

# **Transmission and Distribution Network Pricing Review Issues: Submission to ACCC**

**FINAL REPORT**

*prepared for*

**National Generator Forum**

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*by*

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## 1. INTRODUCTION

The National Generator Forum (NGF) appreciates the opportunity to make this submission to the Australian Competition and Consumer Commission (ACCC) in relation to the finalisation of NECA's Transmission and Distribution Network Pricing Review. Earlier NGF submissions to NECA during the course of this review and the NGF's prior submission to the ACCC are referenced for further details.

The NGF would like to stress that it fully supports network pricing arrangements that ensure efficient signals for the use of and investment in the network. The NGF's position in its prior submissions consistently supports this position. In addition, the NGF has consistently emphasised the need for more market-based solutions, including financial instruments and tradable property rights, to address problematic issues such as new network investment, service standards, and firm access arrangements. The use of more market-based instruments to address these issues would be compatible with possible future directions in improved network pricing arrangements.

The NGF has structured this submission in a question/answer format that is consistent with the questions that the ACCC poses to participants in section 4 of its issues paper, *Applications for Authorisation, Application to Vary an Access Code: National Electricity Code Network Pricing Code Changes*. The NGF has purposely kept its responses concise and included relevant references to its previous submissions. The NGF requests that the Commission considers these previous submissions to enable it to explore fully the arguments relevant to critical issues.

Section 2 responds to questions raised in relation to transmission network pricing. Section 3 addresses the price negotiation framework and unbundling transmission and distribution charges. Section 4 reviews service standards for network service providers, and section 5 responds to questions relating to embedded generation.

## 2. TRANSMISSION NETWORK PRICING

### 2.1. EXISTING ARRANGEMENTS

*Are the proposed Code changes sufficient to encourage networks to negotiate and provide generator access services?*

The NGF believes that the proposed Code changes are *not* sufficient at present to encourage networks to negotiate and provide generator access services. The proposed changes require good faith negotiations and list criteria for such negotiations; however, it is not at all clear how it is determined whether or not a network service provider (NSP), in fact, has negotiated in good faith.

In general, an eventual transition to firm access rights would greatly help solve these problems by implementing market drivers that are more in alignment with economic efficiency. With such arrangements, the NSP would have the option to provide a level of service to ensure firm access or to pay the participant the appropriate compensation. Obviously, the NSP will select the cheaper option, and this outcome is consistent with market-based incentives.

*Is there sufficient clarity to distinguish between the unregulated generator access services and the regulated generator negotiated use of system service (and any associated assets and revenues)?*

While NGF members have had little or no success in negotiating generator access compensation to date, this code change is supported. Removal of generator access compensation from the annual revenue requirement for networks is a positive step as it now provides the incentive for networks to negotiate agreements that will result in additional revenue outside the regulated revenue cap.

## **2.2. WHO SHOULD PAY TRANSMISSION USE OF SYSTEM CHARGES**

### **2.2.1. Existing Network**

*Do interested parties believe that recovering the costs of the existing network from network customers minimises the distortions from recovering sunk costs?*

Yes. The current arrangements represent the economically efficient approach that, by definition, minimises the distortions from the recovery of the residual sunk costs of the network. Although the allocation of sunk costs is arbitrary, there are ways to allocate these costs that minimise efficiency distortions in other aspects of the market.

The code currently requires that the residual sunk costs be recovered directly from customers via the regulated natural monopoly wires businesses. This provision enables the recovery of these costs in a manner that least distorts decisions with respect to network use. It therefore greatly reduces the potential for distortions in generation dispatch, investment/retirement decisions, and locational decisions that arise if these costs are recovered indirectly from customers via transmission charges on generators.

The imposition of charges for sunk cost recovery on generators is *not* theoretically sound and in addition, there is no credible case that such an arrangement will create a demonstrable net benefit for the market as a whole. The most likely outcome is that final customers pay for these costs anyway, and such arrangements introduce distortions into other parts of the market. Depending on how the cost recovery is implemented, these distortions may include:

- early retirement or mothballing of peak generators;
- deferral of market entry by potential new entrants;
- disincentives for investment by high capacity, energy-intensive customers;

- uneconomic (early) market exit by high capacity, energy-intensive customers; and
- uneconomic location of generation at load centres in order to avoid TUOS charges.

*Would the recovery of a proportion of the sunk costs from generators be less distortionary than the framework proposed in the NECA review?*

No, the recovery of a proportion of the sunk costs from generators would not be less distortionary than the proposed framework. The economic rationale for imposing charges for sunk cost recovery on the customer end of the market is that retailers, distributors, and regulators possess the ability to minimise any distortions. They can readily apply fixed charges, variable charges, or some combination, such as a non-linear tariff. These instruments give the distributor/retailer the flexibility to construct the charge such that there is no incentive or easy way to avoid it. This solution promotes an economically efficient outcome.

The main counter-argument is that the imposition of a \$/MW charge on generators is preferable from an economic efficiency perspective to recovering costs directly from customers. This argument is rejected as unsound because generators do not have the ability to use fixed charges and non-linear tariffs, and as a result, they have no choice but to variabilise these charges. Consequently, this variabilisation implies that customers pay for sunk cost recovery anyway, *and* it creates economic distortions in other aspects of the market. These distortions may be exacerbated where there are several intermediate parties in the contracting chain between generator and end-user.

*Could the framework for recovering sunk network costs from customers also be applied to generators? That is, allocate a proportion of existing network costs to generators and allow individual, price sensitive generators to negotiate discounts.*

No, the framework for recovering network sunk costs from customers cannot be applied to generators without serious consequences for economic efficiency. If TUOS charges are imposed equally on generators, then the competitive process will result in those costs being reflected in energy charges (*i.e.* on a per MWh basis), and TUOS charges would be “rolled-in” the spot market price. End-use customers would make decisions based on this higher spot price and such decisions are not efficient because they occur simply to avoid a mechanism for recovering costs that have already been incurred. Further, such an approach is totally inconsistent with efforts elsewhere in the transmission pricing review to unbundle the element of electricity pricing to the end consumer in order to avoid uneconomic decisions.

In addition, there is no guarantee that price sensitive generators will be able to negotiate appropriate discounts. What test would the NSP apply? Will it wait until the generator files for bankruptcy or starts to decommission a particular generating station?

For additional detail on the NGF's position relating to sunk cost recovery issues, please see *Transmission and Distribution Pricing Review: Public Comment*, pp. 9-12 and *Transmission and Distribution Network Pricing Review: Issues, Analysis and Options*, 26 March, 1998, Section 5.8.3., pp. 33-34.

### 2.2.2. New Investment

*Do interested parties believe that NECA's proposals introduce more "market like" disciplines into network's investment planning processes?*

The NGF agrees that NECA's proposals, in general, introduce more market-like disciplines into the network planning processes. The NGF, however, believes that the advancement of such market-like disciplines depends critically on greater alignment of and consistency between the ACCC role and the code investment process.

A continuing and major concern is that efficiency drivers for commercial investment will be compromised by the adoption of a process in which either i) new transmission investment can be included in the revenue requirement without first being subjected to the code investment process; or ii) new transmission investment that is subjected to the code investment process does not necessarily receive any applicable revenue requirement through the ACCC process.

There is a fundamental problem with the proposed investment process if NSPs can allocate the costs of new investment to alleged beneficiaries arbitrarily, as under the new small investment regime. Specifically, a NSP that makes a commitment to a project is highly unlikely to reconsider the investment if involved participants argue that the beneficiaries or their benefits have been incorrectly identified. This problem can be addressed to some degree by ensuring that:

- the investment process occurs in a commercial setting, including a framework for investor scrutiny and potential participant challenge;
- the investment approval and funding processes are fully aligned with each other as discussed above; and that
- consumers are represented in the investment process.

In addition, the NGF believes that the introduction of more "market like" discipline into the network investment planning process is best achieved through the use of firm financial arrangements.

The NGF addresses several concerns with NECA's investment planning process in *Review of ACCC Draft Principles for the Regulation of Transmission Revenues: Final Report*. The NGF's concerns with specific, proposed code changes relating to new network investment are discussed in section 2.4 of this submission.

*Are NECA's proposals likely to be consistent with the future directions of network pricing in the NEM (such as nodal pricing and transmission congestion contracts which are the subject of a new review by NECA)?*

NECA's current proposals are likely to be reasonably consistent with the future directions of network pricing in the NEM. The current proposals, in general, represent a step toward improved arrangements for such market-based initiatives.

*Are NECA's proposals sufficient to get market participants to reveal the extent of the benefits they will receive from a new network investment?*

Yes. There is no *a priori* reason to expect that potential beneficiaries will not reveal their true benefits, provided that the new investment process is open and transparent to all affected parties, including well-defined guidelines for negotiation. Provided an appropriate body can be found to represent consumer interests, the normal processes of market negotiation and adjustment will possess the capability to deliver the desired outcome. These processes, however, could be severely compromised by the prospect of a regulated solution being imposed that creates a significantly different allocation of costs and benefits than would occur under a fully open and transparent negotiation process.

*Alternatively, are the proposed new network investment arrangements likely to illicit behaviour where market participants will act in a strategic manner by denying they receive benefits from a new investment in the anticipation that the investment will go ahead and be paid for by other network users?*

Parties have voiced particular concern that both generators and consumers (or their representative) may be inclined to "free-riding" on new investment; *i.e.* understating their expected benefits in order to avoid contributing to a "fair share" of the costs. The NGF understands this concern but believes that the possibility of such "free-riding" is highly unlikely for several important reasons.

It is expected that most participants will view the benefits accruing to them in a conservative manner. They may tend to underestimate such benefits to ensure that the proposed investment is sound. However, the summation of these benefits is expected to greatly exceed the costs, even if based upon a conservative approach. If the benefits do not clearly exceed the associated costs, then doubt should, quite justifiably, exist regarding the fundamental soundness of the proposed project.

In addition, the NGF notes that such free-rider observations might also be made about many other markets, but are not claimed to prove a convincing case that market failure will be so severe that intervention is necessary. The consequences of free-riding are the risk that the benefits will not accrue at all because the investment does not go ahead. Greater danger of free-riding is created by the underlying regulated investment approach. This concern is particularly acute for customers, who stand to have an asset built by well-intentioned but non-commercial NSPs. The best cure for free-riding is the potential for absolute failure of the investment proceeding.

The NGF also notes that this problem is largely addressed if investors have certainty that the benefits from their investment will, in fact, accrue to them and not to some other party. The NGF supports the use of firm financial rights to help ensure that investors receive the benefits associated with their investment.

*Will regulatory responsibilities be fragmented if the code's dispute resolution procedures are used to arbitrate disputes between networks and connected users? If so, do interested parties believe the ACCC's regulatory powers should be extended to allow it to arbitrate such disputes?*

No, regulatory responsibilities will not be fragmented if the code's dispute resolution procedures are used to arbitrate disputes between networks and connected users. The ACCC's regulatory powers should not be extended to allow it to arbitrate such disputes. Such disputes should be addressed and resolved within the industry itself through an open and transparent process.

It is critical that the ACCC serves as the ultimate umpire for the network investment issue. Greater involvement of the ACCC in details of the process, however, would risk a loss of focus on the overall economic, trade practices and access regime issues.

The concern regarding disputes here suggests that the underlying mechanism is not sufficiently robust, and as currently proposed, includes the potential for regular and significant disputes. This possibility is a reasonable view given that the processes proposed by NECA consistently provide for the arbitrary allocation of costs, without agreement regarding benefits, to highly commercial participants. This is why the NGF has proposed an investment process that is far less likely to result in dispute.

For additional detail on the NGF's position relating to new network investment issues, please see *A Commercial Framework for New Transmission Investment: Final Report and Review of ACCC Draft Principles for the Regulation of Transmission Revenues*, pp. 6-15.

### **2.3. HOW SHOULD TRANSMISSION USE OF SYSTEM CHARGES BE LEVIED?**

The following two questions are answered together.

*Do interested parties believe that a move to long run marginal cost (or utilisation adjusted) pricing represents a significant improvement in transmission pricing?*

*By using both short run (reflecting losses and constraints) and long run pricing methodologies, will there be over signalling of new investment at constrained parts of the network?*

A short-run price that reflects losses and constraints provides the appropriate short-run price signal; however, the short-run signal does not provide the full information required for efficient decisions. Generators and consumers must see the cost of transmission capacity expansion that results from their respective activities. Generators will then be able to trade-off the benefits (or dis-benefits) of a change in price and volume against the cost of the capacity expansion, and similarly, consumers will then be able to decide whether to reduce consumption or to fund transmission capacity expansion. In general, we contend that using both short-run pricing and payment for new investment will result in the appropriate short and long term incentives that, in general, will promote efficient outcomes.

The impacts of large network users on transmission capacity expansion will typically arise as the result of large-scale investment programmes that will have large capital expenditure programmes. It is most efficient for these large users to see the potential change in transmission costs (whether an increase or a decrease) at the time they are evaluating such projects.<sup>1</sup> Our preferred position, therefore, is that large network users see the costs of transmission expansion when and as that expansion occurs. This position is consistent with the fully commercial investment that the NGF proposes in its prior submission to NECA, entitled *A Commercial Framework for New Transmission Investment: Final Report*.

The impacts of small network users (such as households) on transmission capacity expansion will generally arise as the combined result of many decisions taken by many users. While it is possible to identify the transmission expansion caused by the collective action of the small users, it is not possible to identify the transmission expansion caused by the individual action of a single small user. This difficulty means that small users need to see both (a) short-run prices for consumption in the current period, and (b) long-run prices for evaluating consumption levels over time. This outcome, however, depends critically on the long-run pricing calculation, which is critical to achieving efficient outcomes.

This issue does raise the question of whether long run marginal cost is a smoothing of future investment costs from a fixed point in time or an annually revised charge reflecting forward investment costs. If it is the latter, then the NGF would be greatly concerned that this approach would violate the beneficiary pays principle.

*Do the proposed Code changes provide sufficient guidance to require the networks to adopt efficient prices from within the cost ranges?*

From past experience, it is clear that network service providers will choose the set of prices that maximises their return and minimises their risk. It is difficult to determine whether or not these prices are actually consistent with the efficient prices.

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<sup>1</sup> Signalling the costs of transmission capacity expansion at other times is only efficient if it does not change the behaviour of the large user, which in turn requires that the large user can take no action to avoid the charges.

In general, however, the NGF believes that reasonably efficient prices are more likely to prevail provided that the proposed code changes attempt to move network service providers toward accepting a more market-oriented position.

## 2.4. SUMMARY OF PROPOSED CHANGES TO TUOS CHARGES

*Do interested parties believe that the proposed Code changes reflect the findings of the NECA review?*

The NGF believes that the proposed Code changes largely reflect the findings of the NECA review; however, there are also several concerns and issues, specifically with regard to the new investment framework. Section 2.4.1 discusses several issues with regard to the determination of relative benefits for new, small network assets, and section 2.4.2 discusses other new investment issues. For a detailed discussion of a commercial new investment framework, please see *A Commercial Framework for New Transmission Investment: Final Report*. (The outline of a commercial framework is included in Appendix A of this submission.)

### 2.4.1. New Small Network Assets

With regard to the determination of the benefits for new, small network assets, NECA's proposed Code changes do not correctly implement the intent of the *NECA Transmission and Distribution Pricing Review: Final Report*. Chapter 2 of the NECA report states that:

“All the beneficiaries of new investment in the transmission and, where there are shared benefits, the distribution networks should contribute to the costs of that investment in proportion to the estimated share of the benefits they derive from it.”<sup>2</sup>

In Schedule 6.8 of the proposed Code changes, clause 2 states that:

“In relation to *new small network assets* proposed as part of the *network* planning process under clause 5.6.2, *each Network Service Provider* must determine the ratio as between *Generators* and *Transmission or Distribution Network Customers* connected to its *network* (whichever is relevant) of benefits resulting from the establishment of the *new small network asset* which it estimates that each class will derive from that asset.”<sup>3</sup>

In addition, clause 6(a) allocates the costs to all generators connected to the NSP in proportion to their registered capacity.<sup>4</sup>

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<sup>2</sup> NECA, *Transmission and Distribution Pricing Review: Final Report*, volume I, July 1999, p. 31.

<sup>3</sup> NECA, Draft of Proposed Code Changes, Schedule 6.8. clause 2, p. 6.128.

<sup>4</sup> NECA, Draft of Proposed Code Changes, Schedule 6.8. clause 6(a), p. 6.130.

Clearly, the intent of the NECA report is to ensure that all beneficiaries of an (small) investment pay for that investment in proportion to the benefits received. The wording of the above clauses raise two issues in relation to this point. First, beneficiaries from an investment may be beneficiaries that are connected to a given network, but they often include beneficiaries *interconnected* to that network as well. If the latter beneficiaries are not identified and accounted for properly in clause 2, then the recovery of investment costs for new small assets will be from connected parties that may receive only minor benefits. Second, given a new investment, there will be some participants that receive benefits and some that receive dis-benefits. The fact that certain parties receive positive benefits and the extent of these benefits must be more explicitly captured in Schedule 6.8.

These problems can be solved by changing clause 2 to read (bolded words added):

“In relation to *new small network assets* proposed as part of the *network planning process* under clause 5.6.2, *each Network Service Provider* must determine the ratio as between **each** *Generator* and *Transmission or Distribution Network Customers* connected **or interconnected** to its *network* (whichever is relevant) of benefits resulting from the establishment of the *new small network asset* which it estimates that each **participant** will derive from that asset.”

Clause 6(a) should be amended to allocate investment costs on a pro rata basis among generators that receive a positive benefit based on the size of these benefits.

The NGF believes that these modifications are important to ensure a new small investment process that reflects NECA’s intent and that prevents perverse and uneconomic outcomes from occurring. In addition, the identification of these interconnected beneficiaries would pose no significant, additional burdens on NSPs.

#### 2.4.2. Other New Investment Issues

This section briefly raises several additional concerns related to the proposed code changes for new small network investments.

##### *New Small Investment Process*

The NGF is concerned with the proposed code change in section 5.6.2(f) that does not provide for an NSP to engage in any form of consultation with regard to new small network assets, *i.e.*, those assets that fall below the new investment threshold. The NGF believes that this concern is especially valid given that NSPs will have the incentive to “break down” larger projects into smaller components in order to circumvent the threshold trigger for negotiation with expected beneficiaries that applies to large projects.

At any rate, the potential exists for the accumulation of significant costs without scrutiny under the proposed new small investment process. This position is unacceptable in a commercial market.

For these new small network assets that do not meet the threshold, it is critical that potential beneficiaries have the opportunity to assess the expected benefits potentially accruing to them. It is acknowledged that the costs associated with a comprehensive evaluation may not match the benefits, but the NGF is not requesting a fully comprehensive assessment. The NGF, however, believes that at reasonable cost, an NSP can identify these projects individually, the proposed beneficiaries, and the associated cost shares. Otherwise, a NSP that commits to a project will likely be unwilling to revise its position if participants protest the determination of benefits and/or beneficiaries.

In addition, generators would be prepared to accept a higher investment threshold for new large investments if participants retain the right to challenge the estimated benefits and potential beneficiaries of the small network investments. Without any provision for either investor scrutiny or participant challenge for small investments, then there are no incentives to discourage NSPs from breaking down a large investment project into several smaller projects in order to circumvent the entire negotiation and consultation process associated with new large investments.

#### *Dispute Resolution*

The proposed code changes do not explain the dispute resolution process, with regard to the dispute of a recommendation under clause 5.6.2(i), when the parties in a conflict cannot reach an agreement. There is no discussion of what happens in the event that these negotiations are unsuccessful. It should be noted that access to independent experts under the dispute resolution procedures should be codified.

#### *Definition and Enforcement of Good Faith Negotiations*

There appears to be a need for further refinement of the details of the actual negotiation process, or at least the specification of well-defined and detailed minimum standards for negotiation. It is not clear from the proposed code changes what obligations that “negotiation in good faith” places on the involved parties, and there appear to be no incentives to ensure that NSPs actually seek to negotiate in this manner.

### **3. PRICE NEGOTIATION FRAMEWORK AND UNBUNDLING TRANSMISSION AND DISTRIBUTION CHARGES**

*Are the proposed Code principles and regulatory arrangements sufficient to guide the negotiation processes, in particular where one party (i.e. the network) is a monopolist and likely to have an information advantage over customers?*

The NGF believes that the negotiation framework still lacks sufficient detail to be highly effective in giving NSPs the incentives to negotiate on a fully commercial basis with a level playing field. Proposed changes in the code are not currently strong enough to ensure that NSPs do not possess an information advantage.

A move to firm financial rights would help to resolve these negotiation framework problems, as well as firm access rights and service standards issues. However, price negotiations would still be required with some regulatory guidance to ensure equitable price outcomes. The NGF supports the basic principles for firm access rights and hedging arrangements that NECA advances in its report, but its proposals do not go far enough at present.

For further reference to inter-regional hedging and firm access issues, please see *Transmission and Distribution Network Pricing Review: Issues, Analysis and Options*, 26 March, 1998, Section 6.7., pp. 55-57.

#### 4. SERVICE STANDARDS

*Do the Code changes impose sufficient obligations on the networks to establish clear and measurable service standards in advance of the determination of their revenue cap?*

The NGF supports basic and well-defined service standards for network service providers, but the proposed changes do not go far enough. NECA's proposed indicators yield some measurement of network service performance in that they provide information on the frequency and extent of network interruptions. These indices are not sufficient in a competitive environment, however, because they do not capture the *market impacts* of network problems. As a result, they fall short of serving as adequate measures because they (a) do not provide a measure of the relative impact of specific events relative to other events, and (b) they do not account for how the timing of an event changes the impact on the market *value* of network disruptions/failures; e.g., a network failure at 3 am for a domestic load is likely to be less costly than a failure at 7:30 am on a weekday morning.

NECA acknowledges the need to further explore the use of market-based measures of network performance.<sup>5</sup> The NGF also strongly supports the use of market-based performance measures for existing network capacity. These performance measures account for the value that the market places on the transmission services at the time of a network disruption/failure that produces either unserved energy or any constraint on market activity, or increases in losses, associated with a price effect.

For further discussion, please see *Transmission and Distribution Pricing Review: Public Comment*, section 6, pp. 13-17.

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<sup>5</sup> NECA, *Transmission and Distribution Pricing Review: Final Report*, volume I, July 1999, pp.70-71.

## 5. EMBEDDED GENERATION

*In the absence of generators contributing to the costs of existing (sunk) networks, do the proposed arrangements establish a competitively neutral environment for embedded generation?*

No, the proposed arrangements may establish a competitive advantage for embedded generation. If anything, the proposed arrangements encourage *inefficient* embedded generation.

The major deficiency of the proposed arrangements is that allowing embedded generators to receive the pass-through of the *full* reduction in TUOS charges to the DNSP provides an incentive for inefficient embedding. Efficient pricing requires that charges reflect real cost savings, *i.e.*, savings created when embedding generation results in the deferral of new investment, reliability improvements, and loss reduction within the distribution and transmission networks. The NGF has consistently held the view that embedded generators should receive the benefit when their embedding generates these real cost savings.

Equally important from an efficiency perspective, however, is that this distinction also implies that embedded generators should *not* receive a pass-through benefit for reductions in the postage stamp component of TUOS charges. Since the postage stamp component is simply a charge to recover the residual fixed and sunk costs of the network, giving embedded generators a credit that includes this component is simply reallocating sunk costs to other users. In this case, there are no real economic savings from the reallocation of these sunk costs. As a result, the pass-through of the benefit for the reduction in the postage stamp component encourages embedding that is inefficient.

For further reference and an example, please see *Transmission and Distribution Network Pricing Review: Issues, Analysis and Options*, 26 March, 1998, Section 5.12.2., pp. 46-47.

## 6. CONCLUSION

This document provides a brief overview of the main issues surrounding the discussion paper issued by the ACCC. The ACCC are referred to prior submissions made to NECA during the review period. These papers are available on the NECA website; however, they have been attached to this submission for the Commission's convenience.

These submissions provide a description of the arguments that the NGF has advanced throughout the NECA review. The NGF has used an economic framework, outlined in these submissions, to establish an internally consistent approach to transmission pricing. That approach is also consistent with other features of the NEM design such as the dispatch mechanism. Further, while the NGF does not advocate the implementation of nodal pricing at this time, the approach taken here does not impede that development from occurring. Finally, it is essential that the outcome from the ACCC review ensures that:

- the use of existing assets occurs in an economically efficient manner;
- the spot market dispatch mechanism is not distorted;
- a rigorous commercial setting exists for new transmission investments;
- incentives for TNSPs and DNSPs promote market-reflective behavior; and that
- embedded generation does not capture non-existent savings.

## APPENDIX A: OUTLINE OF A COMMERCIAL FRAMEWORK

We present a general discussion of a commercial negotiation framework. This discussion is not intended to be definitive and does not seek to explain the regime in significant detail at this time. The purpose is simply to explain the key elements of the process (see Figure 1), and to outline areas for future work.

### A.1 INFORMATION REQUIREMENTS

In order for this approach to be effective, a central body such as NEMMCO needs to assume responsibility for:

- gathering information on network service reliability, line and outage risks, local demand forecasts, capacity availability forecasts, *etc.*, and this information should include network planning reviews;
- co-ordinating and compiling this information, and placing it in the public domain;
- identifying new investment issues and potential network risks; and
- providing a statement of network investment opportunities.

NEMMCO is in a position to collect and publish this information as well as to explicitly identify any substantial system risks and/or network requirements. This is aligned with NEMMCO's responsibilities for system reliability and security under the code. Since NSPs are themselves potential sponsors of projects, it may be inappropriate for them to assume this role.

This information should be readily accessible and available to all parties in order that they can use it to make their own evaluations of potential investment projects and to draw their own conclusions.

### A.2 EX ANTE COMMERCIAL NEGOTIATIONS

Given the availability of the information discussed above to all parties and the requirements for network expansions, any party can perform and publicly disseminate any studies in support of its own case. These studies would surely focus on pool outcomes and be highly contentious, but would not be a matter for any regulator to evaluate.

The project sponsors must negotiate and agree on a cost-sharing commitment before the project can proceed. The project must not proceed unless there is a group of sponsors prepared to pay for the investment. This requirement directly implies that the cost-sharing arrangements must be negotiated *ex ante* not *ex post*. The cost-sharing commitment could take many forms, such as a capital contribution or presumably, a long - term contract for access rights.

Generators who expect to benefit would presumably participate in these negotiations and share any costs they agree to in the negotiation process. Generators who expect to be disadvantaged would face the reality that this competitive threat exists, but would only be able to block it by adjusting their prices in order to make it no longer worthwhile.

If sufficient project funding can be negotiated by interested parties then firm access rights to compensation must be defined for the involved parties. These rights do not necessarily need to reflect one hundred percent “firm” access rights.

### **A.3 REPRESENTING SMALL CUSTOMERS**

The potential beneficiaries of a network investment project include generators, transmission and distribution network service providers, large customers, small customers and owners of settlement residues. Generators and large customers are capable of assessing their own position and evaluating their ability to fund a given investment project.

The NGF, however, recognises the potential difficulties with small customers’ ability to represent their own interests. Small customers clearly require a representative in the investment decision-making process, with their primary interest being network reliability.

In theory, it might be argued that distributors and/or retailers are large enough and should have sufficient incentives to represent the interests of their own consumers. We recognise that this is debatable since:

- distributors, who are never likely to be subject to the kind of competitive pressure which would give them enough incentives to minimise costs on behalf of consumers, are likely to over-invest; while
- retailers, in a truly competitive market, may not be able to lock consumers into contracts of sufficient term to ensure that they, rather than their competitors, capture the benefits of investment.

It may also be suggested that the NSP enter negotiations on behalf of consumers, but it has an obvious conflict here, as the likely proponent of any expansion proposal. Thus, any involvement by an NSP would have to be carefully overseen by the appropriate regulator, to ensure that consumer interests were being protected and that an NSP does not:

- propose to contribute to a development which would actually raise consumer costs in its own region; or
- propose to contribute more to a development than that development would actually deliver, in terms of lowering consumer costs in its own region.

In particular, it should be obvious that since interconnection will normally raise prices in one region and lower prices in another, no coalition of regional NSPs can credibly claim to represent the interests of consumers in both the regions concerned.

Consequently, the NGF believes that an appropriate body to assume the role of protecting consumer interests is a state-based jurisdictional representative (SBJR), which might directly enter into negotiations, or oversee the NSPs involvement, as above. Naturally, the SBJR should be required to apply very stringent and transparent criteria to any investment it proposes.

If the SBJR decides to contribute to the project on behalf of small customers in that region, or approves such a commitment, then that share of the project costs, subject to any applicable regulatory test and subsequent approval, would enter the network service provider's regulated revenue component. The cost would be recovered through increased TUOS charges to customers that benefit.

Figure 1: New Investment Process

