>▪ a definition of a standard small customer connection asset that may vary for each DNSP, for which no connection asset charge may be levied; and</li> <li>▪ a definition of the relevant connection point.</li> </ul>	<p>Partially Accepted</p> <p>SCO proposes that NER will outline a basic set of principles, based on their responses to the capital contribution recommendations, outlining the calculation of capital contributions. These principles include:</p> <ul style="list-style-type: none"> <li>- large customers will be required to pay a capital contribution for the cost of any network extension and augmentation assets required to connect the customer and for the cost of dedicated connection assets;</li> <li>- small customers (as defined in the NECF) and micro EG will be required to pay a capital contribution for extension and dedicated connection assets. Augmentation costs for these customer types will be recovered through DUOS; and</li> <li>- customers will receive a repayment of capital contributions for dedicated assets (including augmentation assets for large customers) proportional to the new customers’ utilisation of that asset.</li> </ul> <p>SCO agrees, subject to these express principles, the NER will require the AER to develop a Guideline, based on the key objective of cost reflectivity and supporting any move towards increased contestability. This Guideline will contain further details regarding the determination of connection asset charges, including the requirement that there will be a standard small customer connection asset which will</p>

No.	NERA/ACG recommendations	Draft SCO Policy Response
		<p>be provided by a DNSP for at a standard charge where a contestable market for the service does not exist, and a definition of the relevant connection point.</p> <p>In developing the Guideline the AER is to consider existing connection charge arrangements in jurisdictions or regions where contestability does not currently exist and the transition to the proposed capital contribution arrangement for small customers.</p> <p>The definition of a standard asset will be a matter for each DNSP to determine and define for its own network(s) given the variation in ways of measuring/defining this currently across jurisdictions.</p>
29	<p>The NER should require the AER to develop a Guideline that provides a methodology for the partial repayment of connection asset charges when a new customer connects to an extension asset within 7 years. The Rules should provide that the Guideline include:</p> <ul style="list-style-type: none"> <li>▪ an obligation for a DNSP to provide a repayment to a connection customer in the event a new connection utilises part of the previously dedicated assets;</li> <li>▪ dispute resolution procedures;</li> <li>▪ the basis for calculating the repayment; and</li> <li>▪ a requirement that the asset become treated as a shared network asset at the expiry of the seven year period.</li> </ul>	<p>Accepted</p> <p>The NER will provide a framework for the repayment mechanism that is to apply when a user connects to extension assets including the methodology for partial repayment. The AER will develop a Guideline for the treatment of extension assets following public consultation.</p> <p>SCO notes that in the interests of making this consistent with the rest of the proposed capital contribution framework, it will also include repayment of relevant augmentation charges, including for augmentation assets that become general network assets. Therefore the AER will develop a Guideline for the treatment of augmentation assets following public consultation.</p>
30	<p>Provisions within the NER that currently refer to the recovery of network augmentation costs through a connection charge should be removed (ie, Rule 5.5(f)(3)(i) and Draft Rule 6.22(1)(b).</p>	<p>Not Accepted</p> <p>As Recommendation 27 was not accepted by SCO, the current NER provisions pertaining to recovery of network augmentation costs should remain in place.</p>

## National Electricity Rules

### **Schedule 5.6 - Terms and Conditions of Connection agreements**

The *connection agreements* must contain the specific conditions that have been agreed to for *connection* and access to the *transmission* or *distribution network*, including but not limited to:

- (a) details of the *connection point* including the *distribution network coupling points* where appropriate;
- (b) *metering* arrangements and adjustments for losses where the point of *metering* is significantly different to the *connection point*;
- (c) authorised demand which may be taken or supplied at the *connection point* (under specified conditions);
- (c1) details of each *access standard* agreed between the *Network Service Provider* and the *Registered Participant* and all related conditions of agreement resulting from the application of any access provisions contained in schedule 5.1 for *Network Service Providers*, or schedule 5.2 for *Generators*, or schedule 5.3 for *Customers*, or schedule 5.3a for *Market Network Service Providers*;
- (d) *connection service charges*;
- (e) payment conditions;
- (f) duration and termination conditions of the *connection agreement*;
- (g) terms, conditions and *constraints* that have been agreed to for *connection* to the *network* to protect the legitimate interest of the *Network Service Providers* including rights to *disconnect* the *Registered Participant* for breach of commercial undertakings;
- (h) details of any agreed standards of *reliability* of *transmission service* or *distribution service* at the *connection points* or within the *network*;
- (i) testing intervals for *protection systems* associated with the *connection point*;
- (j) agreed protocols for maintenance co-ordination;
- (k) where an expected *load*, to be connected to a *network*, has a *peak load* requirement in excess 10 MW, the provision, installation, operation and maintenance of automatic *load shedding* facilities for 60 percent of the *load* at any time; and
- (l) terms and conditions of access to the *metering installation* for the *Metering Provider*.

The *connection agreements* may include other technical, commercial and legal conditions governing works required for the *connection* or *extension* to the *network* which the parties have negotiated and agreed to. The circumstances under which the terms of the *connection agreement* would require renegotiation may also be included.