

8th January 2010

Australian Competition and Consumer Commission
Level 35, The Tower
360 Elizabeth Street
Melbourne Vic 3001

By email only: adjudication@accc.gov.au

Dear Sirs,

Submission in Response to Applications for Authorisation A91198-A91199 by the New South Wales Government in Relation to the Co-insurance Arrangement for the Energy Reform Strategy

Please see attached submission from Snowy Hydro in relation to the abovenamed applications for authorisation.

If you have any queries in relation to this submission please contact me on (02) 9278 1884, or by email (Leigh.Creswell@snowyhydro.com.au).

Yours faithfully,



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Snowy Hydro Limited

Submission to the Australian Competition and Consumer Commission in response to the applications for authorisation A91198 – 91199 by the New South Wales Government, in relation to the co-insurance arrangement for the Energy Reform Strategy.

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1. SUMMARY

On the basis of the information available in the public version of the NSW Government's application for authorisation, the Commission should not authorise the co-insurance arrangement as it does not meet the statutory test for authorisation - it does not demonstrate that the public benefits outweigh the competitive detriment as required by section 88(1A) of the Trade Practices Act.

The NSW Government's application fails to make the case for a net public benefit because it:

- (1) incorrectly defines the relevant market as the National Electricity Market ("NEM")-wide wholesale market for electricity and the retail market for the supply of electricity (either NEM-wide or NSW-wide) when the relevant product market for the co-insurance arrangement is likely to be different;
- (2) understates or ignores the anticompetitive detriments of the arrangement within the appropriately defined market. The real impact on competition is to create an internal arrangement between Gentraders - a foreclosure of competition which hinders the dissemination of competitive price signals, resulting in a loss of allocative efficiency for an extended period of ten years.
- (3) assesses the claimed benefits against the wrong counterfactual - one under which the NSW Government's energy reform program does not proceed. This is the wrong counterfactual - co-insurance is not a necessary precondition to the reforms despite the NSW Government's mistaken belief that the arrangements will add to the value they receive for the Gentrader bundles; and
- (4) when assessed against the appropriate counterfactual overstates the benefits of the arrangement and claims benefits that are not economic efficiency benefits but wealth transfers between entities.

The overall impact of these deficiencies is that the benefit to the public does not outweigh the detriment constituted by the substantial lessening of competition that would result from this proposal when viewed against the perspective of the appropriate market definition and against the correct counterfactual. Accordingly it should not be authorised by the Commission.

The remainder of this submission is structured as follows:

- (1) in section 2 we analyse the market definition appropriate to the co-insurance arrangement;
- (2) in sections 3 and 4 we examine, respectively, the anti-competitive detriments and public benefits which are likely to arise as a result of the co-insurance arrangement;
- (3) in section 5 we provide our concluding arguments in relation to the NSW Government's application; and
- (4) in Annexure A we provide an overview of generators' approach to contracting

their capacity in the NEM.

2. MARKET DEFINITION

In order to consider the anti-competitive detriments and public benefits attributable to the co-insurance arrangement, it is necessary to consider the suitability of the market definition against which the NSW Government claims the arrangement should be assessed. For the reasons stated below, we believe the NSW Government's definition of the relevant market is fundamentally flawed. In this section 2 we:

- (1) compare the approach of the NSW Government with our own definition of the relevant market (sections 2.1 - 2.2);
- (2) discuss why the co-insurance product is inherently incompatible with the NSW Government's approach to the relevant market (section 2.3);
- (3) discuss the demand and supply side substitutes for the co-insurance product available to generators (section 2.4); and
- (4) consider the geographic dimension of the relevant market (section 2.5).

2.1 The NSW Government's Definition of the Relevant Market

The NSW Government's application for authorisation of their proposed co-insurance arrangement for the coal fired generators defines the relevant markets as being "the NEM-wide wholesale market for the supply of electricity and the retail market for the supply of electricity, being either an inter-regional market or a NSW wide market". The NSW Government considers that "there is not a separate market for the supply of electricity derivative contracts".

2.2 Relevant Market is a Market for the Indemnity of Unfunded Contract for Difference Payments

We agree that there is not a separate market for the supply of electricity derivative contracts. However, a co-insurance contract is not an electricity derivative contract. As we explain below, co-insurance and its substitutes offer substantially different product characteristics to any conventional or 'standard' electricity derivative contract. As a result, the co-insurance product exists in a different product market to the wholesale and retail electricity markets. The relevant market in which the co-insurance product exists is, in fact, the market for an indemnity against unfunded contract for difference payments. To avoid doubt, our use of the terms "indemnity" and "indemnity insurance" refer to 'traditional' insurance products, and a narrow category of insurance-type derivatives, whereby the insured/buyer is compensated for actual losses linked to physical events, rather than derivative contracts which are triggered solely by a market variable and do not require an insurable interest. The relevance of this distinction is discussed further below.

We believe that a separate market for indemnity against unfunded contract for difference payments - as opposed to the broader NEM-wide wholesale market advocated by the NSW Government - makes sense for two broad reasons:

- (1) firstly, if the market for the co-insurance product was the wholesale and retail electricity markets, there would be no need for a co-insurance arrangement as

an appropriate hedge could be purchased in that market - the entire NEM wholesale market is deep, liquid and competitive, and includes a wide range of hedge and derivative products; and

- (2) secondly, the wholesale market is all about buying and selling electricity, both in physical and financial form, and the arbitrage opportunities between all of those forms - the co-insurance arrangement is a form of indemnity insurance which enables a generator to alter the balance of contract and spot offers, without changing the total offer into the electricity market.

The first of these reasons reveals a fundamental inconsistency between the NSW Government's NEM-wide definition of the relevant market and its stated reasons for the need for a co-insurance product. The NSW Government's application states that co-insurance is needed to allow "...Gentraders to collectively offer more financially firm contracts." but the co-insurance product is apparently not readily available in the market as "New entrants... will not have existing generation assets...and will therefore be unable to manage the risk of unfunded difference payments..." and "New entrants will be in a poor bargaining position... to develop co-insurance arrangements".

If the market for the product offered by the co-insurance arrangement is indeed the NEM-wide wholesale electricity market, then given the number of players in that market, its depth and liquidity and the level of competition, it seems unlikely that new entrants would have difficulty negotiating suitable arrangements or purchasing suitable derivatives or hedges. Accordingly, the NSW Government's stated motivation for co-insurance - the availability of more firm capacity - will occur without the need for the proposed co-insurance arrangement if the relevant market is really as wide as the NSW Government asserts.

Similarly, the second of the above reasons reveals why the NSW Government's approach to the market definition is flawed. In the NEM-wide wholesale market, participants have the opportunity to buy and sell electricity at a level of risk that individual participants are comfortable with. Participants can buy and sell in the spot market and bear the risk of variable price. They can buy or sell in the firm swap contract market, thus fixing the price but taking risk on the quantity. They can also pick and chose any point in between those extremes and by a mix of spot and contract exposure and/or utilising any of the different type of swap, cap and option contracts available.

The key point is that an indemnity for unfunded contract for difference payments (such as the co-insurance arrangement) must systematically differ in its pricing from the typical hedges and derivatives available in the NEM-wide electricity market. Since it would be reasonable to expect that any price differences would be arbitrated away within a single liquid market, it would not make sense to buy a hedge to sell a hedge within the same market. Yet, this is precisely what the NSW Government's market definition implies: the purchase of the co-insurance hedge is necessary to sell the contract hedge. Thus, in claiming a market definition which extends to the NEM-wide wholesale market, the NSW Government is asking the ACCC to accept an untenable proposition; namely that there are significant unexploited arbitrage opportunities between 'standard' electricity derivatives and products providing an indemnity for unfunded contract for difference payments.

Accordingly, these two reasons make clear that while co-insurance may have an influence on the NEM-wide market for hedge contracts, the product that the NSW Government is seeking to create with the co-insurance arrangement is likely to be

systematically different to the products traded in the NEM-wide market.

2.3 The Co-insurance Product Market is Different to the Wholesale Market

While the co-insurance arrangement might have an impact on the broad NEM wholesale market, including the market for derivatives, and might have a further impact on the retail electricity market, the key question is whether the co-insurance product is properly viewed within the wholesale electricity market, as claimed by the NSW Government. In other words, is there a separate market for products which manage the risk of unfunded contract for difference payments when large coal fired generators experience a plant outage? We believe there is, and we also explain below why standard derivatives exist in a different market to the co-insurance product.

The co-insurance product is clearly described in the application as “a financial contract, rather than a physical contract”. Physical generation of electricity is clearly not a substitute for this product as there is no suggestion in the application that there is any physical shortage of electricity when an outage occurs - the market operator is charged with maintaining physical supply, or that the co-insurance arrangement creates any actual increase in physical supply. It is the generators’ financial contracting strategy which gives rise to the risk of unfunded contract for difference payments.

Thus the co-insurance product merely enables a generator to offer more firm contracts than otherwise would be the case. Note, however, that whether more firm contracts are sold depends on the risk reward trade-off - the contract premium on the additional contracts must be greater than the cost of the co-insurance product and must compensate the generator for any additional risk involved in selling additional contracts above what was previously considered firm capacity.

Furthermore, contrary to what is implied by the market definition proposed by the NSW Government, standard derivative products in the electricity market are not substitutes for the co-insurance product - the product is only triggered by generator outages and must necessarily provide less cover and at a lower cost than standard derivatives as its primary purpose is to enable the generator to increase its sales of standard derivatives. The primary purpose of the co-insurance arrangement is to provide indemnity against unfunded contract for difference payments in the event of a forced outage of plant. Planned maintenance has a much lower risk of unfunded contract for difference payments as:

- (1) it usually is scheduled at low demand periods of the years, typically spring and autumn;
- (2) the timing is known in advance, forward sales of hedges can be tailored to match the physical availability profile; and
- (3) the financial risk can be covered at low cost by short term hedge contracts, if the generator has committed to long term continuous hedge contracts.

By contrast, unplanned or forced outages are a major risk as none of these conditions apply.

In short, although the proposed co-insurance arrangement and standard derivatives have some commonality, they are fundamentally different products with different uses. The co-insurance arrangement provides an indemnity against losses. Derivatives, on

the other hand, are typically settled by reference to the spot price of electricity and any generator which attempts to use them as a form of insurance will expose itself to significant basis risk. There are a limited number of hybrid derivative products which combine aspects of standard derivatives and indemnity products and which may serve as substitutes for a co-insurance arrangement. However, as discussed below, we consider such products to be fundamentally different - and part of a different market - to the standard derivatives offered in the NEM wholesale market.

2.4 Substitutes for Co-insurance

There are both demand side substitutes and a variety of supply side substitutes for this product.

On the demand side, as contract levels approach physical firm capacity and the risk of unfunded contract for difference payments increase, there are a number of actions that a generator can take to mitigate the risk internally, such as:

- (1) charge a premium for contracts over that safe level;
- (2) sell non firm contracts above that safe level; and/or
- (3) spend more on maintenance or upgrading plant so they have more redundancy for critical systems and thus reduce the risk of unforced outages.

We would view these actions as close demand side substitutes in that they provide protection equivalent to that offered by indemnity insurance against the risk of unfunded contract for difference payments as a result of a forced outage *for a given level of physical capacity*.

In the absence of the co-insurance product a generator could reduce this risk by limiting contracting to a "safe" level of physical capacity - the N-1 approach. As this would entail the generator relinquishing the potential contract premium for capacity above the safe level this would only be an option if co-insurance was not available or at a high cost relative to the potential contract premium. It is thus not a substitute for the co-insurance product.

Of course, the option of building additional generation capacity always exists, but while this will increase the supply of firm contracts it does not reduce the need for the co-insurance product. Additional capacity of the same type as an existing generator makes more firm capacity available to the market, but it cannot make more firm capacity available to the generator than the capacity constructed.

On the supply side (that is, in the market in which the co-insurance product exists) there are a number of sources of alternatives to the co-insurance product:

- (1) the conventional insurance market provides a product to generators in the NEM. There are brokers and insurers who will arrange coverage through an insurance product which pays out against the spot price when the generator suffers an unscheduled outage; and
- (2) there are hybrid derivative products available to generators. These are callable caps and swaptions typically offered by other generators, particularly fast start peaking generators (open cycle gas turbine "OCGT" or storage hydro), who

can partially manage the risk through their own physical capacity and thereby offer callable cap and swaption type products. Such plants typically seek to balance being fully contracted with cap contracts (which would tend to depress spot prices) and having uncontracted capacity to bid opportunistically, gain high spot revenues and maintain spot price volatility. Any uncontracted capacity could be used to provide indemnity-type cover, without necessarily detracting from this contracting strategy as forced outages are a low probability event. In fact, the owner of a peaking plant could offer indemnity to multiple generators, since the probability of simultaneous forced outages is very low - see Annexure A.

Thus there is a discrete category of hybrid derivative products, primarily caps or swaptions callable only in the event of a forced outage, that may serve as a substitute for co-insurance. These are insurance-type products and are backed either by a balance sheet (if provided by an insurance company) or by physical generation and a balance sheet (if provided by a generator). If provided by a generator with physical plant, there is still an element of balance sheet underwriting as the probability of the provider's plant being unavailable or not dispatched when called to provide indemnity, while small, is not zero.

On both the demand and supply sides, therefore, the co-insurance product appears to be quite distinct from the product on offer in the wholesale electricity market. A hypothetical monopolist for the co-insurance product could not use its market power in co-insurance market to raise prices in the NEM, but would be able to do so in a market for low cost insurance against unfunded contract for difference payments.

2.5 The Geographic Dimension

It is also necessary to consider the geographic scope applicable to the relevant market. A proper analysis suggests the relevant market is limited to NSW. On the supply side, a supplier of a conventional insurance product mitigating unfunded difference payment risk could operate across the entire NEM. However, the suppliers of indemnity products backed partially by physical generation, as is the case with almost all other standard electricity derivatives, can only offer within a region. The probability of price separation between regions when prices are high and there is an outage of a major generating unit is such that a partially physically backed product would have to be region-specific.

On the demand side, the willingness to pay for an indemnity product will differ from region to region, due to differences in the contract premium. Regional differences in contract premium arise from local price separation in the NEM, and differences in price variability within each region. For example, the demand for indemnity insurance and the willingness to pay in a region with excess electricity supply (and thus low contract premium) would be substantially different to what could be expected in NSW.

This leads us to the conclusion that the smallest market dimension in which a hypothetical monopolist can raise prices would be within a region. The Government's application essentially concedes that the geographic dimension of the market is NSW. In discussing the effect of combining a number of power stations within a single portfolio, the submission states:

"While there is independent generation in NSW, it is currently relatively limited. The obvious cases are TRUenergy's Tallawarra power station and Origin Energy's Uranquinty power station. These power stations would provide an

*opportunity for TRUenergy and Origin Energy to integrate one of the Gentrader bundles **into a larger portfolio in NSW**, and to provide a measure of self insurance against the risk of unfunded difference payments. However, other bidders, particularly new entrants, will be unable to do the same.”¹*

Incidentally, this analysis neglects to mention that Snowy Hydro has 2200MW of “independent” generation in NSW, which would be available to support contracts with new entrants to the NSW generation market or that commercial insurance market products are available to mitigate the risk of unfunded difference payments. The Commission may be aware that the NSW Government has publically stated that it will not accept any bids by Snowy Hydro for any of the assets being sold in the Government’s Energy Reform Strategy.

2.6 Conclusion

We conclude that, contrary to the assertion in the NSW’s Government’s submission, a proper interpretation of the approach of the Commission under the Trade Practices Act 1974 to defining a market shows that the co-insurance arrangement exists within a market for insurance products that mitigate against unfunded difference payments for NSW generators.

3. ANTI COMPETITIVE DETRIMENT

The NSW Government submission asserts that there are “negligible anti-competitive detriments” to the proposed co-insurance arrangements; as explained below, this assertion ignores the fact that the arrangement will have deleterious effects on competition in the relevant market. In fact, the NSW Government’s submission both conspicuously ignores these detriments and drastically overstates the alleged benefits of the arrangement.

The arrangement enforces both a monopsony and monopoly on the market for insurance products that mitigate the risk of unfunded difference payments for coal fired generators in NSW and it does so for a period of ten years.

The key anti-competitive detriments of the arrangements are:

- (1) it establishes an exclusive arrangement amongst arguably the least efficient providers of forced outage insurance - fellow coal fired generators and by doing so suppresses price signals of the cost of the product leading to a loss of allocative efficiency as well as a foreclosure of competition;
- (2) the long run effect of the proposal is to lessen competition in the market for this insurance product by raising barriers to entry (the loss of the market) and giving the participants an advantage not available to other market participants. Effectively the participants will be party to a revenue sharing arrangement in regard to the co-insurance product and will not compete, despite the power stations having different costs and different levels of reliability and thus both different needs for the co-insurance product and different abilities to supply such a product. Indeed, by blocking new competition, these increased barriers to entry will undermine the efforts of the NSW Government to implement its Energy Reform Strategy;

¹ NSW Government, *Submission in support of application for authorisation*, p32 (emphasis supplied)

- (3) it creates incentives for co-ordinated bidding behaviour in the event of a forced outage and subsequent call on co-insurance. At the very least, it will alter the bidding behaviour of participants which almost certainly will promote inefficient and anti-competitive outcomes in the spot market. Those called upon have incentives to bid their plant at short run marginal cost ("SRMC") to avoid themselves becoming liable for unfunded contract for difference payments for the co-insurance. Paradoxically this mutes price signals for investment in new capacity - one of the stated aims of the NSW Government's Energy Reform Strategy;
- (4) it mutes any incentives for generators to increase or even maintain existing levels of reliability. Consider, for example the arrangement applying to two generators - one old and not very reliable and one newer and more reliable. It is obvious there will be a net flow of co-insurance benefit from the new reliable generator to the older, less reliable generator. Under co-insurance, there is reduced incentive for the newer generator to maintain their reliability, as some of the benefits would be captured by the less reliable partner in the arrangement. Similarly for the older generator, the penalty paid for the use of co-insurance (the difference between their SRMC and the co-insurance strike price) is small, and not sufficient to incentivise them to better performance. Alternative indemnity products address the moral hazard through deductibles and by clearly defining the indemnity event. The proposed co-insurance arrangement does not appear to incorporate established insurance practices. By sharing the moral hazard, co-insurance is likely to lead to reliability deteriorating to the lowest common denominator; and
- (5) the term of the proposed arrangement at ten years amounts to a long term lock-in of anticompetitive detriment. Given the dynamic nature of the electricity market and the changes likely in the next decade it would be singularly unwise to authorise such a far-reaching and pervasive arrangement, distorting the market, and with a high risk of unintended consequences.

As we have noted in section 2, there are a variety of providers and close substitutes for such a product. The co-insurance arrangement excludes all of these. Not only does it exclude actual independent providers of such a product, but it actually precludes Gentraders from procuring such a service internally - they are forced to offer capacity into the co-insurance arrangement. This means that the Gentraders who purchase the Delta Coastal and Eringarook bundles cannot provide their own internal co-insurance from the Colongra peaking power station or the Shoalhaven pumped storage system respectively.

There does not appear to have been any market testing by the Government to ascertain if other providers of the insurance product can provide some or all of the needs of the new Gentrader bundles. In fact, it seems that the Government has not troubled itself to undertake any market testing whatsoever to ascertain if any or all of the prospective bidders see value in the proposal.

There is also no evidence of market failure - in other jurisdictions there are a number of generation businesses without large portfolios of generation units operating without the need for a mandated co-insurance mechanism. There is furthermore, no evidence that the hedge markets in other regions have been impacted by the non existence of a mandated, universal co-insurance arrangement.

4. PUBLIC BENEFITS

The NSW Government's application claims the following benefits for the co-insurance proposal:

- (1) *"Co-insurance supports the splitting of the existing generation portfolios into smaller Gentrader bundles and manages the impact on the contract market that might otherwise result.*
- (2) *Co-insurance will facilitate liquid markets for firm contracts by providing Gentraders with the opportunity to offer a larger volume of firm contracts for a given level of risk.*
- (3) *Co-insurance enables the Government to offer an increased level of availability thereby allowing the NSW Government to offer more valuable Gentrader contracts to the market.*
- (4) *Co-insurance supports potential new generation entrants by helping manage outage risk through the provision of higher firm capacity than would otherwise be available."*²

The basic premise underlying these benefits is threefold:

- (1) without co-insurance the competition benefits of disaggregating the three physical generation portfolios into five Gentrader bundles cannot be achieved;
- (2) co-insurance via this proposal is costless and adds to value; i.e. it is lower cost than any competitor products or substitutes; and
- (3) there are no alternative products available to new entrants.

All of these implicit assertions by the NSW Government application are incorrect, misleading or unsupported by evidence.

4.1 The Counterfactual

Co-insurance is not necessary to unlock the competition benefits of disaggregation

The NSW Government's application assesses the claimed benefits against the wrong counterfactual - one under which the NSW Government's energy reform program does not proceed. This is the wrong counterfactual - co-insurance is not a necessary precondition to the reforms despite the NSW Government's mistaken belief that the arrangements will add to the value they receive for the Gentrader bundles.

The NSW Government as vendor of the Gentrader bundles has sole discretion over the number of Gentraders it offers (subject of course to merger approval processes if it chose to offer less than three bundles).

If co-insurance was necessary to allow the disaggregation into five Gentraders bundles the following conditions would have to be true:

² NSW Government, *Submission in support of application for authorisation*, p1

- (1) there would be no alternative sources of insurance against unfunded difference payments available at a commercial price; and
- (2) all prospective buyers would be uniformly so risk adverse as to not bid for a Gentrader bundle without co-insurance.

Neither of these conditions is true. As we have discussed in section 2 there are a variety of entities offering similar products to that offered by the co-insurance arrangements and there are also substitutes. Indeed we would argue that since the market for co-insurance type products is competitive, it is likely that co-insurance needs can be satisfied by the market and at a lower price.

It is also not obvious that buyers would not bid for Gentrader bundles without co-insurance. The assertion of the NSW Government in this regard ignores the fact that there are already a number of generators of similar size that operate, apparently successfully and profitably, in the NEM without mandatory co-insurance - Loy Yang A, Tarong, Millmerran and indeed all of the generators offered in the privatisation of the Victorian electricity industry were offered on a single station basis, generally of four units. This assertion also implies that it would be uneconomic to construct generation capacity in NSW unless done as part of a wider portfolio of generation assets. If true, this would mean, effectively, that the NSW Government will be unable achieve its stated goal of attracting further new entrants to the industry (other than the initial five Gentraders) for a period of ten years. The future new entrants will not face a level playing field (being excluded from the co-insurance cartel) and cannot have a portfolio of generation - an essential pre-condition according to the NSW Government.

The NSW Government's application acknowledges that two likely bidders, Origin Energy and TRUenergy have operating physical generation plant in NSW which is well suited to provide co-insurance. A third likely bidder, AGL, has a site for gas fired generation (Leafs Gully) with planning approval which could be constructed in two to three years. In addition, the NSW Government is selling a number of generation sites, some with planning approvals, which could also provide plant for this purpose.

Furthermore, the application ignores the fact that at least two of the Gentrader bundles have physical plant suitable to hedge against the risks of forced outages; Shoalhaven in the Eraring bundle and Colongra in the Delta Coastal bundle.

All potential bidders, both existing players and new entrants, are likely to have access to the equivalent to the co-insurance arrangement, via existing plant (including plant in the Gentrader bundles), new plant or financially firm contracts with a number of electricity generation counterparties as well as the general insurance market.

Thus, it cannot be claimed that without co-insurance the Government cannot offer five Gentrader bundles.

Since authorisation requires a consideration of the position that would be likely to exist if authorisation were not granted ("the with and without test"), we would argue that a counterfactual of the reforms not proceeding is unlikely as the lack of a co-insurance arrangement in no way precludes the reforms proceeding. Indeed it is entirely possible that the cost and complexity and detriments of the arrangements might lead to a reduction in value. In general terms, bidders in a transaction will tend to undervalue arrangements such as co-insurance with which they are not familiar, have no

commercial precedent and complicate an already complex Gentrader contract.

For these reasons we suggest that the correct counterfactual is where the reforms proceed without the co-insurance. Using the correct counterfactual allows the benefits of co-insurance to be separated from the undoubted benefits of the Government's reform process. The NSW Government's application conflates the two sets of benefits.

4.2 Claimed Benefits

Co-insurance is costless and will lead to higher values

The NSW Government's application suggests that there are no costs associated with the co-insurance arrangement and that it leads to higher value being received by the Government for the Gentrader bundles - presumably by enhancing market efficiency. If this were so, one would expect similar arrangements to have arisen in other jurisdictions.

That they have not, we attribute to the fact that the arrangement is not costless to the participants and does not enhance market efficiency. We do acknowledge that the NSW Government as the vendor of multiple Gentrader bundles is in a unique position to overcome the co-ordination difficulties sometimes cited as reasons for similar arrangements not being developed.

The co-insurance arrangements are not costless and don't lead to higher value as:

- (1) there is a cost to participants in that they give away some of their rights to bid uncontracted capacity opportunistically as it is now involved in the co-insurance arrangements. In normal circumstances, a generator with uncontracted capacity in circumstances where a competitor with significant generation has experienced a forced outage will bid their capacity into the market at a high price, reflecting the degree of transient market power. However, if the generator with uncontracted capacity is called upon by the co-insurance arrangement to provide co-insurance, they must now bid the plant at its SRMC to avoid the risk of unfunded contract for difference co-insurance payments³. This deviation of bidding behaviour away from the "no co-insurance" case will impact on spot prices. This impact and, of course, the requirement to pay the calling generator the difference between the spot price and the co-insurance strike price will result in a loss of revenue for the generator supplying the co-insurance. This cost is acknowledged, albeit rather perfunctorily, in the NSW Government's application;
- (2) the increase in value is claimed to arise from the higher level of firm contracts that are able to be offered into the market as a result of the co-insurance arrangement. However, given that the demand for contracts, all else being equal, remains the same with or without the co-insurance arrangement, then the effect of increased volumes of contracts will be lower contract prices. It is not obvious that the volume of contracts in the "with co-insurance" case - which is effectively a departure from the 'market equilibrium' - represents the optimum point on the contract price volume revenue curve and that the volume "without co-insurance" is less than optimum. We suggest that at best this might be a zero sum game where the increased volume is offset by a lower price. In

³ Technically their optimum bid strategy would be to bid at the co-insurance price which is greater than the highest SRMC of generators participating in the arrangement.

these circumstances, it is doubtful that potential buyers of the Gentrader bundles will pay the additional value claimed by the Government;

- (3) there are reductions in value for the two Gentrader bundles that include physical plant suitable to hedge the risks of forced outages; Shoalhaven in the Eraring bundle and Colongra in the Delta Coastal bundle. Potential buyers of these bundles will not pay any “co-insurance premium” for the Shoalhaven and Colongra plant as they are already forced to participate in and pay for the NSW Government’s co-insurance arrangement. In effect, the value of those assets will be diminished through their forced exclusion from the co-insurance arrangement; and
- (4) the co-insurance arrangement itself is inherently inefficient when compared with market based alternatives. First, given its size the arrangement will suffer from significant diseconomies of scale. This will particularly manifest itself in high relative transaction costs (see below). Furthermore, as stated previously the effect of the proposal will be to diminish the generators’ usual incentives to maintain spending on the maintenance of plant and equipment – effectively, a form of moral hazard. The NSW Government submission does not propose details as to how it will effectively manage this risk.

One further issue in regard to cost are the transaction and consulting costs imposed by the arrangement in both its creation and ongoing administration. The NSW Government’s application suggests that it will establish an administrator to allocate the supply of co-insurance in the event of a call and keep track of the supply and demand of co-insurance over the life of the contract. Given the ten year life and the need for the administrator to make real time decisions on co-insurance allocation, this will not be a low cost operation. In addition, it is not clear from the application which entity bears the ultimate credit risk in regard to the co-insurance payment flows and how disputes between the administrator and/or the Gentraders will be resolved.

In regard to credit risk, the application states that credit support arrangements will be rolled into the Gentrader contract. However these are individual contracts between each Gentrader and the NSW Government and the Gentrader receiving the co-insurance payment is not a party to the supplying Gentrader’s contract. Thus it appears that the NSW Government is guaranteeing the payment on the basis of the security inherent in its Gentrader contract - presumably the forfeiture of the Gentrader contract in the event of non payment.

There are no alternative sources of co-insurance

The NSW Government’s application ignores the fact that there are both demand side substitutes and a variety of supply side suppliers of indemnity against unfunded contract for difference payments.

On the demand side as contract levels approach physical firm capacity and the risk of unfunded contract for difference payments increase, there are a number of actions that a generator can take to mitigate the risk internally, such as:

- (1) limit contracting to a “safe” level of physical capacity - the N-1 approach;
- (2) charge a premium for contracts over that safe level;

- (3) sell non firm contracts above that safe level;
- (4) spend more on maintenance or upgrading plant so they have more redundancy for critical systems; and/or
- (5) build low cost "standby" generation.

On the supply side, there are, as mentioned, a number of sources of alternatives to the co-insurance product:

- (1) the conventional insurance market provides a product to generators in the NEM. There are brokers and insurers who will arrange coverage through an insurance product which pays out against the spot price when the generator suffers an unscheduled outage; and
- (2) there are hybrid derivative products available to generators. These are callable caps and swaptions typically offered by other generators, particularly fast start peaking generators (OCGT or storage hydro), who can manage the risk through their own physical capacity. Within the NSW region there is approximately 4,000 MW of plant of this type across Snowy Hydro, Origin Energy, TRUenergy and the Eraring and Delta Coastal Gentrader packages.

We note that in the NSW Government application there is no claim, let alone evidence, that the co-insurance is in anyway cheaper or more efficient than the combined option of competitive procurement of any or all of the above alternatives. The application simply asserts that, particularly for new entrants, there are no alternative products or substitutes or strategies available to mitigate the risk.

There is a claim that "new entrants will be in a poor bargaining position, relative to incumbent generators, in any negotiation to develop a co-insurance arrangement". In light of the multiple options and alternatives described above this statement is unsupported.

The NSW Government further claims that "new entrants are likely to be less familiar with the NSW power stations than incumbent generators and therefore in a worse position to assess the likely performance of particular Gentrader bundles". This is a nonsense; all bidders will be given access to the same due diligence data.

From the analysis above, we conclude that the proposed co-insurance arrangement is not costless and is unlikely to lead to buyers of the Gentrader bundles increasing their bids.

Indeed it could be argued that the cost and complexity and detriments of the arrangements might lead to a reduction in value. In general terms, bidders in a transaction will tend to undervalue arrangements such as co-insurance with which they are not familiar, have no commercial precedent and complicate an already complex Gentrader contract. There is thus a high probability that the arrangement would lead to a 'worst of both worlds' scenario of achieving little in terms of 'increased value' to the NSW Government, while at the same time entrenching market inefficiencies for a period of ten years.

However, even if co-insurance did increase the sale price for the NSW Government, this is not a public benefit but a wealth transfer as there is no demonstrated increase in

overall market efficiency - on the contrary we see substantial competitive detriment. If the Government objective is to increase its revenue, then it is open to the Government to use its taxation powers in an efficient manner.

5. CONCLUSION

We contend for the reasons detailed in sections 2 to 4 that the ACCC should not authorise the co-insurance arrangement as it does not meet the statutory test for authorisation. The public benefits do not outweigh the competitive detriment as required by section 88(1A) of the Trade Practices Act.

We also note, although it is not directly relevant to the Commission's considerations on authorisation that mandatory co-insurance is an unnecessary imposition on a mature, well functioning and competitive market. The NSW Government's application makes no case that some market failure is evident and thus necessitates an anticompetitive intervention. The application also makes no case that the co-insurance proposal provides indemnity against the risk of unfunded contract for difference payments at lower cost or more efficiently than any of the alternative products or strategies available to the purchasers of Gentrader bundles.

However, we recognise that neither party can empirically prove or disprove the benefits or detriments of such a complex and abstract proposal. The real test will be in the marketplace, not in economic theory or complex models.

Thus, if the Commission were minded to consider authorisation, we would suggest a three conditions which would limit the anticompetitive detriment of the co-insurance arrangement:

Firstly, since the stated purpose of the arrangement is to allow the existing three generation businesses to be disaggregated into five Gentrader bundles we suggest that co-insurance be limited to within the three existing businesses. Under this proposal, Liddell and Bayswater would be limited to providing co-insurance for each other only as would Mt Piper, Wallerawang and Vales Point. Eraring would not be involved in any co-insurance arrangement. In this way, The Government's stated aim of splitting three businesses into five without loss of efficiency (which we dispute) would be achieved.

Secondly, the Gentrader bundles - however many offered - should only be sold on the basis that they cannot, at least for the period of authorisation, be re-aggregated (ie. merge or be subject to a take over) either among themselves or with third parties. By the NSW Government's own admission, much of the supposed benefits arising from the co-insurance arrangement will occur precisely because of the disaggregation of assets it entails; without such a condition there is no guarantee that any of those benefits will, in fact, occur.

Thirdly, even if one accepts the NSW Government's reasoning, their request for a 10 year period of authorisation is far in excess of what is required to achieve their stated objectives. While we do not, for the reasons already stated, agree with the NSW Government's arguments, the anticompetitive detriment of the arrangement would be substantially reduced if co-insurance was authorised for a much shorter period - say one year. We accept that there may be transitional issues such as splitting the existing contract books of the three existing businesses between five Gentraders and the new owners, particularly new entrants, may require time to establish detailed contracting and bidding strategies. On this basis, a twelve month limit on the authorisation ought to be

adequate. In this case it would be open to the new participants to seek further authorisations if they collectively believed the arrangement was valuable to them and could demonstrate a net public benefit.

ANNEXURE A: GENERATOR CONTRACTING OVERVIEW

All else being equal, generators prefer to sell contracts rather than rely on spot revenue; it gives them revenue certainty (important for raising finance) and enables them to capture the contract premium - the premium for certainty that retailers are willing to pay.

One might consider why there is a contract premium at all - after all both retailers and generators are interested in certainty and thus retailers' willingness to pay a premium would be offset by generators discounting to archive certainty. There are a number of reasons why the contract premium is positive and non zero and they all revolve around retailers being more risk adverse than generators - logical as retailers have no physical assets, operate on slim margins and add far less value than generators.

A retailers preferred wholesale position, given slim margins and the load variability of its customers is to "over contract"; that is to have firm hedges for all but the most extreme demand forecast - say a 10% or 5% POE. Retailers have very little influence on either spot or contract prices - they are price takers.

Generators, on the other hand would contract up to the limit of their risk adjusted firm capacity (simplistically N-1) to capture the contract premium. Generators, individually and collectively, have substantial influence over both pool and contract prices as they control both the quantity and price of their offerings into these markets. This, and their substantial balance sheets - they are always long generation, ensures that they are less risk adverse than retailers who look for a matched position as they have no physical assets and exist on thin margins.

Thus if retailers wish to contract to a 10% POE and generators wish to contract only to N-1, then there will be a greater demand for contracts than supply (assuming that the market has only "normal" reserves equal to the largest unit at the 10% POE).

This imbalance is resolved by one or more of the following:

- (1) contracts being offered at a higher premium so that generators will move above N-1 on the basis that the higher premium offsets the higher risk of unfunded contract for difference payments;
- (2) non firm contracts being offered; and
- (3) more physical reserve capacity than just the single largest unit - "paid" for by the higher contract premiums, that is the financial reserve capacity may be greater than the physical reserve capacity.

Thus it is reasonable to assume that there is a permanent contract premium and generators will seek to capture this by contracting to a level that is their particular risk reward trade-off.

There are two constraints limiting the level of contract sales:

- (1) one, as we have seen, as contract levels approach physical generation capacity, the risk of unfunded contract for difference payments rises; and

- (2) secondly, at higher contract levels, there is less uncontracted capacity available to influence the spot price which is disadvantageous to the generator in the medium to long term.

This last point needs some explanation. The rational strategy for a generator is to bid at SRMC up to the level of contract cover and “opportunistically” above that level - bidding at SRMC eliminates the risk of not being dispatched and being exposed to unfunded contract for difference payments for contracts. However, if all generators are highly contracted, the pool price will be low (SRMC) and stable. In the medium term, this will lead to a reduction in the contract premium as the demand for contracts falls because the need for retailers to contract disappears. So generators need some occasional volatility in the pool price to maintain the contract premium - presuming of course that there isn't an over supply of generation.

Since the optimum strategy for generators bidding into the spot market is to bid at SRMC for their contracted capacity, this suggests equilibrium between spot prices and contract prices. As the contract premium increases in response to high and volatile spot prices, more and more generators will offer previously non firm capacity as firm because the higher premium outweighs the risk of moving above N-1 contracting.

However, the higher contracting levels will lead to more capacity being bid at SRMC with the result that spot prices will tend to be low and stable. As a result, retailers will re-assess the need for high contract levels given the new low and stable pool prices and will over time adjust their contract levels downward, reducing demand for contracts and thus the contract premium; but of course leading to an increase in the volatility and level of the spot price.

Note also that the same type of equilibrium exists between the various types of financial contracts in the wholesale market. If, for example, the contract premium for a swap contract is large and the premium for a cap contract is small, participants will purchase caps for risk management purposes in preference to swaps. As these arbitrage opportunities are available to all market participants, any mispricing will be transitory and self correcting.

The same applies to firm and non firm contracts. While it is correct that, all else being equal, retailers will have a preference for firm contracts rather than non firm, however their preference will depend on the relative price between the two. Thus in a world with no co-insurance, retailers might well purchase non firm contracts if the price reduction over equivalent firm contracts adequately compensates them for the additional risk.

Generators have two strategies for managing the risk of unfunded contract for difference payments:

- (1) they can manage the risk externally by contracting with another party - this is a financial contract and logically must be less than a firm swap otherwise it would not be economic. The financial product must thus either be callable (a swaption) or offer less protection than a swap - a cap contract. They could also access the insurance market with some variant of a loss of profits policy; and
- (2) they can manage the risk internally by:
 - (a) limit contracting to a “safe” level of physical capacity - the N-1

approach;

- (b) charge a premium for contracts over that safe level;
- (c) sell non firm contracts above that safe level;
- (d) spend more on maintenance or upgrading plant so they have more redundancy for critical systems; and/or
- (e) build low cost "standby" generation.

In practise, generators in the NEM and the NSW Government owned generators use various combinations and permutations of all of these options.

It should be noted that:

- (1) each generator will have a different risk appetite and will pick a different point on the risk reward curve as their "safe" level. It is for example, quite possible, that if two generators had identical physical generation plant, one might contract to N-1.5 (risk averse) and one might contract to N-0.5 (high risk); and
- (2) there are no changes to any physical supply demand parameters. Under any level of contracting or risk taking by participants, in the short run there is no difference in physical generation to meet demand. The only thing that changes is the financial flows between participants.

In regard to co-insurance products, coal fired generators have the greatest need as while they are the lowest cost generation, they are the most physically complex and have the greatest need for maintenance downtime and the highest forced outage rates when compared to gas or hydro plants.

The primary purpose of the co-insurance arrangement is to provide indemnity against unfunded contract for difference payments in the event of a forced outage of plant. Planned maintenance has a much lower risk of unfunded contract for difference payments as:

- (1) it usually is scheduled at low demand periods of the years, typically spring and autumn;
- (2) the timing is known in advance, forward sales of hedges can be tailored to match the physical availability profile; and
- (3) the financial risk can be covered at low cost by short term hedge contracts, if the generator has committed to long term continuous hedge contracts.

By contrast, unplanned or forced outages are a major risk as none of these conditions apply. Forced outages cannot obviously be scheduled or known in advance and purchasing an unconditional conventional swap does not enable a generator to sell similar swaps without giving away the entire contract premium.

The natural physical providers of co-insurance to the coal fired generators are in fact the gas and hydro plants as they are:

- (1) fast start so they can respond to an outage; and
- (2) optimised to provide low cost, intermittent load.

The natural providers are also located in the region as the only time when they are likely to be called upon is when pool prices are high, when the magnitude of unfunded CFD payments is material - at these times demand is likely to be high and interconnectors constrained.

Typically they would offer hybrid derivative products such as callable caps and swaptions and would partially manage the risk through their own physical capacity. They could do this in two ways:

- (1) since such plants typically seek to balance being fully contracted with cap contracts (which would tend to depress spot prices) and having uncontracted capacity to bid opportunistically, gain high spot revenues and maintain spot price volatility, any uncontracted capacity could be used to provide indemnity-type cover, without necessarily detracting from this contracting strategy as forced outages are a low probability event; or
- (2) similarly since the probability of simultaneous forced outages is very low, such a generator could "contract" the same capacity to provide indemnity to several generators as the probability of multiple simultaneous forced outages is low. In this way, the sum of the indemnity premiums earned would be approximately equivalent to a conventional cap premium.

One might then ask why coal fired generators contract with each other for co-insurance. The answer seems to be mutual self interest. While a coal plant is not suited to provide such a product, a bi-lateral contract between two coal fired generators may be mutually beneficial, depending on the supply demand balance (and thus the contract premium) and the availability and cost of alternatives and substitutes.