

**Electricity Distribution Network
Planning and Connection**
**A National Framework for Electricity
Distribution Networks**

2009 to 2014

**Integral Energy Submission on MCE SCO
Policy Response Paper**

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Introduction

Integral Energy welcomes the opportunity to comment on the MCE Standing Committee of Officials policy response on the "Electricity Distribution Network Planning and Connection, A National Framework for Electricity Distribution Networks" as detailed in the paper released on 15 December 2008 (the SCO Paper).

Integral Energy notes that the SCO policy response is presented in three parts in the SCO Paper, namely:

- 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.

Integral Energy supports the MCE decision to refer Part 1 to the Australian Energy Market Commission for review of the planning and expansion processes for distribution networks.

This response provides Integral Energy's views on the matters and issues raised in Parts 2 and 3 of the SCO Paper. It is also recognised that the processes described in the SCO Paper have to be consistent with those being developed under the National Energy Customer Framework (NECF).

1.1 Consistency with National Energy Customer Framework (NECF)

While it is acknowledged in the SCO Paper that the connection framework is the key area of overlap with the NECF, it is not clear to Integral Energy how the SCO intends to align the two separate work streams.

Integral Energy recognises the importance of the NECF and in a separate written submission to the Department of Resources, Energy and Tourism has highlighted several major issues which it considers need to be addressed to ensure the policy intention of the MCE and the provisions of the Australian Energy Market Agreement are properly incorporated in the development of the legislative framework.

There will be a number of matters which will carry over from the connection process into the NECF process, for example the capacity of a connection, the provision of substation

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sites and access etc and alignment between the two work streams will be crucial to ensuring that customers are not disadvantaged by the new framework.

1.2 Embedded networks

There does not appear to be anything in the proposed connection framework that deals with embedded networks and the connection of customers to an embedded network.

There are a number of issues that still need to be resolved for the connection of embedded networks including the metering arrangements and issuing of parent and child NMIs and customer and public safety.

For embedded networks within the Integral Energy distribution area, Integral Energy believes that there should be a connection contract established between Integral Energy and the embedded network and then the embedded network owner would be responsible for establishing connection contracts with the customers connected to the embedded network. Consideration would need to be given as to whether the model terms developed as part of the connection framework should also apply to embedded networks.

Part 2: National framework for electricity distribution network connection arrangements

Integral Energy notes that the framework described in Part 2 relates to:

1. New connections to the network, that is, the provision of services to establish a new physical connection to the premises of a customer or embedded generator; and
2. Modifications to existing connections, that is, where there are services required to modify (extend or augment) a physical connection to the premises of a customer or embedded generator.

Integral Energy supports the broad policy objectives outlined in the SCO Paper but believes that the framework detailed in Part 2 does not meet all these broad policy objectives. In particular, Integral Energy believes that the framework does not simplify the process for connection for either customers or embedded generators and does not provide a process that is user-friendly while delivering certainty to all parties.

Each of the jurisdictions has an existing connection process which reflects the requirements of their jurisdiction. Imposing a national framework over the top of these arrangements, without fully understanding the reasons for the structure of the jurisdictional processes, risks making the connection process for the vast majority of customers overly burdensome and bureaucratic and imposes unnecessary costs on the distributors.

Integral Energy is of the view that there would be benefit in preparing a number of case studies to demonstrate the workings of the framework. These case studies should be developed in consultation with the industry and provided to all stakeholders for discussion at any future round table to discuss the proposed framework.

2.1 Integral Energy's Current Process

Integral Energy's current process is based on the NSW Independent Pricing and Regulatory Tribunal's Capital Contribution Determination and the Accredited Service Provider (ASP) Scheme that operates in NSW.

The ASP scheme has ensured that customers are connected to electricity in a timely and efficient manner. The use of ASPs in constructing the connection assets ensures customers in NSW derive benefits from lower new connection costs. Any framework for

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connection being considered for adoption nationally should ensure the retention of the secondary market for connection services in NSW currently performed by ASPs.

2.1.1 Connection of customer load

Customers in a declared urban area with a load of less than 100 amperes single phase or 63 amperes per phase for three phase premises can contact Integral Energy's call centre and they will be provided with a NMI and Account Number which they provide to their level 2 ASP who arranges the provision of the connection assets to Integral Energy's standards and energises the installation. Integral Energy does not make an offer to connect and the connection and provision of ongoing network services are provided under the Standard Form Customer Connection Contract.

All other customers must complete an "Application for Connection of Load" or an "Application for provision of an electricity network in a subdivision". On receipt of an application, Integral Energy will provide an acknowledgement letter within seven days and a "Supply Offer" is generally provided within 14 days.

The "Supply Offer" informs the customer of where to connect to the Integral Energy Network and any other supply conditions. The broad scope outlined in the "Supply Offer" is used by the customer's Level 3 ASP to prepare an electrical design which is then used by the customer's Level 1 ASP to construct the connection assets.

A "Permission to Connect" letter will be issued by Integral Energy to allow the connection of load to Integral Energy's network when all the requirements (including payment of charges) in the "Supply Offer" are met. The connection and provision of ongoing network services are provided under the Standard Form Connection Contract.

2.1.2 Connection of embedded generation

For the connection of an embedded generator Integral Energy requires the completion of a detailed written application form and supporting documentation.

Connection of small solar powered generation systems to domestic installations are covered by the Sun Power arrangements. Under these arrangements customers wishing to install systems with a maximum capacity of 10kW single phase must use an approved inverter and the system must be installed in conjunction with a domestic load. The installation of the Sun Power system must comply with Integral Energy's requirements and relevant standards including:

- NSW Service and Installation Rules including Section 8.6 – Small Scale Parallel Customer Generation (Via Inverters);
- AS/NZS 3000, Wiring Rules;
- AS 4777 Parts 1, 2 and 3 Grid Connection of Energy Systems via Inverters; and

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- Technical requirements included in the Sun Power Interconnection Agreement.

An Integral Energy Sun Power Interconnection Agreement must be completed and submitted prior to the connection of the system. Integral Energy will then issue a permission to connect letter. The customer must install an additional meter on their main switchboard to measure the amount of energy generated by the system and must engage a Level 2 ASP to perform this work, test the installation and commission the system.

Conditions for the connection of other embedded generators are determined on a case by case basis.

2.2 Standard connections for small load customers and micro embedded generation

Integral Energy already has in place a Standard Form Customer Connection Contract. The vast majority of Integral Energy's connections are made under this existing Standard Form Connection Contract. This includes large customers as well as micro embedded generation. There would be very few instances when a Standard Form Connection Contract was not used and to date these instances have been for relatively large embedded generators.

2.3 Additional standard connection contracts

Integral Energy believes that there would be little benefit in developing additional standard connection contracts for customers. The Standard Form Connection Contract currently in place covers all connections to the network whether they are through the process described above or through the process being contemplated by the NECF.

2.4 Negotiated connections

Integral Energy believes that there would be very few instances when a negotiated connection would be required.

Integral Energy consults with various customers over the connection arrangements to their property and agreement is reached on the best method of achieving a connection. Once there is agreement the connection then proceeds under the Standard Form Connection Contract.

The consultation with customers is generally over the various technical requirements such as the point of supply, the size of the connection, the number of phases required, the number of connections to the installation, positioning of any substations on the customer's property, etc. and the outcomes of these "negotiations" would be documented

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in the "Supply Offer". The consultation would generally take the form of considering what it is the customer is trying to achieve and what is technically feasible in the location that the customer wishes to connect.

None of these issues would need to be incorporated into a negotiated contract and the connection would still occur under the Standard Form Connection Contract.

Given the nature of distribution networks it would not be practical to negotiate individual reliability and quality of supply outcomes for customers. Customers can be made aware of the reliability and quality of supply that exists in specific locations within the network and they can make arrangements within their installations to address any concerns that this may cause.

For some large loads and embedded generators there may be commercial requirements outside the technical requirements that would need to be negotiated and a framework which allows a negotiated contract for these commercial terms would be appropriate.

2.5 Classification of connection services

Integral Energy is currently finalising its first determination under the National Electricity Law and Rules (including the Transitional Rules put in place for the NSW distributors) under the Australian Energy Regulator (AER).

In the AER's draft distribution determination the following classification of services is to apply for the 2009 to 2014 regulatory control period:

- A distribution service provided by Integral Energy that was previously determined to be a prescribed distribution service is deemed to be classified as a direct control service and further classified as a standard control service.
- A distribution service provide by Integral Energy that was previously classified as an excluded distributions service is deemed to be classified as an unregulated distribution service (With the exception of public lighting services).
- Integral Energy has no services that are classified as a negotiated distribution services.

This means that the provision of connection services by Integral Energy will be a direct control service and based on the framework outlined in the SCO Paper there will be no scope for price negotiation. There may be components of the direct control service however, which could be negotiated and the AER's draft determination defines the negotiable components and puts in place the framework and criteria for the terms and conditions of access.

It is envisaged that the only components of a direct control service that would be part of a negotiable component would be the technical requirements for connection although as

stated earlier, this would take the form of a consultation with the customer to consider the standard options available rather than a negotiation.

Under the AER's draft determination, the provision of customer funded connections, which was an excluded service previously, will now be an unregulated distribution service. As such, Integral Energy believes that this work should not be covered by the SCO Paper framework as the majority of this work is undertaken by ASP's in a competitive environment.

As a part of the final determination the AER will set a number of fees that will apply to the connection of load and embedded generators, for example monopoly fees, and the provision of ongoing distribution services, for example miscellaneous fees. These fees would not be negotiable as they are a regulated fee.

2.6 AER's role

Integral Energy does not support the proposal to introduce an additional layer of regulation by having the AER approve the standard connection contracts.

Integral Energy believes that the only role for the AER in this process is that of compliance. As such, the NER must be such that the DNSP prepares a standard contract that complies with the NER. The AER can check this compliance as part of its compliance role.

This would mean that the NER would be required to have in place the terms of the contract that are designed to provide the customer protections envisaged by SCO.

2.7 Timeframes for connection

As stated earlier, Integral Energy's existing processes have timeframes for acknowledging receipt of a customer application within seven days and for responding with details on the connection requirements generally within 14 days (or 10 business days).

Integral Energy believes that these timeframes have proved workable and should be maintained in the proposed framework for connection.

It needs to be stressed however, that the timeframes commence from when a "completed application", that is one that provides all the required information, is lodged with the DNSP. Also, if the customer changes any of the required information then the timeframe will need to recommence from the time the customer advises the DNSP of the revised information.

The framework also needs to acknowledge that in Integral Energy's distribution area ASPs provide the majority of customer connections and hence the proposed 2 month timeframe from provision of the information required to connect to the acceptance of the

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offer by a customer would apply to the information provided. Any arrangements between a customer and an ASP for the timing of the actual connection would be a matter for negotiation between the customer and the ASP.

Similarly for negotiated connections, once Integral Energy has provided the information on the required connection arrangements the customer would then have one month to accept the offer. Any arrangements between a customer and an ASP for timing of the actual connection would be a matter for negotiation between the customer and the ASP.

2.8 Scope/coverage of standard and negotiated connection contracts

In NSW a single contract is entered into between DNSPs and customers for the provision of connection services and ongoing distribution services such as the reliability and quality of supply.

The majority of greenfield and other new connections are constructed by ASPs engaged directly by the customer. Any arrangement between the customer and the ASP are a matter for negotiation between the customer and the ASP.

Integral Energy believes that the requirements for connection proposed in the national framework could be covered in a single contract between the customer and the DNSP with the customer having a separate contract with their ASP for provision of the actual connection. Accordingly, Integral Energy sees little benefit, if any, in having a separate contract for connection and another contract for the ongoing distribution service provision.

Part 3: National framework for electricity distribution capital contribution arrangement

Integral Energy supports the SCO's key objective of long run cost reflectivity for electricity distribution capital contribution arrangements. Integral Energy also notes that one of the recommendations is for the AER to develop a guideline based on this key objective.

Integral Energy supports this recommendation, however it should be made clear that any Guideline developed by the AER can only be implemented at the time of a regulatory reset so that any changes in costs can be incorporated into the DNSP's expenditure forecasts. Under the Transitional Rules that apply to the NSW DNSPs, clause 6.21.4 (a) states that capital contribution charges by the NSW DNSPs in respect of the regulatory control period 2009 to 2014 are to be determined in accordance with Determination No 1 2002 made by IPART (the IPART Capital Contributions Determination). As noted in the SCO Paper there may be a need to transition from the existing capital contribution arrangements to the AER's proposed approach. This may mean the transition will have to occur over more than one regulatory reset.

Integral Energy is generally supportive of the proposed basic set of principles to be included in the NER, namely:

- 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 and micro embedded generation 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 payment of capital contribution payments for previously dedicated assets (including augmentation assets for large customers) proportional to a new customers' utilisation of that asset.

These principles are generally reflected in the existing IPART Capital Contributions Determination that applies in NSW.

The third principle relating to reimbursement of capital contributions is of concern however, as it is very broad in its approach and will create a need for extensive record keeping and administration costs to manage any such scheme.

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Integral Energy already has a reimbursement scheme in place under the IPART Capital Contributions Determination. Under the current arrangements the reimbursement scheme for large loads has been problematic and has led in some instances to a negotiated commercial arrangement that negates the need for a reimbursement scheme to be established. Under such an arrangement costs are apportioned such that other customers don't benefit from the large load connection but neither do they have to fund the large load connection.

Integral Energy's experience has been that a reimbursement scheme works reasonably well for small customers connecting in a rural area. Under the IPART Capital Contributions Determination the reimbursement scheme applies to the dedicated connection assets which in a rural situation are quite readily identified. This means that the need for a reimbursement is identified early and the amount of the reimbursement is quite readily calculated. This is not the case for large load connections.

Integral Energy would recommend that the reimbursement scheme be applied only to small customers connecting in rural areas. In addition to the requirement to only apply to small customers connecting in rural areas, the reimbursement scheme should have the following features:

- Limit the allocated costs at the amount of the original capital contribution;
- Limit the period over which reimbursements may be offered to 7 years;
- Apply a materiality threshold such that inconsequential reimbursements are not required;
- The reimbursement is made to the current owner of the property who would be responsible for advising the DNSP of any change of address; and
- Developers of subdivisions should not be eligible to receive reimbursements but should be liable for payment of reimbursements.