

**Submission to the ACCC on the
NECA proposals for Market Network Services**

TransGrid

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1.0 Executive Summary

TransGrid supports competition reform and the need for an effective framework for unregulated investment in the National Electricity Market ("**NEM**"). As an organisation, TransGrid fully embraces COAG's objectives of achieving a competitive electricity market framework. In particular we note the following COAG objectives¹ for the fully competitive national market:

1. "non-discriminatory access to the interconnected transmission and distribution network";
2. "no discriminatory legislative or regulatory barriers to interstate and/or intrastate trade"

TransGrid does not consider that the code changes relating to market network services are suitable for authorisation by the ACCC or acceptance by the ACCC as an industry access code. In particular, TransGrid believes that:

1. NECA's model for market network services falls well short of delivering the overall levels of competition that would otherwise be available through other models;
2. NECA has failed to make a case demonstrating that the public benefits arising from their proposals offset the disadvantages associated with allowing Market Network Service Providers to restrict available capacity and restrict the level of access to adjacent market regions;
3. NECA's model for market network services discriminates between technologies in contradiction of the National Electricity Code objectives.
4. The proposed changes are contrary to the Code objectives and inappropriately favour the interests of the proponents of such services over others in the market. In particular, these changes will serve to institutionalise inefficient outcomes to the detriment of customers.

It must be stressed that TransGrid is not apposed to the concept of unregulated interconnectors, but merely rejects NECA's proposed 'safe harbour' model for unregulated interconnectors. TransGrid does not consider that allowing market network service providers ("**MNSP's**") to restrict network capacity and deny participants access to possible sources of cheaper generation is consistent with the competition objectives of the NEM.

TransGrid believes that the model NECA proposes will only marginally improve the level of competition between generation in adjacent regions and will only marginally benefit end consumers. The regulated alternative, on the other hand, ensures that the benefits of energy market competition are substantive, with consumers receiving the maximum overall benefit. We also believe that there has been a significant lack of focus on end consumer benefits and poor representation of end user groups during the Code change process.

¹ These objectives come from the COAG report on electricity reform, August 19, 1994.

In the event that the principles are accepted by the ACCC there are a number of drafting issues that remain to be addressed. These are also set out in this submission.

In general, TransGrid does not consider that the code changes in their current form are suitable for authorisation by the ACCC or acceptance by the ACCC as an industry access code.

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2.0 Introduction

2.1 Background

This submission to the Australian Competition and Consumer Commission ("**ACCC**") is made in response to the National Electricity Code Administrator Limited's ("**NECA**") application to the ACCC for:

- (a) authorisation under section 88 of the Trade Practices Act 1974 ("**TPA**"); and
- (b) the acceptance of the Code as amended by the proposed changes as an industry access code pursuant to section 44ZZAA of the TPA,

of certain proposed changes to the National Electricity Code (the "**Code**") to provide for what is referred to in the Code as "market network services" (the "**Proposed Changes**").

2.2 Role of interconnectors

It is important to be mindful of the originally intended role and purpose of interconnectors in the NEM. According to its clause 1.2.1:

*"The Code had its genesis in the Special Premiers' Conferences of October 1991 and July 1991, which led to the formation of the National Grid Management council, and in the Prime Minister's One Nation Statement of February 1992, where **plans for developing a coordinated electricity grid spanning the eastern States were articulated***

*"**Development of a national grid and a national Code of Conduct, overseen by a national regulator such as the ACCC (leading to enhanced competition and efficiency within the States and Territories as well as between jurisdictions)** was also consistent with the reforms of competition policy articulated in the National Competition Policy Review report by the Hilmer Committee."*

These statements, contained in the Code, highlight the extent to which effective interconnection was a motivating force behind the advent of the Code and the NEM. Clearly, an interconnected national grid was seen as a key driver of increased competition and efficiency improvements in the electricity industry. The debate surrounding Safe Harbour provisions for unregulated interconnectors should be viewed in this light.

2.3 Market Network Service Changes

TransGrid does not consider that the code changes relating to market network services are suitable for authorisation by the ACCC or acceptance by the ACCC as an industry access code. In particular, TransGrid believes that:

1. NECA's model for market network services falls well short of delivering the overall levels of competition that would otherwise be available through other models;
2. NECA has failed to make a case demonstrating that the public benefits arising from their proposals offset the disadvantages associated with allowing Market Network Service Providers to restrict available capacity and restrict the level of access to adjacent market regions;
3. NECA's model for market network services discriminates between technologies in contradiction of the National Electricity Code objectives.
4. The proposed changes are contrary to the Code objectives and inappropriately favour the interests of the proponents of such services over others in the market. In particular, these changes will serve to institutionalise inefficient outcomes to the detriment of customers.

2.4 Structure of this submission

This submission has been organised into two distinct sections. The first section of the report, titled 'Main Issues', deals with the following issues:

- The public benefits of the proposals;
- The impacts on optimal transmission investment;
- The impacts on competition;
- The applicability of the model to existing interconnectors;
- The TUOS charging arrangements for MNSPs;
- The compliance with Code objectives;
- The NECA review process; and
- The effect on the Access Code

The second section of the report, titled 'Code Change Analysis', provides a detailed analysis of NECA's code changes and illustrates numerous errors and inconsistencies in the drafting of the code changes.

3.0 Main Issues

3.1 Overview of NECA's model

NECA have proposed changes to the Code to allow for unregulated interconnectors. The basic features of NECA's unregulated interconnector model are:

- the "link" owner can bid in capacity bandwidths and price differentials into the energy market;
- the link is treated as a scheduled generator/load pair; and
- the link owner is entitled to the congestion rentals developed across the link.

The striking feature of NECA's model for unregulated interconnectors, which distinguishes it from most other models around the world, is the fact that they have allowed the owner of the link, the market network service provider, to determine how much capacity is made available to the market and at what price. This feature of NECA's model, which allows MNSP's to restrict capacity and deny participants access to possible cheaper sources of generation in adjacent regions, is a significant concern and would seem contrary to the overall objectives of the National Electricity Market.

3.2 Public Benefits from Proposed Changes

Section 90 of the TPA empowers the ACCC to authorise contracts, arrangements or understandings that would otherwise be a breach of the TPA if the ACCC is satisfied that the benefit to the public that results or is likely to result from the contract, arrangement or understanding outweighs or would outweigh the detriment to the public constituted by any lessening competition that has resulted or is likely to result from the contract, arrangement or understanding.

TransGrid submits that NECA, in applying for authorisation of the Proposed Changes, has not demonstrated that any such benefits are likely to arise in the current instance and, as such, there are no grounds on which the ACCC can be satisfied that the benefits to the public which result or are likely to result from the Proposed Changes will outweigh the detriments resulting from such changes.

TransGrid understands that the only details that NECA has provided the ACCC as to the public benefits that would result from the Proposed Changes are those set out in a document entitled "Summary of Public Benefits from Varying the Code to Incorporate the Outcomes from the Transmission and Distribution Pricing Review". In relation to the Proposed Changes this document states that:

"The provisions to allow market network service providers to enter the market, where they meet the safe harbour provisions, adds new competitive pressures

to generators at the expense and risk of the entrepreneur rather than customers."

As discussed in other areas of this submission, TransGrid believes that the additional competitive pressures likely to result to Generators as a result of the Proposed Changes are marginal. Further, TransGrid notes that the statement made by NECA is misleading in that:

- (a) the statement refers to Market Network Service Providers being allowed to enter the market where they meet the "safe harbour provisions". However, the final report of NECA's Transmission Distribution Pricing Review on which the Proposed Changes are based, rejected significant elements of the proposed "safe harbour provisions" such as those relating to the market power of a proposed Market Network Service;
- (b) the statement also refers to the competitive pressures to Generators coming at the "expense and risk of the entrepreneur rather than customers". However, as discussed in a number of other places in this submission, TransGrid notes that the failure to deliver the benefits which could have been achieved through different design of the Proposed Changes results in significant additional costs being imposed on end-use customers and, in particular, leaves them exposed to the exercise of market power by proponents of Market Network Services.

The statement also ignores the significant detriments which result from the Proposed Changes. Many of these are discussed in other sections of this submission and, in TransGrid's view, means that the ACCC should not authorise the changes under section 90 of the TPA.

3.2 Unregulated Interconnectors and Economic Efficiency

It can be shown that, from the perspective of maximising economic welfare, unregulated interconnectors will generally not be of optimal capacity. Interconnectors transfer energy from regions with relatively low prices to regions with relatively high prices. Operated in an economically efficient way, they provide benefits to all the customers in the importing region. This means that transmission investment is a classic example of a commodity with 'public good' characteristics: If an entrepreneur develops an interconnector, the entrepreneur cannot force all the customers in the importing region to contribute towards the cost of the project. Therefore, customers in the importing region will have an incentive to 'free-ride' off the development of the interconnector by the proponent. This may mean that the interconnector never actually gets built.

Even if it does get built, the entrepreneur will not have an incentive to build an interconnector of a large enough size that would maximise the economic welfare of the community. Rather the focus of the entrepreneur will be to build the interconnector to a size that maximises profit. Furthermore, even if an unregulated interconnector of the optimal size were somehow built, the operator of the

interconnector could have an incentive to hold back its capacity to maximise profits, rather than the economic welfare of society as a whole.

The advantage of a regulated interconnector is that, by socialising the cost of the investment, market participants are, in effect, forced to pay for a good that benefits the whole market. In other words, regulated interconnects overcome the potential market failure problems that unregulated interconnectors face.

While we applaud the Working Group's attempts to provide greater certainty to the transmission investment environment, the proposed Code changes effecting the Safe Harbour provisions would tend to distort the most efficient pattern of investment. However, at this stage, there is no obvious solution to this problem, which is essentially one of the provision of a 'public good' in the context of a private market. In some circumstances, customers would simply be better served by an effective system of regulated investment provision than a poorly designed market-based system. Indeed, in some circumstances, it may be better to incur the direct costs of market failure by 'doing nothing' in terms of transmission investment rather than create even greater indirect long-term costs through the implementation of a bad market-based mechanism.

3.3 Potential for abuse of the Safe Harbour provisions

Given the problems associated with developing unregulated interconnectors of the socially optimal size, we believe that the Safe Harbour provisions should not institutionalise an approval regime for unregulated interconnectors that favours their development over regulated interconnectors. The Safe Harbour provisions for unregulated interconnectors are relatively simple and straightforward. Meanwhile, proposed regulated interconnectors must pass a regulatory test developed by the ACCC before being granted regulated status. This involves detailed analysis by the Inter-Regional Planning Committee and the ACCC to determine whether the interconnector is economically justified.

Because, typically, only one interconnector can use a particular geographical route, this discrepancy in approval processes means that unregulated interconnectors have a systematic advantage in obtaining approval over regulated interconnectors. There may be a number of vested interest groups who could abuse the ease of approval embodied in the Safe Harbour provisions to delay or 'spoil' the approval of a regulated interconnector by acting as though they wish to develop an unregulated interconnector and never actually carrying out the investment. The end result could be that no interconnector gets built and the community, as a whole, is worse off. The risk of such abuses would be even greater if, as suggested in the ACCC's Preliminary View , a 'market failure' limb were added to the regulatory test.

3.4 Impacts on Competition

TransGrid recognises that the model NECA proposes represents competition between generation and transmission. TransGrid considers, however, that when

compared to the regulated alternative, that this competition comes at the expense of a reduction in competition between Generators in adjacent regions and results in a shift in benefits from end consumers to market participants (the benefit shift is illustrated in appendix 1). By allowing MNSP's to control the capacity in a link which is made available to the market and the price at which that capacity is made available, NECA's proposed model encourages MNSP's to maximise the price differential between the importing and exporting regions to maximise its own revenue. This means that the MNSP is given a strong incentive to maximise the spot price in the importing region and to minimise competition between generators in that region.

Giving network owners the ability to restrict network capacity goes against one of the original design objectives of the national market: that being to provide open access transmission networks to facilitate competition between generation on a national level. Even in more advanced electricity markets such as the PJM market in the USA, where there is full nodal pricing and transmission congestion contracts ("**TCCs**"), transmission networks still effectively provide open access. The PJM market does not allow network owners to restrict available capacity on their networks to generate congestion rentals for themselves. This is one example of a market where unregulated network investment is allowed without allowing network owners to determine what level of capacity they will make available to the market place.

While TransGrid recognises the desire for market driven investment, it believes that inter-regional investment is a special case and decisions relating to whether interconnectors should be built should be addressed in the context of NEM policy with a focus on the role of transmission in the NEM. It should not be forgotten that the NEM is a national market and the original role of interconnectors was to provide competition between Generators on a national level.

3.5 Applying NECA's model to existing interconnectors

While, as set out in this section, TransGrid has serious concerns about the model developed by NECA, TransGrid also considers that it is inequitable for Transmission Network Service Providers to be prohibited from classifying their existing regulated interconnectors as market network services.

Given that there are no limitations in the current proposals on the size or market power of market network services, the size of the existing interconnectors does not, in TransGrid's view, provide any reason why those assets should not be entitled to become market network services.

Further, the current regulated status of an asset does not provide any rationale as to why that asset should not be entitled to become a market network service. In particular, given the current regulated status of these assets, it must be assumed that the owners of the existing interconnectors are not earning a monopoly return on these assets.

Similarly, any argument that users of the existing interconnectors may have paid for the relevant assets in the past appears irrelevant. As with any other asset, the users

of a market network service may "pay" for that asset many times over through the returns received by the owner of the asset. TransGrid is not aware of any suggestion that such payments in some way gives the users of the relevant assets a proprietorial "claim" over the assets and submits that the same must be true for currently regulated assets.

TransGrid submits that the rationale for why the owners of existing interconnectors should not be entitled to reclassify them as market network service highlights the flaws in NECA's model. In these circumstances, TransGrid submits that NECA's model is inappropriate and should not be authorised by the ACCC or accepted as part of an industry access code.

3.6 Eliminating TUOS charges for Market Network Service Providers

In the model developed by NECA, a Market Network Service Provider is effectively a Customer in the region from which it exports, and a Generator in the region into which it imports.

However, the arrangements for the recovery of the costs associated with ancillary services and TUOS and DUOS charging arrangements do not reflect this. In respect of both of these costs, NECA has proposed that Market Network Service Providers should effectively be treated as a Generator in both the importing and exporting regions.

TransGrid does not consider this to be appropriate and submits that, in the region from which an Market Network Service Providers exports, the Market Network Service Provider is a Customer and should be treated as such and, as a result, pay its share of ancillary service and network costs. This appears to be based on the concern that:

"It would be inconsistent with our key principle of promoting competition to require promoters of a non-regulated interconnector to pay TUOS charges which materially disadvantaged them compared to regulated interconnectors."

TransGrid notes that this conclusion is inconsistent with the other outcomes of the transmission and distribution pricing review, which will effectively result in regulated interconnectors bearing TUOS costs.

Further, TransGrid believes that this conclusion is based on a fallacy. The manner in which a regulated interconnector recovers its costs means that exposing it to these costs will not effect the return to its owner from its investment in the interconnector (since regulators will presumably allow these costs, if imposed on the relevant Network Service Provider, to be passed through to the Network Service Provider's customers). The Network Service Provider is effectively indifferent as to whether or not it bears these costs. As such, unless the recovery of these costs through a Network Service Provider is seen to be a more appropriate means of allocating the costs, there is no reason to allocate these costs to a Network Service Provider.

However, as a Market Network Service Providers revenue is not subject to regulation, requiring it to bear these costs does expose it to the costs of its activities and require it to internalise these costs in the same way as other users of the relevant network. As such, no question of comparative disadvantage arises. Rather, the Market Network Service Provider is bearing the costs that results from its activities.

TransGrid notes that in NECA's July version of the Code changes, Market Network Service Providers were to be allocated TUOS charges in accordance with their behaviour as Generators or loads. In NECA's August version of code changes, however, they have completely eliminated all charges for Market Network Service Providers except for "negotiated use of system" charges in accordance with proposed clause 5.5A(g)(2) of the Code. (ie. the charge associated with any extensions or augmentations required to the network to provide connection to the MNSP).

Eliminating virtually all the TUOS charges for Market Network Service Providers will lead to serious inequities in how Customers are treated. Consider, for example, the Directlink proposal. This proposal is for a market network service from NSW to QLD with the NSW connection point being in the NorthPower distribution network (ie. it is an embedded interconnector).

The TUOS charges levied on North Power by TransGrid will be influenced by the power flows on Directlink. If Directlink exports power from NSW to QLD, then the TUOS charges to NorthPower will be increased to reflect the increase use of the TransGrid transmission system. NorthPower, however, will not be able to pass the full increase in charges onto the Market Network Service Provider which operates Directlink. Instead, the majority of the increase in charges will have to be passed on to NorthPower's regular customer base. TransGrid submits that not only is this an inequitable outcome for the other users of NorthPower's network but it would appear to involve a subsidy from the users of NorthPower's network to the proponents of Directlink. This would seem to be a very unfair situation. One questions why MNSPs are to be treated differently from other Customers.

3.7 Compliance with Code Objectives

TransGrid submits that the Proposed Changes are in breach of the market objectives in clause 1.3 of the Code by imposing a requirement that the two-terminal link through which the network service is provided not form part of a network loop or must be independently controllable.

Clause 1.3 of the Code provides:

"The objectives of the national electricity market (called "market objectives") are as follows:

- (1) the market should be competitive;
- (2) customers should be able to choose which supplier (including generators and retailers) they will trade with;

- (3) any person wishing to do so should be able to gain access to the interconnected transmission and distribution network;
- (4) a person wishing to enter the market should not be treated more favourably or less favourably than if that person were already participating in the market;
- (5) a particular energy source or technology should not be treated more favourably or less favourably than another energy source or technology; and
- (6) the provisions regulating trading of electricity in the market should not treat intrastate trading more favourably or less favourably than interstate trading of electricity."

TransGrid submits that the requirement for the link to be independently controllable has the effect that only particular technologies, such as direct current technology, may be used to provide market network services and as a result is in breach of the market objectives in clause 1.3 of the Code. In particular, by requiring that only particular technologies be used, the Proposed Changes breach the objective in clause 1.3(b)(5) that a particular energy source for technology should not be treated more favourably or less favourably than another energy source or technology source.

This is because by requiring that the market network service be independently controllable, the proposed amendments have the effect of precluding normal alternating current technology.

3.8 NECA Process

As the ACCC is aware, TransGrid raised a number of substantial concerns with NECA regarding the process NECA followed to consider the amendments to the Code to allow for market network services. In particular, TransGrid raised with NECA concerns that:

- (a) clause 8.3.5(b) of the Code requires that, if NECA refers a proposed Code change to the Code Change Panel, the Code Change Panel must consider the proposed change and give notice to NECA (and to the Code Participant which proposed the change) within 10 days as to whether or not, in the Code Change Panel's opinion, further consideration of the proposed Code change is warranted. It appears that this process was not followed;
- (b) clause 8.3.5(d)(1) of the Code requires that, if the Code Change Panel considers that further consideration of a Code change is warranted, the Code Change Panel must give notice to all Code Participants and interested parties of the proposed change. As far as TransGrid is aware, no such notice was given to Code Participants in accordance with clause 1.8, but rather an "announcement" was placed on NECA's web site;

- (c) as mentioned above, clause 8.3.5(d)(1) requires the Code Change Panel to give notice of the proposed change to all Code Participants and interested parties and that notice must invite those Code Participants and interested parties to make submissions on the proposed change. However, clause 8.3.5(d)(2) requires that to be valid any submissions on a proposed Code change must be received within 30 days of the notice given under clause 8.3.5(d)(1). Clause 8.3.5(d)(3) appears to restrict the Code Change Panel to only consider "valid" submissions, that is, those received within the 30 day period. However, the Code Change Panel allowed a period of longer than 30 days for submissions to be made; and
- (d) as far as TransGrid is aware, NECA referred the proposed market network service changes to the Code Change Panel. However, TransGrid understands that Mr Gary McGuire, a director of NECA acted as a member of the Code Change Panel notwithstanding that he is also a director of NECA. This would appear to represent a breach of clause 8.3.2(d) of the Code which requires that any member of the Code Change Panel who is a member or "representative" (as defined in the Code) of an entity from which a matter is referred to the Code Change Panel must not act as a member of the Code Change Panel in respect of that matter.

In these circumstances, TransGrid questions how NECA was in a position to give the statement required by section 8.3.7(a)(4) of the Code that the procedures set out in clause 8.3 of the Code have been followed in relation to the proposed Code change. Further, TransGrid questions whether the ACCC is in fact entitled to consider the proposed changes given that the preconditions laid down in the Code have not been followed.

3.9 Effect on Access Code

TransGrid is extremely concerned that the Proposed Changes will significantly reduce the effectiveness of the Code as an industry access code under section 44ZZAA of the TPA. This is because the new clause 5.2.3(i) which is included in the Proposed Changes effectively provides that, until NECA develops Code provisions to address the financial risk to Market Network Service Providers from being required to augment assets used to provide a market network service to support a regulated augmentation to the power system, then a Market Network Service Provider is not required to grant access its network under Chapter 5 of the Code.

TransGrid submits that not only is this provision inconsistent with the Code being an industry access code under section 44ZZAA of the TPA, but that it further increases the ability of Market Network Service Providers to take advantage of any market power they may possess from their ownership of their relevant assets.

TransGrid accepts that there would appear to be significant issues to be addressed to determine how a Market Network Service Provider should be required to grant access to assets used to provide a market network service. However, these issues have yet to be addressed in the development of the Proposed Changes. In

TransGrid's view, the failure to address these issues substantially advantages providers of market network services.

TransGrid does not believe that this issue is appropriately addressed by providing in clause 5.2.3(h) for the Code to be amended in the future to address some of the relevant issues as this not only puts off the consideration of the issues but also leaves the market exposed to the use of market power by Market Network Service Providers until the issue is addressed.

4.0 Code Change Analysis

This section of the report provides a detailed analysis of the code changes submitted by NECA.

Clause 2.5.2(a)(2)

Clause 2.5.2 requires that before a Network Service Provider can classify a network service as a market network service, the Network Service Provider must be registered under clause 2.5.1 in respect of the "network elements" which provide the relevant "network service". However, under clause 2.5.1 only those who own, operate or control a distribution or transmission "system" can register as a Code Participant. A "network element" may not constitute a distribution or transmission system.

Clause 2.5.2(a)(3)

This clause effectively prohibits assets used to provide a prescribed service or a prescribed distribution service from being a market network service. Leaving aside the drafting issues discussed below, there appears to be no policy reason why a regulated service should be prohibited from becoming a market network service. Given that the rationale for regulation of providers of transmission services or distribution services is to avoid exposure to monopoly pricing, as the Proposed Changes do not impose any limitation on the capacity which can be controlled by a market network service there would appear to be no reason for prohibiting providers of prescribed services or prescribed distribution services from electing to become providers of market network services.

In terms the manner in which clause 2.5.2(a)(3) is drafted, it is unlikely that a market network service will have been a prescribed service or a prescribed distribution service as opposed to being an element used to provide such a service since, to be a prescribed service, the elements used to provide the market network service would need to constitute the entirety of the relevant providers network. Further, the requirement that a network service be analysable to become a market network service for it to be able to become a market network service is contrary to the provisions of Chapter 5 of the Code allowing the providers of certain types of network services to elect whether or not such services are to be provided on a regulated basis.

Clause 2.5.2(a)(5)

By requiring that the two-terminal link through which the network service is provided not form part of a network loop or must be independently controllable, this clause means that in most cases only direct current technology may be used to provide market network services. As discussed above, such a requirement is in breach of the market objectives in clause 1.3 of the Code and, in particular, the objective in

clause 1.3(b)(5) that a particular energy source for technology should not be treated more favourably or less favourably than another energy source or technology source.

Clause 2.5.2(c)

This clause appears to provide that a market network service can be reclassified as a prescribed service or a prescribed distribution service. However, the clause provides that this occurs when the market network service "ceases to be classified" as such without detailing how this may occur. For example, can a Market Network Service Provider elect for a market network service to become a prescribed service or prescribed distribution service?

Further, it is not clear that, in exercising the discretion granted to it under clause 2.5.3(c) to allow a market network service to become a prescribed service or prescribed distribution service, the Regulator or Jurisdictional Regulator must apply the same test as it would apply to determine whether the relevant network element could be constructed on a regulated basis. This would appear to allow Network Service Providers to "game" the regulatory process by constructing a "market network service" and then seeking to have it reclassified as a regulated asset. This incentive may be increased by the consideration that in many circumstances the building of one network element will preclude the construction of other elements (due to, for example, network constraints).

In addition, the clause provides that if the Relevant Regulator exercises its discretion to allow the relevant network service to become a prescribed service or prescribed distribution service the relevant revenue cap or price cap "may be adjusted" to include the relevant network elements. A number of comments can be made about this.

First, neither clause 6.2.4(d) which relates to the reopening of revenue caps for transmission services nor clause 6.10.5(e) which relates to the setting of revenue caps or price caps for distribution services allow for a revenue cap to be reopened in these circumstances. As such it is unclear how the adjustment provided for under clause 2.5.3(c) is to be made.

Further, as the allowed return (as well as an allowance for depreciation and operation and maintenance costs) are included in the relevant cap or price cap, rather than the value of the asset itself, the reference to the revenue cap or price cap "including" the relevant network element is not correct. Rather, clause 2.5.2(c) should provide for the revenue cap or price cap to be adjusted to reflect to an appropriate extent the relevant network elements as well as the cost associated with their operation and maintenance and the depreciation of such assets.

Clause 2.5.2(e)

Given that clause 8.4.1 of the Code provides NECA with a general power to derogate from any one or more provisions of the Code which would otherwise apply to a Code Participant, clause 2.5.2(e) which provides that "for the avoidance of doubt" a Code

Participant may apply to NECA for a derogation from the condition specified in clause 2.5.2(a) is unnecessary. Further, by including a provision which could be taken to suggest that there may be doubt as to whether NECA has the power to derogate from the conditions specified in clause 2.5.2(a), clause 2.5.2(e) may lead to uncertainty as to whether NECA in fact has the power to derogate from other provisions of the Code.

Clause 2.5.3

Clause 2.5.3 provides that all market network services must be classified as scheduled networks services. As such, all Market Network Services Providers will become Scheduled Network Service Providers.

However, the Proposed Changes use the terms interchangeably. Given that the two sets of terms appear to refer to exactly the same thing, TransGrid submits that distinguishing them in this way only serves to introduce further confusion and uncertainty into the Code. TransGrid suggests that the Proposed Changes be amended to solely refer to one or the other of terms.

Clause 3.6.4

The Proposed Changes amend clause 3.6.4(a) to provide that a regulated interconnector is constrained when it is not acceptable for the "regulated interconnector" to transfer the level of electricity between regions that would be transferred if the limitation was removed and the condition impacts on the dispatch of "other regulated interconnectors, generation, scheduled network services or loads". However, clause 3.8.1 which sets out how the central dispatch process is intended to operate does not refer to regulated interconnectors being dispatched.

As such, either clause 3.8.1 needs to be amended or clause 3.6.4 needs to be amended to remove the reference to a constraint impacting on the dispatch of regulated interconnectors.

It is also proposed to amend clause 3.6.4 by the addition of a new clause 3.6.4(a1) providing that conveyance of electricity between regions by means of a scheduled network service is constrained when the dispatch of the relevant scheduled network service is limited by the "notified available capacity for ramp rate" of the scheduled network service. It is unclear why this issue needs to be specifically addressed as any constraint caused by such limitations would appear to be the same as a limitation caused by generation or demand side bids or offers.

Further, such a constraint would appear to be addressed by clause 3.8.1(a)(1) which refers to dispatch offer and dispatch bid quantity constraints or clause 3.8.1(b)(2) which refers to constraints due to availability and commitment. In these circumstances, the inclusion of clause 3.6.4(a1) appears to introduce further confusion into the Code. It is also unclear why this issue needs to be specifically addressed as the other clauses which deal with network constraint (such as clause

3.6.5 which relates to the settlement residue) specifically exclude market network services.

Clause 3.8.1(b)

This clause is to be amended to provide how market network services are to be accommodated in the central dispatch process. It is intended that the clause now read that the dispatch process should aim to:

"Maximise the value of dispatched loads based on dispatch bid less the combined cost of dispatched generation, dispatched offers, dispatched network services based on network dispatch offers, and dispatch ancillary services based on the cost of contracts for ancillary services entered into under clause 3.11."

As such, the clause proposes that "dispatched network services" should be reflected in the central dispatch algorithm on the basis of the network dispatch offer. However, this will lead to a significant under statement of the cost of the market network service as:

- (a) it is not clear how the cost associated with load dispatched from the exporting region through a dispatch network service is to be accommodated in the algorithm; and
- (b) in the importing region, it appears that the dispatched network service is to be accommodated in the central dispatch algorithm on the basis of the network dispatch offer (ie. the difference in the dispatch price between the two regions) that the Market Network Service Provider expects to receive for providing the relevant capacity. It is not apparent that this would include the cost of the energy in the exporting region.

Clause 3.8.3(b)

Clause 3.8.3(b)(1) requires that aggregated generating units or loads must be operated by a "single" Market Participant. However, clause 3.8.3(b)(1a) provides that aggregated scheduled network services must be operated by the "same" Market Participant. It is unclear why a different criteria has been applied between the two groups of Market Participant.

Clauses 3.8.6a(f) and (g)

These clauses set out the basis on which network price offers are to be interpreted in the central dispatch process. The language used is different from the similar provisions relating to generation dispatch offers and bids from schedule loads.

For example, whereas clause 3.8.6(j) provides that a loading price in a generation dispatch offer is to be interpreted as "the minimum price at which up the specified

MW increment is to be loaded in the central dispatch process", clause 3.8.6(f) provides that a network dispatch offer is to be interpreted in the central dispatch process as meaning that the:

"Schedule Network Service Provider is willing to deliver an increment of power to connection point B, within the power delivery range of the power band provided that the net revenue which is expected to be derived from that increment per MW/h delivered to connection point B is not less than the specified price".

TransGrid submits that, given that the concepts behind generation offers and market network service offers offer are the same, they should be treated the same way in the Code. Further, we believe the language used in the proposed clause 3.8.6(f) to be complex and confusing. In addition, it uses terms such as "power delivery range" and "power band" which are not defined and also appears to confuse capacity with energy in referring to delivering an increment of "power" but referring to the net revenue for that capacity in terms of a measure of energy (ie. MW/h).

Clause 3.9.1(a)

This clause sets out the principles applying to the determination of the spot price. Sub-clause (3) provides that:

"dispatch prices determine dispatch such that a generating unit or load whose dispatch bid or dispatch offer at a location is below the dispatch price at that location will normally be dispatched".

Sub-paragraph (4) sets out the basis on which network losses and network constraints affect dispatch and states that these matters are taken into account in the determination of dispatch and consequently have an affect on dispatch prices. However, the Proposed Changes propose to include a reference to scheduled network services and network dispatch offers in sub-paragraph (4) rather than sub-paragraph (3). As such, this appears to mean that rather than stating that if a network dispatch offer is (after being added to the spot price in the exporting region) below the spot price in the relevant region it will normally be dispatched, the clause merely provides that such offers must be "taken into account" in the determination of dispatch.

TransGrid believes that, it is unclear from this formulation that network dispatch offers are to be treated in the central dispatch process in the same way as generation dispatch offers and dispatch bids. For this reason, we believe that rather than sub-clause (4) being amended in the manner proposed, sub-paragraph (3) should be amended to provide that where the sum of a network dispatch offer and the spot price in the exporting region (adjusted for losses between the connection point of the market network service and the relevant region reference node) is below the spot price at the relevant location, then the market network service will normally be dispatched.

Clause 3.10

Clause 3.10 has been deleted. It is not clear why this clause has been deleted since, as discussed above, the Proposed Changes only allow for non-regulated inter-connectors which are based on DC technology to proceed. The effect of the Code changes is that not only can non DC solutions not participate in the market under the rules as currently drafted but the mechanism to determine what the rules should be for the participation in the market of solutions based on other technology has been removed.

Schedule 3.1

It is proposed to amend Schedule 3.1 to require Scheduled Network Services Providers to provide certain information to NEMMCO regarding their network assets. Amongst the information which they are to provide is information as to:

"Loss vs flow as piece wise linear relationships for each direction which, taken together, are convex over the entire range of power transfer capabilities in both directions."

It is not clear what this is intended to obliged Scheduled Network Service Providers to provide.

Clause 4.8.13

Clause 4.8.13 imposes obligations on Generators and Market Network Service Providers to carry out testing of Black Start-Up Facilities to demonstrate they can provide the service in accordance with the agreement. However, in the case of generators, the tests may also be used to demonstrate whether or not the Black Start-Up Facilities meet the approved Local Black System Procedures. While Market Network Service Providers must also prepare Local Black System Procedures it appears that, in contrast to Generators, NEMMCO may not require Market Network Service Providers to test their Black Start-Up Facilities to demonstrate their complying with the Local Black System Procedures. Given that such testing may involve expense, it appears inequitable for Market Network Service Providers to be advantaged in this way in comparison to Generators.

Clause 5.4A(a)

Clause 5.4A(a) prohibits a Scheduled Network Service Provider from energising a connection point without NEMMCO's prior approval. However, it would appear from the definition of connection point that a connection point includes equipment forming part of the power system which would be energised prior to the Market Network Service Provider commencing to inject or draw electricity off from the power system. As such, it is not clear what actions clause 5.4A(a) would prohibit the Market Service Provider from taking. TransGrid suggests that the clause should be amended to

prohibit Market Network Service Providers from commencing to inject or draw off electricity from a connection point without NEMMCO's prior approval.

Clause 5.2.3 (e1)

The Market Network Service Provider should have to arrange for the operation of its network to maintain the connection point within limits for fault levels specified in the connection agreement. This clause excludes the Market Network Service Provider which should not be the case.

A Market Network Service Provider should also be required to arrange for the management, maintenance and operation of its network using good electricity industry practice. Failure to do so may result in power system disturbances, and the Code should ensure that the number and extent of disturbances are minimised.

Clauses 5.2.3(h) and (i)

These clauses of the Proposed Changes address how a Market Network Service Provider can be required to augment its network as a result of the inter-regional planning process set out in clause 5.6.5 of the Code. The clauses provide that NECA must develop Code provisions to address the financial risk to a Market Network Service Provider within 2 years of market commencement to address the financial risk which arises when a part of a Market Network Service Provider is augmented. However, clause 5.2.3(i) provides that until the Code is amended to include such provisions, the Code is not to be read as requiring a Market Network Service Provider to permit connection or to augment any part of its network which are solely used for the provision of Market Network Services.

The effect of this provision is that, until the Code is amended to include these provisions, while a Market Network Service Provider will give an access undertaking in the form set out in Schedule 5.7 of the Code, this access undertaking will be of no effect whatsoever as the Market Network Service Provider will not be required to grant access to its network. Further, it is unclear why the obligation to grant access has been linked to the development of provisions to address the effect of a requirement to augment under clause 5.6.5 of the Code, given that parties could seek access for reasons other than the augmentation decision under clause 5.6.5.

In addition, clause 5.6.5 of the Code does not appear to actually impose an obligation on a Network Service Provider to augment its network as a result of the process in clause 5.6.5. Clause 5.6.5(n) provides that if NEMMCO determines that an augmentation is justified and a relevant Network Service Provider declines to arrange for the augmentation to be undertaken, NEMMCO must mediate and liaise with the relevant Jurisdictional Regulator to resolve the dispute. As NEMMCO can only seek to mediate the dispute, it would appear that it has no power to oblige a Network Service Provider to actually undertake the work.

TransGrid also notes that the proposed clause 5.2.3(h) appears to be based on similar concepts to the clause which currently appears as clause 5.6.5(j). However, under clauses 5.2.3(h) and (i), while the Code obliged NEMMCO to develop the relevant provisions, the proponent of a non-regulator indicator remain obliged to grant access to its inter-connector even before such provisions were developed.

Clause 5.5A

Clause 5.5A sets out access arrangements for Market Network Service Providers. Broadly this is based on the Generator access provisions of clause 5.5. However, there are areas where it is not appropriate to apply such arrangements to Market Network Service Providers and there are certain additional matters which have been added to the provisions which are also inappropriate.

In particular, it is proposed that in terms of the basis on which Market Network Service Providers will pay transmission use of system charges Market Network Service Providers will be charged use of system charges as if they were Generators at both ends of the relevant Market Network Service. While it may be appropriate for a Market Network Service Provider to be charged for use of system charges on the basis that they are a Generator in the region into which they inject electricity or in periods when they inject electricity into a region, there would appear to be little to distinguish them conceptually from a Customer in the region from which they are exporting. In that region, they are consuming electricity in the same way as any other Customer and as such should be treated in the same way.

Clause 5.5A(g)(2)(a) provides for the Market Network Service Provider and the relevant Network Service Provider to negotiate use of systems managers to be paid:

"To the Market Network Service Provider in respect of any reduction in the long run marginal cost of augmenting the network as a result of it being connected to the network."

This clause suffers from a number of difficulties. Firstly, the clause appears based on a presumption that the need to augment a network may be avoided by the connection of a Market Network Service Provider and that the Market Network Service Provider should be remunerated to reflect the benefit that they bring in terms of deferring augmentation expenditure. However, given that capacity which is part of a Market Network Service is under the control of the Market Network Service Provider and can be withdrawn at any time, a Network Service Provider could only rely on that capacity for network planning purposes if that capacity were the subject of a network support arrangement entered into under clause 5.6 of the Code. As such, the proposed clause 5.5A(g)(2)(a) is unnecessary.

Further, the manner in which the clause is drafted does not make it clear what amount is proposed to be passed through to the Market Network Service Provider as the clause refers to the reduction in the long run marginal cost of augmenting the network. However, while the Market Network Service Provider may defer or avoid the need for a particular augmentation to occur, the augmentation to be carried out will still involve the same costs. As such, the long run marginal cost of the relevant

augmentation will remain unchanged whether or not the Market Network Service Provider is connected to the network or not.

Further, the proposed pass through arrangements for Market Network Service Providers are inconsistent with those of Generators that don't receive such benefits when connected to the transmission system. It is assumed that the drafters of this clause intended this provision to be for the case where the Market Network Service Provider is embedded in the distribution system. In which case, it is assumed that they were trying to provide for similar provisions to those allowed for embedded generators. The current drafting, however, does not achieve this outcome.

It should also be noted that the proposed clause 5.5A(g)(2)(a) gives the Market Network Service Provider an entitlement to regulated revenue. If MNSPs receive regulated revenue then they should be subject to the same reporting requirements and information disclosure provisions that apply to other regulated entities. They should also be required to publish service standards in the same manner as other regulated entities.

Clause 5.5A(i) refers to payments made to Market Network Service Provider under clause 5.5A(g)(3). However, it appears that this clause reference is incorrect and that the Code should refer to clause 5.5A(g)(2)(A). Further, the reference in the proposed clause 5.5A(i) to payments to Embedded Generators under clause 6.13.3(d) introduces some uncertainty as to how Transmission Network Service Providers are to recover the relevant payments as they do not make to Embedded Generators. This problem could be resolved by deleting the words:

"and are to be recovered in the same manner as payments to Embedded Generators under clause 6.13.3(d)".

5.0 Recommendations

TransGrid does not consider that the code changes relating to the market network services, in their current form, are suitable for authorisation by the ACCC or acceptance by the ACCC as an industry access code.

TransGrid believes that the proposed Code changes will not provide a stable environment for the national electricity market to develop until several critical issues are addressed. In TransGrid's view, the significant policy issues involved suggest that these issues should be addressed through a process developed and coordinated by the Participating Jurisdictions.

Appendix 1 - Unregulated Interconnector Example

This appendix examines the impacts of a regulated and unregulated interconnector in a simple market environment. The market model that will be used for this analysis is shown in Figure A1. The model consists of two regions connected by a single interconnector with each region being a competitive market in its own right.

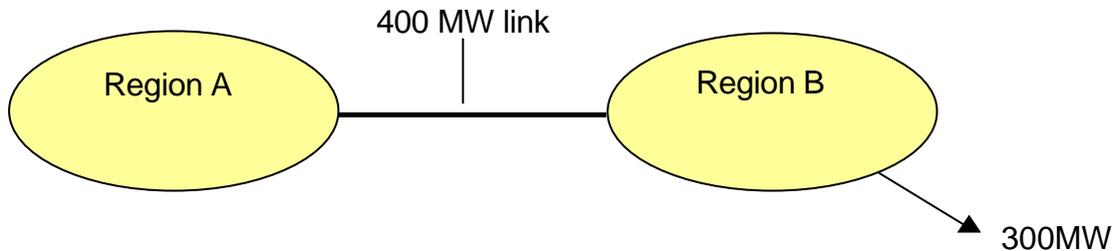


Figure A1. Simple market model

It is assumed that the bid to supply an additional 300MW of load from region A is \$20/MWh, while the bid to supply an additional increment of 300 MW from region B is \$30/MWh. The interconnector is assumed to be lossless and has a capacity of 400 MW. The analysis that follows looks at the impacts on pool prices in region B to supply a load increment of 300 MW connected to region B when the interconnector operates in a regulated and unregulated manner.

The first scenario to be examined is the case where the interconnector is regulated. Under this model, the full capacity of the link is available and a price difference will only occur across the link when there is an actual constraint. The link owner has no rights to any congestion rentals that develop across the link and has no incentive to restrict capacity to generate constraints and congestion rentals. The pool prices for this scenario are shown in Table A1.

Bid Data	
Load at B	300 MW
Gen Bid at A	20 \$/MWh
Gen Bid at B	30 \$/MWh
Results	
Pool Price at B	20 \$/MWh
Pool A generation	300 MW
Pool B generation	0 MW
Link flow	300 MW
Link price difference	0 \$/MWh

Table A1. Pool prices for the regulated interconnector

The bid from Region A to supply the 300MW load increment is cheaper than that of region B and results in the 300 MW load being supplied by Region A, via the

interconnector, and sets the pool price in region B to \$20/MWh. The price difference developed across the link is \$0/MWh as the interconnector is not constrained. All customers in region B benefit from full open competition between the generators in each region.

The second scenario to be examined is where the interconnector is unregulated. Key features of this model are:

- The link owner can bid in capacity bandwidths and price differentials to the market
- The link is treated as a scheduled generator/load pair
- The revenue for the link owner comes from the congestion rentals developed across the link
- The link owner is not entitled to any regulated revenue

The pool prices for this scenario are shown in Table A2. The interconnector owner bids the link to the market at \$9/MWh, just below the difference between the bids of the generators in each region. The 300 MW load is still supplied by region A, except that the pool price in region B is now \$29/MWh instead of the \$20/MWh that occurred for the regulated case.

Bid Data	
Load at B	300 MW
Gen Bid at A	20 \$/MWh
Gen Bid at B	30 \$/MWh
Link Bid	9 \$/MWh (cf 0 \$/MWh for the regulated link)
Results	
Pool Price at B	29 \$/MWh (cf 20 \$/MWh for the regulated link)
Pool A generation	300 MW
Pool B generation	0 MW
Link flow	300 MW
Link price difference	9 \$/MWh (cf 0 \$/MWh for regulated link)

Table A2. Pool prices for the unregulated interconnector

The ability to create a price difference across the link, even when there is no physical constraint, results in a shift of benefits away from the consumers in Region B to the link owner. The end consumers no longer see the benefits of full open competition between generation in adjacent regions.

The unregulated interconnector model provides competition between generation and transmission. This competition, however, comes at the expense of competition between generators in adjacent regions. Allowing network owners to impose artificial constraints and generate congestion rentals also goes against the principle of open access transmission networks.