New South Wales
TREASURY

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Tom

Dear ~~Professor Parry~~

Pricing for Capital Contributions for Electricity Networks

NSW Treasury has prepared the attached document as its response to IPART's Discussion Paper: *Pricing for Capital Contributions to Electricity Networks.*

We have evaluated each of the four options proposed in the Discussion Paper against a set of evaluation criteria, which we have developed based on the principles explained in our submission.

We support the adoption of a menu approach in principle and recommend that IPART develop a menu of options for consideration. As the approach recommended by the working group provides for the most acceptable generic solution we would expect to see that this approach is included as a menu option.

In preparing this submission we have consulted with, an incorporated the contributions of, the Ministry of Energy and Utilities.

Please contact Adriaan van Jaarsveldt if you wish to discuss any aspect of our submission.

Yours sincerely

Don

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TREASURY

Pricing of Capital Contributions to Electricity Networks NSW Treasury submission to IPART's Discussion Paper

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Contents

1 Executive Summary

NSW Treasury has prepared this submission in response to IPART's Discussion Paper: *Pricing for Capital Contributions to Electricity Networks.*

The allocation of the cost of new or expanded network connections is a complex matter that has been under debate for some time. There have been a number of reviews conducted by the industry over the past 10 years in attempts to establish a more transparent and consistent approach.

In January 1999 IPART asked the industry to form a working group to develop joint proposals on capital contributions for IPART's consideration. IPART's *Discussion Paper* discusses the key features of the current arrangements and the working group's recommendations. It sets out four proposed options for changes to the capital contributions framework in NSW.

Considering the amount of study and debate that has already been invested in developing a capital contributions policy it is doubtful whether at this stage one single approach will emerge that provides optimal outcomes for all stakeholders and across all areas.

The recommendations of the working group are the results of a very rigorous examination of the issues and consideration of a wide range of alternative solutions. On balance the recommendations of the working group would appear to provide the most acceptable ***generic*** solution.

A number of Distribution Network Service Providers ("DNSPs") have, however, expressed reservations with the practical application of some of the working group's recommendations.

Given these concerns and the arguments for and against each of the proposed options the adoption of a menu approach, whereby the DNSPs choose the capital contributions framework that is most suited to the characteristics of their network, may be the best solution. The options that would be available under the menu approach are not those proposed in the *Discussion Paper* and would have to be developed by IPART as a next step.

NSW Treasury supports the adoption of a menu approach in principle and recommends that IPART develop a menu of options for consideration.

As the approach recommended by the working group provides for the most acceptable generic solution IPART should ensure that this approach is included as a menu option, In reaching this conclusion NSW Treasury has considered the key issues involved and evaluated each of the four options proposed in the ***Discussion Paper*** against a set of evaluation criteria developed at Section 2 of this paper.

2 Evaluation criteria

Four options have been developed by IPART and put forward in its ***Discussion Paper***:

- Option 1 – Continuation of the current guidelines.
- Option 2 – The proposals of the Capital Contributions Working Group.
- Option 3 – Continuation of the current guidelines with certain amendments.
- Option 4 – The proposals of the working group with certain amendments.

In order to properly assess the merits and shortcomings of each of the proposed options we have re-examined the criteria against which a framework for capital contributions should be assessed. We discuss the evaluation criteria set out in section 3 of the ***Discussion Paper*** and as considered by the working group below.

2.1 Economic Efficiency/Price Signals

The primary objective for IPART in developing a framework for capital contributions must be to develop a scheme that provides for an economically efficient outcome and sends undistorted price signals to customers and DNSPs.

There are at least three components of efficiency against which the policy should be evaluated:

2.1.1 The policy should facilitate and encourage economic connection and discourage uneconomic connection.

The policy should not provide any barrier to the DNSP to connect a new customer where the cost of connection can be justified on economic grounds. Conversely, it must not compel DNSPs to connect customers or encourage customers to seek connection where the connection would clearly be economically unsustainable. In these instances the policy should allow the natural selection of the most efficient alternative solution, such as remote generation.

2.1.2 The policy should allocate the cost of connection to the beneficiaries of connection.

Uneconomic connections and augmentations that are not paid for by the connecting customer or from future revenues place upward pressure on average electricity prices. This outcome provides incorrect locational signals to customers in remote areas where the cost of connection is far greater than for areas located near the grid.

2.1.3 The benefit derived from the policy should exceed the cost of its implementation.

Proposals that require significant additional administration or are otherwise expensive to implement should be subjected to a cost benefit analysis.

2.2 Equity

2.2.1 Equity is not a general criterion

IPART as an economic regulator must view economic efficiency as the overriding requirement for the development of any policy.

It may, for example, not be "equitable" that customers in remote areas have to pay more for connection to the grid. This is, however, not a consideration for IPART in determining how the cost of connection should be shared between DNSPs and customers.

Whilst equity *per se* should not be a general criterion there are a number of specific areas where questions of equity should be considered. These include:

2.2.2 *Rural considerations*

A capital contributions policy that provides acceptable outcomes for urban customers may not provide acceptable outcomes for rural customers, particularly those in remote and sparsely populated areas. The cost of new connections is a more pressing issue in remote areas. It is therefore desirable that a capital contributions policy recognises the particular needs of rural customers.

2.2.3 *The segregation of responsibilities for capital contributions*

It is important to clearly distinguish the various responsibilities of IPART, the DNSPs and Government in respect of new connections and capital contributions. The working group in its report recognised the need for customers to be provided with clear guidance on these respective roles:

> *IPART has a role in determining rules for the equitable sharing of connection costs between customers, either through specific charges or general pricing arrangements. The re-examination of these rules has been the function of this Working Group.*
>
> *The distributor's role is to apply the rules determined by IPART, in conjunction with other legislative and regulatory requirements. Distributors recover their investments in distribution assets and customer connections through network prices.'*

If any consideration is to be given to whether these arrangements are equitable then that is a question for the Government to consider in a far wider policy context. Neither

[1] Guidelines for Implementing the Recommendations of the Capital Contributions Working Group, Final Report (December 1999) – Page 39

IPART nor the DNSPs have a role in considering whether or not it is fair to require customers to contribute to the cost of connection.

2.2.4 *Risk attached to forecasting new connections*

IPART implies in its *Discussion Paper* that DNSPs may be reluctant to acknowledge the possibility of further connections so as to avoid changing the status of assets from 'dedicated' to 'shared'.

It is inappropriate to require DNSPs to fund connections on the assumption that future connections will occur. The DNSPs are not compensated through their regulated revenues for taking this risk. Placing the onus on the DNSP to make capital contribution decisions based on projected future connections may lead to disputes as the decisions would necessarily be subjective.

2.3 Simplicity

Capital contributions is a complex area and it may be naive to expect that it is possible to develop a simple solution that will satisfy all parties. It is likely that a generally acceptable solution will involve a degree of complexity. This, in itself, is not a bad thing.

A more realistic expectation is that the policy allows for transparency and consistency in application.

The problems that arise from applying the existing determination are caused by ambiguity and generalisations in the drafting of the rules and not from any degree of complexity in the systems required to apply those rules.

2.4 Evaluation criteria

In summary, the criteria against which capital contributions policies should be assessed are:

1. The policy should facilitate and encourage economic connection and discourage uneconomic connection (('economic connection").
2. The policy should allocate the cost of connection to the beneficiaries of connection("efficient cost allocation").
3. The benefit derived from the policy should exceed the cost of its implementation ("cost/benefit").
4. The policy should recognise the particular needs of rural customers ("rural needs").
5. The policy should allow for transparency and consistency in application. ("transparency and consistency").

3 Evaluation of options

Using the criteria developed above we have evaluated each of the four options proposed in IPART's *Discussion Paper* as follows:

	Economic Connection	**Efficient Cost Allocation**	**Cost/Benefit**	**Rural Needs**	**Transparency and Consistency**
Option 1 Current guidelines	✗	✗	✓	✗	✗
Option 2 **The** working group proposals:					
Economic Test	?/ ✓	✓	✓	✗	✓
Dominant Load Test	-		?	✓	?
Reimburse-ment Scheme	✓	✓	?	✓	?
Option 3 The current guidelines with certain amendments	✗	?/✗	?	✗	✗
Option 4 The working group proposals with certain amendments	✗	✗	?	✓	?

Key: ✓ = criteria met; X = criteria not met; ? = practical application unknown

3.1 Option 1 – current guidelines

The current guidelines are not providing the correct incentive effects in terms of economic efficiency and cost allocation.

DNSPs are responsible for funding all shared parts of the network upstream from the point of customer connection. This means that all network customers contribute through increased tariffs to the augmentation costs required to connect customers for which these costs are not fully recoverable from existing tariffs.

Customers are responsible for the cost of all non-shared assets required for their connection downstream from the point of connection. There is no scheme for reimbursing customers for assets they have funded if they are subsequently shared.

The current guidelines apply a uniform approach to urban and rural areas. A policy that provides acceptable outcomes for urban customers may not provide an acceptable outcome for rural customers, particularly those in remote and sparsely populated areas.

The current guidelines are not transparent and do not allow for consistent application. Both DNSPs and customers report difficulties in interpreting and applying the guidelines, particularly in relation to the definition of a connection point, the distinction between shared and dedicated lines, and the assessment of alternatives to connection.

3.2 Option 2 -the working group proposals

3.2.1 *The economic test*

A fundamental requirement is that the connection of new customers should not cause current electricity prices to rise. The proposed economic test under which DNSPs contribute to the cost of new connections only to the extent that their costs are recovered through future revenues at current tariffs should ensure this.

However, under the current IPART revenue determination the DNSPs' allowed revenues are capped. This means that, depending on actual growth and other variables, the additional cost of connecting new customers may not be recoverable from revenues within the five year regulatory period. Depending on growth and other characteristics of the distribution area serviced this constraint may be unacceptable to some DNSPs.

3.2.2 *The dominant load test*

The separate definitions of dominant load proposed for urban and rural areas will allow for differences in network characteristics to be accounted for.

3.2.3 *The reimbursement scheme*

The proposed reimbursement scheme should allow for an equitable and efficient allocation of costs. There is, however, some concern as to the administrative effort that this scheme will require from the DNSPs. Clear rules for the scheme's operation will have to be developed and communicated to customers to ensure that transparency and consistency is achieved.

3.3 Option 3 – the current guidelines with certain amendments

This option would not address the shortcomings of the current guidelines in any meaningful way.

3.4 Option 4 - the working group proposals with certain amendments

This option does not address the fundamental requirement that the connection of new customers should not cause current electricity prices to rise.

Under this option a 'simplified' economic test is proposed based on fixed revenue offsets, which could be determined by IPART. The basis that IPART would use in making this determination is not explained. As the basis for the revenue offsets is unknown it is not clear how this approach would be more transparent than the approach proposed by the working group. The working group approach is based on verifiable figures.

3.5 Conclusion

Considering the amount of study and debate that has already been invested in developing a capital contributions policy it is doubtful whether at this stage one single approach will emerge that provides optimal outcomes for all stakeholders and across all areas.

The recommendations of the working group are the results of a very rigorous examination of the issues and consideration of a wide range of alternative solutions. On balance the recommendations of the working group would appear to provide the most acceptable generic solution.

A number of DNSPs have, however, expressed reservations with the practical application of some of the working group's recommendations. In particular Energy Australia is concerned with its inability to recover the costs of new connections under a revenue cap within the five year regulatory period.

Given these concerns and the arguments for and against each of the proposed options the adoption of a menu approach whereby the DNSPs choose the capital contributions framework that is most suited to the characteristics of their network may be the best solution. The options that would be available under the menu approach are not those proposed in the Discussion *Paper* and would have to be developed by IPART as a next step.

NSW Treasury supports the adoption of a menu approach in principle and recommends that IPART develop a menu of options for consideration.

As the approach recommended by the working group provides for the most acceptable generic solution IPART should ensure that this approach is included as a menu option.

In developing a menu based approach IPART should consider and discuss with the DNSPs the impact on customers in different geographic areas potentially being subject to different capital contribution policies. This may create customer confusion and discontent, particularly at distribution boundaries, if not specifically addressed in implementing the policy.

IPART may further wish to consider:

- Performing, or requesting the working group to perform, a cost benefit analysis of a menu based approach against adopting a uniform solution.
- Undertaking to review the effectiveness of the approach adopted now within a reasonable period, say twelve months, in order to assess whether the policy is operating as planned and whether any adjustment is necessary.