

EnergyAustralia Retail

RESPONSE TO IPART'S ISSUES PAPER

on the Regulated Retail Price Determination 2007-08 to 2009-10

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1 EXECUTIVE SUMMARY

EnergyAustralia welcomes the opportunity to make the following submission in response to the Minister for Energy's Terms of Reference to IPART to determine and report on regulated retail electricity tariffs and charges for the period 1 July 2007 to 30 June 2010, and IPART's Issues Paper on this matter.

EnergyAustralia is the largest NSW standard retailer, supplying regulated electricity under its standard form customer supply contract to over 800,000 customers in the Sydney and Hunter regions. We are therefore keenly interested in the review, in the context of its impact on EnergyAustralia and on its regulated customers.

Understanding the Terms of Reference

EnergyAustralia considers that there is scope for ambiguity in interpreting the Minister's Terms of Reference. In this submission, EnergyAustralia has aimed to clarify those areas where there is scope for divergent interpretation.

Form of regulation

EnergyAustralia has conducted an international review of the form of regulation applied to retailers offering a default regulated electricity supply service.

Internationally, it is unusual for a retailer to be obliged to provide a fixed-price energy service to customers, while being exposed to volatile wholesale prices for supply. It was this construct that ultimately led to the collapse of the California electricity market.

Different jurisdictions have applied various mechanisms to cope with this disparity, ranging from deferral accounts, frequent retail price changes, Government guarantees combined with control over hedging procedures, and contracting for the regulated supply through a generator bidding process.

After examining these options in the context on the Ministerial Council on Energy's commitment to remove retail regulation, EnergyAustralia has considered that it would be inappropriate to invest in significant structural change which may require some years to unwind.

On balance, EnergyAustralia supports retaining the current form of regulation which separately identifies the network and retail components, but with some key enhancements:

- Considering that network prices are already subject to rigorous economic regulation, these costs should be passed through the regulated retail tariffs;
- For cost items outside the retailer's influence, such as distribution losses and NEMMCO pool fees, a pass through factor should be written into the price control formula;
- For material cost items associated with unforeseen events, general pass though provisions, via a limited re-opener provision, should be written into the Determination;
- Any side constraints on pricing should therefore be applied to the "R" component;
- Importantly, there should be no side constraint on the bundled retail and network charge; and
- A "Target Average Price Cap" approach should be applied, rather than constraints on changes in individual tariffs.

These issues are discussed more fully in section 3.

Defining the MMNE Retailer

The Minister's Terms of Reference place a strong focus on cost reflectivity as measured from the perspective of a Mass Market New Entrant (MMNE) Retailer.

However, the Terms of Reference provide little guidance on the detailed definition of a MMNE Retailer, advising only that a MMNE Retailer is one that is "of a sufficient size to achieve economies of scale".

EnergyAustralia has engaged advisors to assist in developing this definition more fully, and has concluded that the MMNE would most reasonably be considered a stand-alone retailer with no vertical integration, and a customer base in the order of 250,000 customers. With this many customers, the MMNE Retailer would be of a sufficient size to invest in the necessary systems to achieve the economies of scale envisioned in the Terms of Reference. This is expanded in section 4.3.1.

LRMC of new entrant generation

It is not clear how the Long Run Marginal Cost of new entrant generation fits into this price review. EnergyAustralia considers that the LRMC of new entrant generation is an artificial construct that bears little relevance to the market based costs facing the standard retailers.

The Long Run Marginal Cost of Electricity Generation in NSW report prepared for IPART (February 2004) gave a very broad range of costs from \$35.16/MWh for the low scenario to \$58.32/MWh for the high scenario. This broad range highlights the difficulty and risk in using the LRMC approach. The LRMC cannot be readily observed and so exists only as a theoretical construct.

Wholesale electricity costs

If the Terms of Reference envision tariffs to be based on cost reflective tariffs of a MMNE Retailer, then the wholesale electricity cost component should clearly be based solely on the efficient cost of hedging a mass market portfolio.

However, if the Determination is to recognise the realities of the standard retailers' electricity supply portfolios (and the related requirement to purchase electricity to serve the regulated load through the ETEF), then the wholesale purchase cost element would be reasonably based on a blended price, combining the ETEF strike price and the cost of hedging the portfolio, in proportions consistent with the roll-off of ETEF. This presents some complexity for determining prices, given the September / March ETEF transition step dates, and the July 1 date for resetting retail tariffs. EnergyAustralia recommends a process for dealing with this complexity in section 4.2.6.

A reasonable approach might be to set the regulated retail tariff at a level that assumes the immediate cessation of the ETEF. This would have the advantages of being administratively simpler to manage, and would more closely align with the objective of setting tariffs based on the factors facing a MMNE Retailer. To support this, EnergyAustralia also suggests that IPART advise Government to set the ETEF strike price equal to energy cost allowance included in the retail price.

The load profile of customers remaining on regulated tariffs

EnergyAustralia has researched the NEMMCO Net System Load Profile (NSLP) for its service territory, and found an error in its calculation. NEMMCO has amended the EnergyAustralia NSLP, and it is this amended profile that should be used in any determination of regulated retail tariffs.

A more accurate measure of the *regulated load* (as identified in the Terms of Reference) can be obtained from the audited ETEF settlement data. This data more accurately reflects the "settlement by difference" methodology to which the standard retailers are subject.

EnergyAustralia also considers that any determination of the remaining regulated load must consider the rollout of interval meters in EnergyAustralia's network. This is discussed in more detail in section 2.3

Green energy costs and obligations

EnergyAustralia has been active over the course of recent years in supporting green energy projects in the market. This activity allows proponents to finance projects and allows EnergyAustralia to build up a portfolio of green energy certificates (NGACs and RECs). Importantly, this ongoing activity is necessary, as the spot markets for green energy certificates have insufficient capacity to accommodate large quantities of spot purchases. It is therefore important that IPART not rely on spot prices for green energy certificates in determining the regulated retail tariff.

EnergyAustralia recommends the cost of RECs be valued using latest technology wind generation, and the cost of NGACs be valued using latest technology combined cycle gas turbine generation. This is discussed in section 4.6.

In the context of considering the standard retailers' requirement to offer an optional 10% green power component to new and moving customers, EnergyAustralia considers that, consistent with IPART's previous position on green power offers, this component of any retail tariff should not be subject to any form of price control.

Operating costs

EnergyAustralia has engaged consultants to assist it in determining the nature and level of operating costs that would be faced by a MMNE Retailer. EnergyAustralia has conducted a functional cost tree analysis, and then subjected these costs to international benchmarking to ensure that the operating costs to be reflected in the regulated retail tariff reflected international best practice.

EnergyAustralia considers that it would be reasonable to add an allowance for those operating costs that will remain with the incumbent standard retailer. This is discussed in more detail in section 4.3.

Retail margin

Related to the analysis of retail costs is the appropriate level of retail margin. It is important to draw a clear delineation between those costs that should reasonably be recovered through retail operating costs, and those that are more related to the competitive market and should be recovered through a retail margin.

The key factor to be recovered through a retail margin, from the perspective of the MMNE Retailer, is customer acquisition and retention costs. EnergyAustralia's experience as a MMNE Retailer in other jurisdictions indicates that MMNE Retailer customer acquisition costs are in the order of 3% of revenue.

Consistent with the approach taken in other Australian jurisdictions, EnergyAustralia is of the view that a sustainable net retail margin is in the order of 5%. Combined

with the customer acquisition costs, this indicates a retail margin for the purposes of setting the regulated retail tariff in the order of 8% of total revenue.

EnergyAustralia considers it would also be reasonable to include an allowance for those costs remaining with the incumbent retailer which would not be incurred by a new entrant retailer. These are discussed in more detail in section 4.4.

2 POLICY CHANGES THAT AFFECT THIS REVIEW

2.1 NSW Government's decision to phase out the ETEF

The Tribunal seeks comment on:

- Whether, for the purposes of establishing cost reflective tariff levels, it should consider the phasing out of the ETEF over a period of time or assume that the ETEF immediately ceases.
- How the phasing out of the ETEF will affect retailers' hedging, risk management and transactions costs over the course of the determination and whether these costs are different between a standard retailer and a mass market new entrant retailer.
- How it should recognise the forecasting risks that retailers will face in the absence of the ETEF and whether these risks are different between a standard retailer and a mass market new entrant retailer.

When setting regulated retail tariffs, IPART should reflect the fact that ETEF is being phased out over the period of the Determination.

This is the most significant policy event affecting this review. However, there is some uncertainty as to where the ETEF strike price will be set. Hence the pricing implications for wholesale energy purchases are uncertain.

Normally, retailers buy hedge products for their portfolios as much as 3-5 years in advance. The uncertainty over the closure of ETEF rollout has meant that retailers' advance buying activity has been delayed. Hedge purchases to replace the ETEF will only begin to occur now that the announcement of the Fund's closure has been made. This will create further upward pressure in the market at a time when the underlying supply/demand balance is tightening, and yield expensive hedge portfolios compared to historical levels.

The implications of this policy change will need to be assessed in the context of the relativity between hedge costs and the ETEF strike price. As developed more fully in section 4.2.6, EnergyAustralia recommends that IPART advise the NSW Government to set the ETEF strike price at the same level as the energy cost allowance underpinning the regulated retail tariffs. Where these two values are aligned, the risk implications of the ETEF roll-off will be sharply diminished.

2.2 COAG endorsement of phasing out of retail price regulation

The Tribunal seeks comment on:

- the extent of competition in the NSW retail electricity market
- the appropriate form of regulation given Governments' aim to phase out energy retail price regulation.

The NSW mass market is not as actively competitive as other states such as Victoria and South Australia, as measured by customer churn.

However, competition exists and will increase when regulated retail tariffs are set at efficient, cost-reflective levels.

The phase out of retail price regulation is best facilitated by a light-handed form of regulation such as a Target Average Price Cap or 'tariff basket' approach.

EnergyAustralia has not conducted a review of the extent of competition in the NSW retail electricity market, choosing to leave this analysis to IPART. EnergyAustralia believes that IPART will need to make an assessment as to the extent of competition in NSW so as to satisfy its obligations under section 43EB(2)(b) of the Electricity Supply Act which states the Tribunal must have regard "to the effect of the determination on competition in the retail electricity market."

IPART will need to form a view as to the current level of competition in the retail electricity market before it can make an informed assessment of the effect of its Determination on competition in this market.

Although appreciating that customer churn alone is not an accurate indicator of competition, EnergyAustralia notes that comparative analysis performed by the ICRC suggests Victoria and South Australia have significantly higher churn rates than NSW¹. This does not necessarily suggest that competition in NSW is ineffective. Indeed, based on the current level of competition, we believe that the NSW market is 'primed' for strong competition. EnergyAustralia holds the view that the lower churn rates experienced in the NSW market relative to Victoria and South Australia are largely a function of the low margin environment that characterises the NSW electricity market. Truly effective competition will only be achieved when regulated retail tariffs are set at cost-reflective levels.

EnergyAustralia's experience in the market causes it to believe that the NSW market is on the cusp of vigorous competition in the energy markets. In EnergyAustralia's experience:

- there is a significant level of customer awareness of the competitive energy market; and
- competitive retailers are present in the marketplace and primed for increased activity.

However, margins are currently not reflective of the risks involved to allow competitive retailers to discount prices sufficiently to entice small customers to move from the current "safe haven" of regulated retail tariffs, and also insufficient to encourage vigorous competitive activity on the part of other retailers.

AEMC assessment of effective competition

At the national level, clauses 14.10-14.16 of the Australian Energy Market Agreement (AEMA) set out all parties' agreement on the phase out of retail price regulation for electricity and natural gas where effective competition can be demonstrated. The AEMA states that the Australian Energy Markets Commission (AEMC) will assess the effectiveness of competition for the purpose of retention, removal or reintroduction of retail energy price controls (clause 14.11(a)). Clause 14.11(c) notes that the AEMC will publicly report on its assessments of effective competition in which it will provide advice to each jurisdiction.

The AEMA (clause 14.11(a)(i)) states that the AEMC assessment will be conducted in accordance with criteria for assessing the effectiveness of competition, which will be developed by the MCE in consultation with the AEMC and other interested parties based on the principles/indicators set out in Annexure 3 of the AEMA.

The MCE has recently completed a consultation process addressing the criteria and indicators to be utilised by the AEMC for determining whether competition is effective in jurisdictional retail energy markets. Recognising that there is no universal benchmark against which effective competition can be demonstrated or assessed, the AEMA sets out the following criteria:

- Customer experiences for competition to be effective, customers must be aware of different retailers and perceive that they can make price comparisons – data compiled from customer surveys.
- Customer switching² transfer rates can indicate customer interest and activity in the competitive market – available from market data.
- Price and non-price offers evidence that suppliers are actively competing by
 offering innovative products that meet customer needs compiled from retailer
 surveys and 'mystery shopper' surveys.

 ¹ Issues paper—Retail prices for non-contestable electricity customers, ICRC, November 2005, p10
 ² Importantly, the MCE Consultation Paper recognises that customer switching includes the number of customers accepting market offers from the incumbent retailer.

- Entry and exit of suppliers number of competing suppliers and changes in the number of suppliers can indicate the degree of competition – available from market data.
- Market share market share and changes in market shares are an indicator of market structure and dynamics – available from market data.
- Barriers to entry the threat of new entry creates pressures to reduce prices and improve services – to be ascertained by analysis.

Recognising the MCE Consultation Paper's acknowledgement of the need to examine jurisdictional differences, EnergyAustralia considers that there are broad benefits to be gained in aligning the IPART review of the effectiveness of competition with that to be undertaken by the AEMC.

In addressing the relationship between the policy aim to remove energy retail price regulation and the form of that regulation, EnergyAustralia considers that a suitable goal, at the end of this price regulation period, is for Government to be confident that there is no longer a need for retail price regulation in electricity, although there may be some residual scope for some form of safety net tariff for vulnerable customers.

This helps us set targets in terms of cost reflective pricing and make decisions on mechanisms we can use to promote competition in order to give Government the confidence that customers will not be subject to potential abuses of market power.

With this goal in mind, EnergyAustralia supports a light-handed form of price control such as the "Target Average Price Cap" approach. EnergyAustralia believes that this best facilitates a considered transition towards an environment where full retail price deregulation can become a reality.

EnergyAustralia's comments on the form of regulation are discussed in more detail in section 3.

2.3 COAG's agreement to roll out time-of-use meters

The Tribunal seeks views on:

- What problems have arisen during the current determination as a result of network roll out of time-of-use meters
- How the new determination could be used to facilitate the transition to time-ofuse tariffs
- How the Tribunal should consider the impact of its determination on demand management.

The new Determination can facilitate the transition to ToU tariffs by removing second-order constraints around customer bills.

Allowing the full pass through of network charges in retail tariffs is the best way to ensure network demand management price signals reach the end-user.

At their meeting of 10 February 2006, CoAG Ministers decided:

Decision 2.2

Governments will improve the price signals for energy investors and customers by: (a) committing to the progressive roll out of electricity smart meters to allow the introduction of time of day pricing and to allow users to respond to these prices and reduce demand for peak power;

EnergyAustralia supports the rollout of interval meters as a critical tool to deliver price signals to customers to allow them to more efficiently manage their electricity consumption and energy costs.

Experience of the current determination

The current Determination includes a number of features that have inhibited the movement to time of use tariffs to take advantage of the interval meter rollout.

The current Determination appears to inappropriately align the concepts of "off peak" and "controlled load" consumption. While much of the controlled load (in particular hot water) is consumed in off peak periods, this is not to say that all off-peak consumption arises through controlled load.

For example, a ripple controlled water heater may consume the bulk of its energy in off peak periods, but does not require any behavioural modification on the part of customers. However, a customer choosing to run the dishwasher at night to take advantage of lower off peak tariffs requires a separate "off peak" tariff to send the behavioural signal.

For the price signals of ToU pricing to be effective in encouraging behavioural changes, it will be important for the current Determination to distinguish between "controlled load" and off peak consumption.³

³ Controlled load also affects the calculation of the Net System Load Profile as discussed in section 4.1.

Tariff controls

A total bill side constraint would significantly curtail retailers' ability to move customers onto ToU tariffs. While the total bill constraint would apply to the customer bill at the same *level* of consumption, the total bill on a shift to a ToU tariff will also depend on the customer's *pattern* of consumption.

Limits on tariff movements, and in particular a total bill price constraint, therefore limit the extent to which the ToU peak, shoulder and off peak tariff components can diverge from the flat tariff. In the extreme, assuming the flat tariff is the same as the shoulder period tariff, the side constraints would limit the ability to increase the cost reflectivity of tariffs to increasing only the peak component by the CPI-X side constraint.⁴

This would then inhibit the retailer's ability to raise sufficient revenue. The side constraint was designed to apply to a flat tariff, and would therefore apply to all consumption. Were the retailer constrained to increasing only the peak component, then its revenues would only increase by the price rise on a proportion of consumption (ie that consumed during the peak periods).

This issue has been further complicated by IPART's incorrect classification of off peak load as controlled load (that is, the ToU rates were effectively classified as peak, shoulder and controlled load). With this nomenclature in place, it was not possible to reduce off peak rates to allow an increase in peak energy rates without reducing the tariff applicable to all controlled load across the entire business. While the revenue impact of this would have been catastrophic (about a 15% reduction), it is also important to note that the controlled load tariff is well below cost reflectivity. This error severely limited the ability to move ToU tariffs toward cost reflectivity. ⁵ Moreover, had this situation prevailed, the retailer would not have been able to accommodate changes in the network ToU tariffs. EnergyAustralia applauds IPART's pragmatic solution to this matter.

EnergyAustralia acknowledges the need to be aware of the implications of price changes and the impacts on customers. EnergyAustralia therefore proposes that customer impacts on a move from a flat to a ToU tariff could be measured, on average, by assuming the pattern of consumption reflected in the Net System Load Profile.⁶ This would allow some insights on customer impacts, acknowledging that

⁴ In order to be certain that the side constraint was not offended, the retailer would be forced to assume that all electricity was consumed during the peak period. It would not be possible to assume that there was any consumption in the off peak period such that a reduction in the off peak tariff could allow a commensurate increase in the peak period tariff.

⁵ EnergyAustralia acknowledges that IPART subsequently accepted that "controlled load" is separate and distinct from "off peak".

⁶ See the discussion on the correct definition of the NSLP in section 4.1.

some customers (those with relatively more peak consumption) would experience bill increases greater than the average, and that some customers (particularly those with relatively more off peak consumption) would experience bill decreases.

The current Determination also specifies the relevant time periods to which peak, shoulder, and off-peak pricing would apply. However, these specified time periods do not align to any of the retailers' practices. EnergyAustralia believes that this detailed specification is not necessary in light of its comments on the form of price control in section 3.2.

In the context of this price review, it will be important for standard retailers to allow price-regulated customers to take advantage of this technology by ensuring that standard retailers have the flexibility to

- introduce new cost reflective tariffs to make use of the information and communications capability of the interval meters, and
- to migrate customers onto those more cost reflective tariffs.

In order to facilitate a movement to time of use tariffs, the form of price control should continue to include an option for the retailer to move standard customers onto time of use tariffs where an interval meter is in place. This would be better achieved with no limits imposed on customer bills.

As discussed in section 3, this degree of flexibility would be consistent with a tariff basket approach to price control.

Demand management impacts

From a demand management perspective, EnergyAustralia considers that providing the correct pricing signals to customers is the most effective way of obtaining a demand response from the marketplace, which would have cost saving implications throughout the electricity supply chain.

In broad terms, the network benefits relate to the savings associated with reducing the level of capital expenditure required to meet peak demand whilst keeping network performance within acceptable limits. The retail benefits accrue with lower wholesale purchase costs available outside of peak times. To the extent that these price signals are embedded in network charges, it is imperative that these signals are not dampened by the operation of limits on individual price movements.

3 FORM OF REGULATION AND PRICE CONSTRAINTS

Clarity of terminology

EnergyAustralia has found that there is some scope for misunderstanding in the terms used in the current Terms of Reference, Issues Paper and common industry usage. For example, the term "N+R" is variably used to describe the notion that a target tariff is constructed by adding the network charge ("N") and the retail charge ("R") together. In other places the same term is used to describe the total bill ("N+R") side constraint, where the constraint is applied at the total bill level, including network charges. There is also some confusion as to whether the "N+R" mechanism is a form of revenue control or price control.

Similarly, the term "Weighted Average Price Cap" is generally interpreted from a network perspective, in which case the current application of the mechanism features rigorous backward-looking volumetric auditing and compliance requirements, and forward looking price movement signalling. While a streamlined WAPC methodology would be appropriate for the retail business, the additional compliance requirements (in particular the forward price signalling requirements) are unsuitable to a market-based setting.

In order to avoid confusion with other forms of regulation in the arena, EnergyAustralia has elected to nominate the specific features of its preferred form of regulation. Some of these features will be similar to those in the WAPC model; others will be similar to those found in the "N+R" or "Target R" approaches. For simplicity in this submission, we have collectively referred to our preferred set of regulatory features as the "Target Average Price Cap" form of regulation.

EnergyAustralia submits that its proposed form of regulation is consistent with the implied objectives of the Terms of Reference. Where there are tensions in these objectives, EnergyAustralia has considered that the over-riding intent should be to ensure that tariffs achieve full cost reflectivity by the end of the regulatory period.

EnergyAustralia's proposed "Target Average Price Cap" form of regulation is developed more fully in the following sections. In summary, EnergyAustralia proposes a form of regulation consistent with the Terms of Reference which features:

- minimal constraints on individual tariff movement to achieve cost reflectivity;
- pass through of uncontrollable and unforeseen costs; and
- administrative simplicity.

3.1 Broad options for the form of regulation

The Tribunal seeks comment from stakeholders on the regulatory approach that best meets the objectives for the review, the pros and cons of the options, and whether there are additional broad options or variations within the options that the Tribunal should consider.

EnergyAustralia believes that a Target Average Price Cap form of regulation is the preferred approach given its capacity to accommodate the features integral to the preferred form of regulation.

Objectives

The Terms of Reference imply a number of objectives that IPART should seek to achieve when setting regulated retail electricity prices for the 2007-10 regulatory period. EnergyAustralia believes that the primary focus of this review should be to ensure that prices achieve cost reflectivity by the end of the Determination. Prices will be cost reflective where:

- the cost allowances used to determine an efficient price adequately capture the true costs of supply, including a reasonable margin commensurate with the risk of the business; and
- the manner in which prices are set accommodates the complete transition to this efficient, cost-reflective price.

The two points above essentially differentiate between <u>setting</u> an efficient price and <u>achieving</u> the efficient price. This delineates the *form of regulation* from the *form of price control*. When defining the form of regulation, EnergyAustralia recommends that IPART focus on ensuring that the features of the form of regulation help <u>achieve</u> the efficient, cost reflective price.

EnergyAustralia considers that the form of regulation and the form of price control must be harmonised.

Under the current Determination, the "Target N+R" form of regulation aims to set a target tariff that, if achieved, will allow the retailer to recover its efficient costs and earn a fair commercial margin.

However, the form of price control acts to undermine the form of regulation by restricting the ability of the retailer to achieve the "Target N+R" tariff. This is particularly the case where there have been increases in the "N" component which have not been reflected in the "N+R" targets or constraints.

EnergyAustralia believes that the current form of regulation, the "Target N+R", has several deficiencies which have encumbered its ability to set regulated retail tariffs

with sufficient dexterity to achieve fully cost-reflective levels. These deficiencies are discussed in detail in section 3.1.1.

International experience

In order to offer a better alternative, EnergyAustralia believes it is valuable to examine regulatory decisions in other comparable jurisdictions⁷ to determine a 'best practice' approach that might be adopted. To this end, EnergyAustralia has conducted a desktop research project on the forms of regulation that would be applicable to the current review (see Appendix 2). In general, the research found:

- Internationally, it is highly uncommon for a retail business to be obliged to
 provide electricity supply to mass market customers at a fixed price, while being
 exposed to the volatile wholesale prices of the marketplace in providing that
 service;
- A variety of measures have been used to shelter the standard retailer from that volatility, including deferral accounts for electricity purchase costs, government indemnification for energy purchase costs, and electricity supply bidding mechanisms; and
- Retail prices include pass through mechanisms for those matters that are not within the retail business' control. In particular, network charges are almost unanimously subject to a pass through mechanism.

Each of the mechanisms to protect the standard retailer from market volatility would require some fundamental structural changes in the way the standard retailer market operates. EnergyAustralia considers it to be neither practical nor prudent to attempt to undertake significant structural changes for a regulatory framework that is expected to have a relatively short life.

Importantly, EnergyAustralia would not encourage introducing any complex lookback, deferral, or "unders and overs" account mechanisms. Any retrospective adjustment mechanism will be difficult to unwind with the declining regulated customer base, and prolong regulatory involvement in retail pricing.

Notwithstanding, there are features of regulatory decisions that are preferred and generally consistent with the objectives of the review, and these include:

- Clear separation of the regulation of retail from network pricing, with network costs and price changes passed through;
- For readily observable cost items outside the retailer's control, such as distribution losses and NEMMCO pool fees, a pass through factor should be written into the price control formula;

⁷ Where retail businesses are required to provide fixed price retail energy while being subject to the risks of wholesale costs.

- For material cost items associated with unforeseen events, general pass though provisions should be written into the Determination via a limited re-opener mechanism;
- Any constraints on pricing applicable to only the retail component of the price (ie no 'total bill" constraints);
- A fair estimate of the costs of obtaining wholesale supply for the regulated load;
- Recognition of reasonable retail operating costs; and
- A fair and sustainable retail margin consistent with the risks of the business.

Following the format of the Issues Paper, the remainder of this section will discuss the current "Target N+R" and WAPC approach to setting regulated retail tariffs in the context of achieving the objectives and characteristics above.

3.1.1 Setting target or maximum tariffs based on N+R

The Tribunal seeks stakeholder views on:

- Whether the N+R approach should be retained.
- Whether there are variations within the N+R approach which should be considered.
- What modifications could be made to the current N+R framework and/or incorporated in a revised N+R approach to meet the objectives implied in the Terms of Reference.
- How the N+R approach could be designed and implemented to better accommodate network tariff reform.

EnergyAustralia does not advocate the retention of the current "Target N+R" approach.

For "Target N+R" to be a suitable approach, IPART would need to remove total bill price constraints and restrictions on increasing individual tariffs deemed to be 'over-recovering' target price.

EnergyAustralia strongly supports a Target Average Price Cap form of regulation for retail electricity prices. However, if IPART continues to use "Target N+R" as the methodology for determining regulated tariffs, EnergyAustralia believes that a number of modifications would need to be effected to ensure that the requirements of the Terms of Reference are achieved and that standard retailers are not disadvantaged.

The elements of the "Target 'N+R" approach that could be retained, and those that should be modified or discontinued, are discussed briefly below and in more detail in Appendix 1.

Features to be retained

If IPART continued to set regulated tariffs under "Target N+R", EnergyAustralia submits that the following features should be retained:

- The level of price change controls is appropriately directed to the basket of <u>tariffs as a whole⁸</u> (rather than individual tariffs). Applying price constraints to tariffs as a whole will provide a substantially greater degree of flexibility in setting tariffs than applying these constraints to individual tariffs.
- The calculation of notional target revenue effectively relies on 'weightings' based on previous years' volumes. These are readily available.
- The simple and straightforward structure of the target tariff. The limited number
 of target tariff components (fixed, variable, off peak and extended off peak) is
 desirable as it offers the flexibility to construct regulated tariffs in such a manner
 as to pass through to customers the underlying cost to supply them. Adding any
 additional tariff components to "Target N+R", such as peak, shoulder and off
 peak for time of use pricing, inhibits the retailers' ability to move tariffs toward
 cost reflectivity, and adds an unnecessary degree of regulatory involvement.

These features are included in EnergyAustralia's proposed Target Average Price Cap form of regulation.

Suggested modifications

Should IPART decide to retain the current "Target N+R" form of price control, EnergyAustralia considers that the following modifications would be required:

- Total bill price constraints should be removed. The limits of price movements to a customer's bill (N+R) have greatly inhibited the transition to fully cost-reflective regulated retail tariffs. This is further addressed in section 3.2.
- Standard retailers should not be required to demonstrate to IPART that they
 have not increased any particular tariff beyond cost-reflective levels. The
 requirement to prove cost-reflectivity at the individual tariff level constitutes
 unnecessary regulatory involvement. If the concern is that any one tariff or tariff
 component may be consequently 'over-priced', then comfort should be taken
 that competition will effectively ensure that these customers are quickly lost to
 other retailers.
- The target revenue formula (CPI + x) could also include a separate factor for uncontrollable and readily-available costs such as NEMMCO pool fees and distribution line losses. This is further addressed in section 4.10.1.
- Addition of a limited re-opener feature to accommodate exogenous and unforeseen changes outside the control of the retail business. This would

⁸ "The Tribunal...amended its [draft] decision so that the control is based on revenue from *tariffs as a whole*." *NSW Electricity Regulated Retail Tariffs 2004/05 to 2006/07*, Final Report and Determination, IPART, June 2004, p 6

function similar to that in place for the network businesses, addressing such events as a change in tax event, change in regulation event, etc. This is discussed in more detail in section 4.10.1.

Accommodating network tariff reform

There is a natural incentive for a retailer to formulate a tariff in a manner that reflects the underlying structure of the network charge. Complexities arise where the network and retail tariff structures are misaligned and relate to, amongst other things, the reconciliation in network revenue settlements and the resultant need to distinguish between different retail and network rates in the customer bill.

Hence, there is an inherent incentive to follow the structural changes in network tariffs in order to avoid administratively-costly system complexities.

This will require the standard retailers to have sufficient flexibility to introduce new tariffs or modify existing tariffs to accommodate innovation in network tariff design. One example is the EnergyAustralia Network's trials on Dynamic Peak Pricing, in which customers could be subject to high network charges during the period of a notified peak event.

As the standard retailer cannot influence the choice of tariff applied by the network, it will be important for the standard retailer to have the capacity and flexibility to cope with these changes in network tariffs and network tariff structure.

One of the major implications of network tariff innovation is that standard retailers will need to invest in billing systems to cope with a myriad of network tariffs and varying network tariff structures. EnergyAustralia considers that, where the obligation to serve the standard retail customers is imposed upon the standard retailer, it is incumbent on the regulatory framework to ensure that the standard retailer is not disadvantaged in meeting its obligations to the marketplace.⁹

Consistent with the separation of retail and network regulation, EnergyAustralia considers that there is significant merit to the market in segregating network and retail costs on the customer bill. This will increase the transparency of the network and retail charges and increase the ability of competitive retailers to compete for the retail component of the bill.

To this end, EnergyAustralia wishes to engage with IPART to include funding in the current regulatory framework for the costs to upgrade the billing system to cope with these changes in network tariffs. EnergyAustralia considers that the cost impact on

⁹ It has been EnergyAustralia's experience that the preponderance of investment in retail systems has been driven by compliance obligations rather than commercial initiatives. The obligation to provide supply to standard retail customers in the face of a myriad of network tariffs is just such a cost driver.

customers will be smallest if this upgrade is conducted in the early days of the regulatory period, when there are more customers over which to recover these costs.

Looking to the future, EnergyAustralia envisions that there will still be a residual need for some form of regulated tariff for the few remaining customers for whom a market offer is not forthcoming. It would be reasonable to expect that these customers, state-wide, might be served by a single standard retailer to allow for sufficient economies of scale, reduce administrative complexity, and focus CSO involvement. This investment in the billing system under the current regulatory framework would reduce the costs of providing service to these customers for many years to come.

3.1.2 Applying a weighted average price cap

The Tribunal seeks views on:

- Any implementation issues associated with introducing a weighted average price cap.
- How the framework can be used to promote cost reflectivity and demand management objectives.
- Whether a weighted average price cap should be applied to the retail component of tariffs only, and any issues associated with this approach.

EnergyAustralia believes that a form of WAPC could be applied.

A WAPC could only apply to retail price regulation if it remains simple to administer, applies only to the 'R' component of tariffs, and has no second-order side constraints.

EnergyAustralia believes that a form of WAPC is consistent with its proposed methodology to allow the standard retailers to transition regulated retails tariffs towards cost-reflectivity. However, the WAPC would need to be constructed in such a way as to ensure it best delivers the benefits of efficient pricing. The following sections will discuss, at a high level, the requisite features of EnergyAustralia's preferred form of retail WAPC. More detail can be found in Appendix 1. EnergyAustralia believes that these features are consistent with the requirements of the Terms of Reference.

Complete tariff-basket approach

The level of price change controls should be directed towards a complete basket of tariffs, as opposed to individual tariffs or even 'sub baskets' for, say, business and residential tariffs. Applying price constraints to a complete tariff-basket will provide more flexibility in setting tariffs than applying these constraints at a more granular level.

Applies to 'R' component of regulated tariffs

EnergyAustralia believes strongly that any WAPC be applied to the retail component of tariffs only. Broadening its application (to N+R) would have the potential to override IPART's current NSW Electricity Distribution Pricing Determination. Indeed, it could also over-ride the following Distribution Determination which will commence in 2009/10, the final year of the next retail Determination. EnergyAustralia believes it is incumbent on IPART to direct the focus of its review on regulated retail tariffs and charges only, so as to avoid encroaching on and potentially distorting the intent of current and future Determinations for the NSW transmission and distribution networks. Furthermore, adding 'N' into the price control equation would be analogous to the total bill "N+R" price constraint which, as we have argued in section 3.1.1, should be discontinued.

Administrative simplicity

In order to implement a WAPC, it will be necessary to define the volumetric 'weights' to be used in the WAPC formula. When determining the appropriate weights, IPART will need to be mindful of the level of administrative complexity and regulatory involvement that will result.

One of the main concerns in introducing a WAPC similar to that applicable to network tariffs is the level of backward-looking volumetric auditing required. EnergyAustralia understands this requirement in the context of the network business, given the high proportion of fixed costs in the network revenue requirement.

However, given that retail costs are predominantly constructed at the unit level, the need for backward-looking volumetric auditing is largely eliminated.

EnergyAustralia advocates a weighting approach that is relatively easy to adopt and administer; it must also minimise regulatory involvement. This is consistent with the key features that should characterise the proposed form of regulation which in turn align with the Terms of Reference.

EnergyAustralia submits that the most appropriate weights to apply are the volume weightings developed using the methodology inherent in the current "Target N+R" approach, where prices for the current year are based on volume and customer number information from the preceding year. Incorporating current values for the upcoming year will also allow the weights used to be the most currently reflective of the changes in customer mix caused by the continued erosion of the regulated retail customer base.

Pass through of uncontrollable costs in price control formula

EnergyAustralia believes that it is inappropriate to subject a standard retailer to the risk of a potential windfall gain or loss associated with incorrectly estimating cost

allowances. Where it is accepted that these costs are uncontrollable and can be extracted from independent, readily-available information, then these costs should be separated out and included separately in the price control formula. Examples of such 'uncontrollable' costs include distribution line losses and NEMMCO pool fees. EnergyAustralia's proposed pass through mechanism is detailed in section 4.10.1.

EnergyAustralia also recommends that limited re-opener pass through provisions apply to exogenous, unforeseen events which impose material costs on the standard retailers, similar to that in place for the network business. This is also discussed in more detail in section 4.10.1.

Demand management

EnergyAustralia has an inherent incentive to send (demand management) price signals to customers as a result of the nature and level of its energy purchase costs. The purchase cost of wholesale electricity during 'peak' periods is significantly higher than 'off-peak' periods. Encouraging customers, through price signals, to use electricity during an 'off-peak' period will reduce the retailer's overall wholesale purchase costs. Ultimately this will be reflected in lower energy costs to customers.

3.1.3 Establishing new opt-in regulated tariffs

The Tribunal seeks input from stakeholders on:

- Whether it is appropriate to apply a regulatory approach that requires customers to 'choose' to be supplied on a regulated tariff and the implications of doing this.
- What measures could be taken to resolve the customer protection issues associated with such an approach, and who should take responsibility for taking them.
- Whether customers could continue to be supplied on a standard form contract if they do not choose to be supplied on the new regulated tariff.

EnergyAustralia believes there are a number of implementation issues and problems, particularly in regard to the uncertainty of ETEF load, that make new 'opt-in' tariffs an untenable option for this regulatory period.

EnergyAustralia supports the move towards retail price deregulation. However, it does not believe there is a sufficient level of preparedness in the market to cope with a sudden major change in the form of regulation such as the suggested 'opt-in' framework. Specifically, the inherent uncertainty around contracting wholesale purchases for a major (and unknown) shift in load before the commencement of the 2007-10 regulatory period renders the opt-in approach unsuitable. That uncertainty can be accommodated through contract optionality, but this would be priced into the contract at a significant premium, rendering the 'opt-in' approach financially untenable.

EnergyAustralia prefers a managed transition approach to achieving price deregulation. EnergyAustralia does appreciate, however, that an 'opt in' tariff may be a useful construct once all regulated retail tariffs reflect the true cost of supply and default retail price controls are removed. EnergyAustralia is currently investigating an "opt in" qualification-based tariff (together with other possible options) for genuinely disadvantaged customers.

Section 34 of the Electricity Supply Act and sections 12 and 13 of the Electricity Supply (General) Regulation 2001 currently provide for new or moving customers to elect to be supplied by the standard retailer under a standard form customer supply contract, at the regulated tariff. In this respect, the regulated tariff is already an opt in tariff for a significant proportion of the customer base.

EnergyAustralia considers that the time to consider the broader application of an "opt-in" regulated tariff is at the end of this regulatory control period, by which time (presuming the regulatory framework is sufficiently amenable to competition) many customers will have already made a choice of retailer.

It must be recognised, however, that an opt-in tariff for disadvantaged customers would presumably recover less revenue than the cost to supply. For a standard retailer to provide this tariff, any related revenue shortfall would need to be recovered through other tariffs being greater than cost reflectivity. The "Target R" regime restricted the retailers from raising tariffs above cost reflectivity, and therefore inhibited the ability of the retailers from providing a reduced tariff to disadvantaged customers.

EnergyAustralia is currently investigating this matter.

3.1.4 Monitoring prices where competition is considered 'effective'

EnergyAustralia believes that a goal of this price review should be to develop costreflective tariffs that will encourage a healthy level of competition in the marketplace, such that Government will be confident in introducing a light-handed price monitoring regime at the end of the forthcoming regulatory period.

As discussed above, EnergyAustralia believes that the NSW energy market is primed for competition. Should this next retail price Determination result in reasonable retail margins being available to the competitive market, then price monitoring should be a viable option following the 2007-10 regulatory period.

EnergyAustralia has been an active participant in the ICRC's review of the ACT Transitional Franchise Tariffs (TFTs), in which this question was addressed. EnergyAustralia would be pleased to provide information to IPART to help inform its view on the current effectiveness of competition.

3.2 Price constraints

The Tribunal seeks views on whether and at what level it should set price limits, how price limits interact with the form of regulation, and whether it is appropriate to remove price limits on obsolete tariffs.

EnergyAustralia submits that no price limits should be imposed on individual tariffs, including obsolete tariffs. Imposing tariff- or customer-specific price limits will serve to encumber the movement to fully cost-reflective tariffs.

3.2.1 Limiting increases to customers' bills

The Tribunal seeks comment on:

- Whether it should impose limits on increases to customers' bills.
- Whether there are alternative approaches that the Tribunal should consider.
- Experiences with the customer bill price limit in the current determination.
- Whether different limits should be applied to different customer classes, and why.

EnergyAustralia submits that, as both the network and retail components of the bundled price are subject to robust regulatory oversight, no secondary constraints should be placed on movements in the total bill.

EnergyAustralia considers that a Target Average Price Cap approach, with an overall constraint on price movement, will place sufficient protections in place to avoid customer price shocks.

The current bill limit, particularly in light of network charge increases, has severely curtailed the retailers' ability to move the bundled tariffs toward cost reflectivity.

Any tariff constraints, particularly constraints placed on some customer prices and not others, will curtail the ability of the retailer to move tariffs towards cost reflectivity.

During the current Determination, EnergyAustralia has found that the imposition of customer bill price constraints has prevented the achievement of efficient target prices. The diminished scope to adjust retail prices in the face of significant increases in network prices and a binding N+R price constraint has severely restricted EnergyAustralia's ability to recover its costs and earn a fair margin on its activities.

EnergyAustralia understands that placing a limit on a customer's total bill is targeted at the consumer protection issues associated with any price control review. EnergyAustralia is aware of, and sympathetic to, the effect of price increases on customers in general and vulnerable customers in particular. However, as discussed throughout this submission, EnergyAustralia does not believe that the Determination should include a limit on increases in a customers' bill.

EnergyAustralia considers that customer bill side constraints have, over a number of years, largely served the purpose of protecting vulnerable customers against any severe price shocks that might otherwise have been felt by price increases each year. That was their purpose.

However, many customers have benefited from this form of price increase protection who, arguably, do not need that protection - customers consuming large amounts of discretionary electricity and who can afford to pay. The current side constraints have prevented the standard retailers from applying cost reflective prices to customers who can actually afford such cost reflective pricing. As a customer protection mechanism, the side constraints are a very blunt tool indeed.

It is also not obvious that smaller (and particularly vulnerable) customers have benefited from the side constraints. These smaller customers are not protected against price increases that might be more dramatic for them proportionally.

EnergyAustralia strongly believes that vulnerable customers are better protected by schemes specifically established to address their needs. For this reason, EnergyAustralia has developed a number of programs to help customers who have difficulty in managing the payment of their electricity bills, as discussed below. EnergyAustralia proposes to further develop these schemes and seeks input in support of its proposal to remove the N+R total bill side constraint.

EnergyAssist program

Through the EnergyAssist program, EnergyAustralia informs and assists customers to manage the cost of their energy usage as well as providing them with flexible payment options and channels tailored to meet their individual needs. In addition, EnergyAssist also offers:

- Extra time for payment;
- Protection from disconnection;
- Referrals to government and community support services;
- Useful payment options to help with budgeting;
- Added incentives such as bonus payments (for every 6 payments a customer makes, EnergyAustralia will make a bonus payment equal to their instalment amount);¹⁰
- Information on rebates for people on pensions; and

Quarterly Newsletters full of helpful information, including energy saving messages.

One of the major objectives of the EnergyAssist Program is to develop positive long term relationships with community partners for EnergyAustralia's residential customer base. The EnergyAssist Program has developed strong links with community welfare agencies to ensure that customers suffering financial and social distress are referred to the most appropriate point of assistance.

Representatives from the EnergyAssist Program are also involved with or participate directly on a number of community and stakeholder committees that deal with energy issues impacting on low income and disadvantaged customers. These include: The Salvation Army, Centacare, the Energy & Water Ombudsman of NSW, the Smith Family, NCOSS and the Public Interest Advocacy Centre.

Centrepay

Centrepay is a free direct bill-paying service offered to Centrelink recipients. Through Centrepay customers may elect to pay bills by having a regular amount deducted from their Centrelink payment. Customers who find difficulty in managing their energy bills as and when they are due may benefit from organising small regular payments to their energy account through Centrepay. It is free for Centrelink recipients and has become a very useful budgeting tool. It can be used with all energy service providers, rental agencies, some telephone providers, Department of Housing, local councils and some other service providers.

Energy Concessions

Energy Concessions are a form of rebate on the cost of energy. These concessions or "rebates" are provided by the NSW Government to assist low income and marginalised customers. The policy and funding for the concessions are administered by the Department of Energy Utilities and Sustainability (DEUS).

There are three different types of concession rebates available as follows:

- Pensioner Energy Rebates \$112 per year;
- Life Support Rebates ranging from \$73 \$606 per year depending on the particular type of prescribed equipment required; and
- Energy Accounts Payments Assistance Scheme (known as EAPA) This is a scheme offering vouchers (each worth \$30) for low income and marginalised customers in crisis and requiring financial assistance to pay their energy bill. The vouchers can be obtained from a number of charity and community organisations.

¹⁰ It should be noted that this is funded by EnergyAustralia with no form of government support.

No Interest Loans Scheme (NILS)

EnergyAustralia also funds a scheme that provides loans to people on low incomes to buy essential household items, such as washing machines. A typical NILS loan is for around \$600-\$1,000 and repaid over 8-15 months. As loans are repaid, the money is lent out again to other people. EnergyAustralia provided funding to get this scheme started some years ago, and provides ongoing funding to assist in the administration of this scheme.

In summary, EnergyAustralia considers that its targeted EnergyAssist scheme provides better and more comprehensive protection to vulnerable customers without distorting price signals to the broader marketplace. IPART should be able to rely on the assistance programs and other benefit schemes as the mechanism to address concerns of price shocks to vulnerable customers, rather than imposing bill constraints that inhibit flexibility in the tariff-setting process.

3.2.2 Limiting increases to individual tariffs

The Tribunal seeks comment on:

- Whether it should impose limits on increases to individual tariffs.
- Whether there are alternative forms of price limits it should consider.
- Whether different limits should be applied to different tariffs or tranches of tariffs, and why.

EnergyAustralia does not believe there are alternative forms of price limits it should consider. The average price restrictions under the Target Average Price Cap, coupled with competitive market forces, provide a sufficient limit on tariff increases.

Consistent with the WAPC or tariff basket approach, EnergyAustralia is strongly of the view that the responsibility for setting tariffs should rest with the retail business. In this form of regulation, it would be inappropriate for the regulator to impose limits on any particular tariff or tariff class in addition to the discipline imposed by the overall WAPC or tariff-basket approach.

EnergyAustralia does not believe there are alternative forms of price limits it should consider. The WAPC is a price constraint as it will, by definition, limit the extent to which average retail prices can move from one year to the next. Similarly, the current "Target N+R" places a limit on the amount of notional target revenue that can be earned which in turn limits the extent to which average retail prices can change.

Competitive market forces operating in a market with a limited number of regulated tariff offerings will also prevent the need for IPART to impose limits on individual tariff increases. Where a standard retailer attempts to set a tariff above its cost-reflective level, then customers on this 'over-priced' tariff will be quickly lost to other retailers.

In principle, EnergyAustralia does not support an approach to limiting different tariffs and tranches of tariffs. Doing so requires further regulatory oversight than is currently the case. EnergyAustralia supports refinements to the regulatory framework in a way that supports a transition to full price deregulation which requires less, rather than more, regulatory intrusion.

3.3 Assessing the options

The Tribunal seeks comment on the most appropriate form of regulation, having regard to the Terms of Reference.

In order to avoid confusion with other forms of regulation in the arena, EnergyAustralia has elected to nominate the specific features of its preferred form of regulation. Some of these features will be similar to those in the WAPC model; others will be similar to those found in the "N+R" or "Target R" approaches.

For simplicity in this submission, EnergyAustralia's preferred form of regulation is referred to as the "Target Average Price Cap".

In summary, EnergyAustralia submits that its proposed form of regulation is consistent with the implied objectives of the Terms of Reference and features:

- A fair estimate of the costs of obtaining wholesale electricity supply for the regulated load;
- Recognition of reasonable retail operating costs;
- A fair and sustainable retail margin consistent with the risks of the business;
- Clear separation of the regulation of retail from network pricing, with network costs and price changes acting as a pass through;
- For cost items outside the retailer's influence, such as distribution losses and NEMMCO pool fees, a pass through factor should be written into the price control formula;
- For material cost items associated with unforeseen events, general pass though limited re-opener provisions should be written into the Determination;
- The regulated price path based on the average of retail tariffs, allowing the retailer scope to manage its individual tariffs to that average control;
- A transitional price path designed to achieve retail cost reflectivity over the term of the current price determination;
- Any constraints on pricing applicable to only the retail component of the price (ie no 'total bill" constraints);
- Any constraints on price movement should be applied at the aggregate, rather than individual tariff or component level; and

• Scope to introduce new tariffs and to move customers onto those tariffs as appropriate.

The Tribunal seeks views on the appropriate level for each of the relevant costs and on how the Tribunal should directly or indirectly consider that cost in determining regulated tariffs.

4.1 Long run marginal cost of electricity generation

The Tribunal seeks views on:

- The appropriate level of LRMC to be included in regulated retail tariffs.
- How and whether the Tribunal should recognise projected future changes in net system load profiles and what these profiles are likely to look like in 2010.

The role of LRMC is unclear from the Terms of Reference. EnergyAustralia believes LRMC has no direct relationship to the energy purchase costs faced by a retailer in the short to medium term and therefore serves no useful purpose in determining retail prices for the next 3 years.

The Tribunal should recognise the recent correction to EnergyAustralia's NSLP.

Role of LRMC in regulated prices

The Long Run Marginal Cost of Electricity Generation in NSW report prepared for IPART (February 2004) gave a very broad range of costs from \$35.16/MWh for the low scenario to \$58.32/MWh for the high scenario. This broad range highlights the difficulty and risk in using the LRMC approach. The LRMC cannot be readily observed and so exists only as a theoretical construct.

Notwithstanding that the role of LRMC is unclear from the Terms of Reference, EnergyAustralia engaged McLennan Magasinik Associates (MMA) to undertake an analysis of the appropriate measure of the long run marginal cost of new entrant generation as referred to in the Terms of Reference.

Importantly, EnergyAustralia believes LRMC has no direct relationship to the energy purchase costs faced by retailers in the short to medium term and consequently serves no useful purpose in this determination. Retailers are exposed to the market price of hedging the mass market load and consequently EnergyAustralia believes the market price of hedging should be the basis of the energy purchase costs used for this determination.

To cover the risk of contract price movements EnergyAustralia submits that it is necessary to ensure that a sufficient risk premium is allowed for in the energy cost provision.

Defining the Net System Load Profile

The Terms of Reference require "...recognition of Net System Load Profiles (NSLP's) for each standard retailer...". We believe that this provision is intended to acknowledge that the load shape and therefore energy cost for regulated customers is different in each of the distribution areas, as distinct from the common cost base used in the current determination.

While the NSLP is unique for each distribution area and highlights the differential energy cost in each distribution area, it is not the complete picture. The NSLP specifically relates to customers with accumulation¹¹ meters on principle tariffs [ie. not controlled load]. However regulated customers also have controlled load tariffs [eg. Off Peak Hotwater] which are separately metered with accumulation meters but purchased on the relevant controlled load profile [CLP] rather than the NSLP. There is also an increasing number of customers with interval¹² metering whose individual profiles are unique.

The only true picture of the regulated load¹³ is the data submitted to the ETEF Administrator for settlement of the ETEF. Calculating this profile is not trivial as the NSLP is published in units of Mega-Watts [MW], while the CLP is unit-less. Also customers with interval meters have individually unique profiles. The correct load shape for the regulated load requires calculations at the customer level to correctly account for the NSLP, CLP and interval metering. The regulated load provided to the ETEF administrator correctly accounts for all of these issues and should be used as the basis for assessing energy costs in this determination. Note that for each standard retailer their embedded power purchases need to be added back in to the regulated load submitted to the ETEF administrator.

Future changes in the Net System Load Profile

Prior to 13 August 2006 NEMMCO had calculated EnergyAustralia's NSLP including the aluminium smelter at Kurri Kurri. Based on information provided by EnergyAustralia, NEMMCO has now removed the smelter from the EnergyAustralia NSLP. EnergyAustralia can provide historic data, with the smelter removed, to IPART.

¹¹ Accumulation meters are also known as Type 6 meters.

¹² Interval meters are also known as Type 5 meters. These meters record energy consumption at half-hourly intervals and are being deployed to support EnergyAustralia Network's 'Time of Use' tariff roll-out.

¹³ The Minister's Terms of Reference refer to "the load profile of customers remaining on regulated retail tariffs".

EnergyAustralia's network business is also deploying Type 5 meters to customers below 160 MWh pa. Customers with load shapes better than the NSLP are more likely to be offered (and switch to) a contestable contract, whilst customers with load shapes worse than the NSLP are likely to remain regulated. Thus the load shape of the regulated base can be expected to become more expensive over the period of the Determination. This will impart costs on the standard retailer in two ways:

- The size of the load to be hedged will become smaller, increasing hedge costs per unit;
- The load to be hedged will become "peakier" increasing the cost of obtaining hedge cover.

4.2 Hedging, risk management and transaction costs

The Tribunal seeks comments on:

- The appropriate level of hedging, risk management and transaction costs for inclusion in regulated retail tariffs.
- Whether the concepts of LRMC and hedging are compatible and how any relationships should be considered.
- Whether the Tribunal should consider hedging costs against the pool price or only allow costs for hedging above the LRMC estimate.
- Retailers' experience in hedging load for customers less than 160MWh per annum in NSW and hedging in other relevant markets.
- What impact the phasing out of the ETEF is likely to have on hedging and risk management costs over the determination period.

4.2.1 Hedging, risk management and transaction costs

In line with the IES report on Wholesale Electricity Costs Estimate for the Essential Services Commission of South Australia (24 October 2003), when modelling a retailer's hedging costs the model needs to consider:

- the cost of forward contracts;
- a retailer's contracting strategy;
- the timing of the writing of the contracts;
- the cost to the retailer when over or under contracted (hedge mismatch cost);
- an assessment of other risks that retailers face such as force majeure and credit risk; and
- add on amounts for various pass-through costs.

We would recommend that the following method be used to estimate the base hedging cost:

- Average the load within peak/off-peak within calendar quarters for the NSLP shape and use the AFMA forward curve for peak and off-peak offer prices;
- Assume a strategy of hedging to the average load with swaps, and hedging from the average load to the maximum load with \$300/MWh caps using closing price data from the SFE. This technique can be enhanced by optimising the swap position; and
- Using historic pool price and actual load data the premium for hedge mismatch cost can be calculated and adjusted to the level of forward volatility inherent in the forward cap premiums.

To mitigate the risk of movement in contract prices, retailers usually hedge [buy] at the same time they are selling to customers. In practice, market prices are signalled internally through 'trading books' which follow market movements and flow directly into customer pricing.

However, in relation to this determination, the sale price for all regulated customers will be set in advance with no hedges [except for ETEF] in place. Therefore any assessment of hedge costs must be based on current NSW contract prices plus a premium to cover the risk of movement in the forward price prior to hedges being written. Notably, all NSW standard retailers will be going to market simultaneously to replace ETEF, and the extra buying volume in the market will push the contract price up significantly. In a somewhat illiquid market, this price increase over the current curve could be substantial.

In addition to this amount must be added the costs associated with operating the energy trading function. This would include the facilities and communications costs of the trading room itself, plus the salary and related costs of the energy traders.¹⁴

As developed in section 4.2.6, EnergyAustralia recommends that the ETEF strike price be set equal to the energy cost allowance underpinning the outcome of this determination.

4.2.2 Are LRMC and hedging compatible and how any relationships should be considered

The 'LRMC of a new entrant generator' is a theoretical construct not readily observable in the market. Theoretically, LRMC will equate to hedge costs in the very long term. However, for the purpose of understanding the cost of energy purchases that a retailer is exposed to in the short- to medium-term, one must turn to the hedge market. Within the 3 year horizon of this next price determination, hedge costs are independent of LRMC.

¹⁴ These costs have been subject to international benchmarking with the MMNE operating costs in section 4.3.3

The price of flat swaps relate to a forward view of average spot prices, while the price of cap hedge products relates to spot price volatility and supply scarcity for these products in NSW. Since NEM start, average NSW annual spot prices have varied $\pm 33\%$ largely due to the number of price spikes [eg prices above \$1,000/MWh]. Prices spike at around one hundred times higher than the median price, and do not inherently reflect LRMC. These price spikes occur less than 0.3% of the time, yet contribute over 20% to the annual average spot price. Therefore hedge prices are driven not by LRMC, but by the level of price spike activity in recent history.

Price spikes occur when the supply/demand balance is tight as can occur during extremely hot or cold weather, due to generator failure or transmission constraints.

The non-storable nature of electricity and the lead-time to build new generation capacity permit these price spikes to occur and effectively allow a hysteresis to exist between spot prices and LRMC.

In summary, in the short- to medium-term, and certainly with the 3 year horizon of this next price determination, hedge costs are independent of LRMC.

4.2.3 Whether the Tribunal should consider hedging costs against the pool price or only allow costs for hedging above the LRMC estimate.

As discussed above, the cost of a hedge portfolio is not necessarily related to LRMC in the short to medium term. The actual exposure of a retailer is a function of hedge costs & pool costs, which will generally come at a premium to LRMC. If LRMC must be used as a starting point, the hedge cost as a premium could potentially be derived.

However, the concepts of hedge costs and pool pricing align, and reflect the reality of a retail business. An attempt to add a 'hedge premium' to LRMC is contrived and fraught with difficulty.

4.2.4 Retailers' experience in hedging load for customers less than 160MWh per annum in NSW and hedging in other relevant markets.

Retailers sell 'whole of meter' [WOM] swaps to retail customers.¹⁵ A retailer must hedge this exposure to establish some cash-flow certainty and avoid the fluctuations in spot prices; however it is generally not possible or economic to purchase WOM hedges. Therefore retailers attempt to synthesise a WOM hedge with a portfolio of

¹⁵ The term 'Whole of Meter' reflects the fact that the volume is determined by the electricity meter - essentially meaning that whatever energy the customer consumes each half-hour as recorded by their electricity meter is served by the retailer at a fixed price.
swaps, caps and other options. The result, however, is a mismatch between a retailer's physical purchases and the hedge portfolio, and consequently a degree of uncertainty in the purchase price and resultant margin.

This mismatch occurs because the physical load continually changes every half-hour depending on customer consumption, while hedge portfolios are forward purchased, often years in advance with either fixed volume or finite volume optionality. To manage this mismatch a retailer must understand the risk and protect themselves in a cost effective way, trading-off market and other risks against the cost of being perfectly hedged.

Market risk tends to be asymmetrical because price spikes tend to correlate with increased load, and prices spike at around one hundred times higher than the median price. This encourages retailers to carry more hedge cover than they have load ("being long") in order to cover the extreme days which contribute significantly to the pool costs.

The load associated with small customers tends to have the worst load factor of our customer segments and is also the most volatile. This means that these loads vary greatest between peak and trough, and are also the most sensitive to weather events. These features create a high degree of uncertainty and risk, and consequently require significant optionality to hedge away, compared to large (commercial and industrial) customers.

4.2.5 What impact the phasing out of the ETEF is likely to have on hedging and risk management costs over the Determination period.

At the most rudimentary level, the phase-out of ETEF means that retailers must begin hedging this volatile sub-160MWh load, which has not been required until now. Normally a retailer would build up a hedge portfolio for a given period over 3-5 years, or longer if underwriting the investment in new plant. However, it was not possible for the standard retailers to negotiate hedge cover, given uncertainty over the potential extension of the ETEF, until recently. Even now that the ETEF set-down sequence is known, the ETEF still currently terminates on 30 June 2007. However, we reasonably expect it will be extended to coincide with the payment rules.

Therefore buying to replace the ETEF will only begin to occur now, creating further upward pressure in the market around this period at a time when the underlying supply/demand balance is tightening. In a somewhat illiquid market this price increase over the current curve could be substantial yielding expensive hedge portfolios compared to historical levels, for the replacement of the ETEF.

Notably, all NSW standard retailers will be going to market to replace ETEF. This will push the contract price up significantly with the extra buying volume in the market. In a somewhat illiquid market this price increase over the current curve could be substantial.

4.2.6 ETEF and price transition path

EnergyAustralia is concerned about the complex interrelationship between the ETEF strike price, the IPART-determined price path for regulated retail tariffs, the cost to the standard retailer of supplying the regulated load and the resulting impact on competition.

Importantly, regardless of the price transition path chosen by IPART, the standard retailers will still be required to purchase electricity to supply the regulated customers through the ETEF. Particularly in the earlier years of the regulated retail price determination, any discontinuity between the ETEF strike price and the wholesale electricity costs implicit in the transitional price path will have a significant impact on the standard retailers, and the competitive market:

- If the ETEF strike price *immediately* reflects the genuine cost of market based hedge contracts and IPART adopts a *gradual transition* to prices reflecting the new entrant generation cost, electricity purchased through the ETEF will be more costly than that allowed to be recovered through the transitional tariff. This would have a catastrophic financial impact on the standard retailers. This will also stifle competition, as the regulated tariff will be lower than a competitive retailer, purchasing electricity on the market, could meet.
- If the ETEF strike price immediately reflects the genuine cost of market based hedge contracts, and IPART immediately adopts a regulated retail price to reflect that cost, electricity purchased through the ETEF would cost the same as electricity sourced through the marketplace. This alignment of price and wholesale energy costs would allow the standard retailer to earn a fair margin on its regulated retail supplies. Moreover, it would not hinder competition, as it would give competitive retailers a price against which to compete and earn a sustainable margin as well.

This is EnergyAustralia's preferred outcome.

- If the ETEF strike price is lower than the genuine cost of market based hedge contracts and this is reflected in the IPART price path, the regulated retail price will be too low for new entrant retailers to compete. However, the standard retailers would presumably be able to earn a fair margin on the regulated electricity supply.
- If the ETEF strike price is lower than the genuine cost of market based hedge contracts and IPART adopts a regulated retail price to reflect the genuine cost of market based hedge contracts, there is scope for the standard retailers to earn windfall gains on their purchases through ETEF. However, this situation would be short lived as the ETEF rolls off and competitors pursue retail customers.

EnergyAustralia recommends that this complexity could be avoided by setting the ETEF strike price to the same level as the market hedge costs. This would ensure a consistent signal to the market and provide a level playing field for competition.

EnergyAustralia recognises that IPART is not responsible for setting the strike price for electricity purchases through the ETEF. However, it is important for IPART to be aware of the implications of its transitional pricing decision in light of the relationship with the costs of ETEF purchases. EnergyAustralia recommends that IPART advise the NSW Government, in the context of its setting the ETEF strike price, of the implications of setting an ETEF strike price at a level different from market hedge costs.

4.2.7 Managing energy supply risks to the standard retail market

EnergyAustralia is very concerned about the implications of its requirement to supply regulated retail customers at a fixed price while being exposed to the energy purchase risks of the marketplace. In particular, EnergyAustralia is concerned that retail prices set three years in advance may not adequately reflect changing market conditions into the future.

For example, if the regulated retail price path into the future reflects a low cost of electricity supply and the market conditions cause supply costs to increase, then competitive retailers would be unable to secure supply to compete against the regulated tariff. At the same time, the regulated standard retailers would suffer losses in meeting their obligations to supply the regulated load at the regulated price.

Conversely, if prices are fixed assuming a high cost of energy supply, and market prices subsequently fall, then there is a potential for the standard retailers to capture windfall gains to the extent they can secure supply at a lower cost than that reflected in the retail tariff. However, this is a much smaller risk than the first scenario, as these windfall gains would be quickly competed away by other retailers. It is clear that the risks and consequences of this scenario are much lower than the first case.

A reasonable approach might be to set the regulated retail tariff at a level that assumes the immediate cessation of the ETEF. This would have the advantages of being administratively simpler to manage, and would more closely align with the objective of setting tariffs based on the factors facing a MMNE Retailer.

4.3 Mass market new entrant retail operating costs

The Tribunal seeks comments on:

- The appropriate level of mass market new entrant retail operating costs for inclusion in regulated retail tariffs.
- The experience of mass market new entrant retailers, both in NSW and other relevant markets.

EnergyAustralia's experience as a new entrant in other markets places it in a good position to be able to comment on the appropriate level of operating costs facing a MMNE retailer.

EnergyAustralia submits that the operating cost allowance should be based on a cost build-up approach that references international best practice benchmarking.

EnergyAustralia submits, in the context of determining a regulated retail price, that IPART should include the residual costs faced by the incumbent standard retailer that would not be faced by a new entrant.

EnergyAustralia has engaged KPMG to conduct a review and benchmarking exercise to determine a reasonable level of MMNE retail costs to be reflected in the current price controls. This analysis has included a survey of regulatory decisions across Australia and a bottom-up benchmarking study.

One of the major issues in this analysis has been the demarcation between the costs that are to be reasonably recovered through the recovery of operating costs, and which are to be recovered through the retail margin. The question of whether the retail margin is considered a gross or net margin is fundamental to this analysis.

Consistent with the practice adopted by IPART in making the current Determination, and with that of other Australian regulators, EnergyAustralia has adopted the view that the retail margin should be considered to be a net margin, calculated after the recovery of relevant operating costs. Furthermore, EnergyAustralia submits that net margin be applied in reference to sales revenue, not total costs.

Importantly, EnergyAustralia notes that operating costs and the retail margin make up a very small proportion of the total costs reflected in the customer's final bill. However, the implications of providing insufficient funding in these areas can have a significant impact on the level of service provided to customers and the scope for competition in the marketplace. Considering the minimal impact on customer bills, EnergyAustralia encourages IPART to carefully consider the implications of targeting reductions in these cost areas.

4.3.1 Defining the Mass Market New Entrant Retailer

The IPART Terms of Reference refer only to the Mass Market New Entrant (MMNE) Retailer as one "that is of sufficient size to achieve economies of scale".

In order to develop a meaningful estimate of the types and magnitude of operating costs that needs to be reflected in the regulated retail tariffs, some additional detail is required around that definition.

EnergyAustralia considers that a size sufficient to achieve economies of scale indicates a sufficient number of customers to justify the investment in systems to

achieve those economies of scale. This definition is important, as some of the costs are "step-variable" in nature.

EnergyAustralia has also taken the view that a genuine "new entrant" must be considered as a stand alone new entrant. That is, one that must develop its own systems rather than rely on marginal use of its interstate incumbent business systems.

EnergyAustralia has therefore honed the definition of the MMNE Retailer as one of a size that warrants investment in systems suitable to support the delivery of energy retailing to the mass market. Such systems must be able to handle the necessary volumes of data and customer information in a timely manner in order for the retailer to be sustainable in the marketplace.

On balance, EnergyAustralia has defined the MMNE Retailer as one with a customer base of 250,000 as representative of the scale of a mass market retailer, who can efficiently employ the services of a commercial customer information and billing system, automated business to business communication systems and energy trading systems.

4.3.2 Survey of Australian regulatory decisions

KPMG conducted a survey of recent Australian regulatory decisions on retail operating costs. In summary, KPMG's review found the current reasonable range for retail operating costs to be in the order of \$85 - \$95¹⁶ per customer. The retail operating cost assessment reflected in the current NSW electricity determination is well outside the reasonable range identified by other Australian regulators.

Energy market	Year	Operating costs per customer	Customer base ('000)
SA Electricity	2005	84	700
Victoria Electricity	2003	90	Various
SA Electricity	2003	82	700
Tasmania Electricity	2003	77	250
ACT Electricity	2003	85	150
NSW Electricity	2002	45 – 75	Various
SA Electricity	2002	80	700

¹⁶ These amount have been judgementally indexed to reflect the timing of the subject regulatory decisions.

Victoria Electricity	2001	50 – 80	Various
NSW Electricity	2000	40 - 60	Various

4.3.3 Bottom-up benchmarking

KPMG also conducted an extensive bottom-up benchmarking analysis, which:

- defined the electricity retailing function and the scope of a MMNE's business;
- identified the activities that are likely to be involved in undertaking the function;
- identified the types of resources involved in undertaking those activities; and
- identified the quantum of resources and unit costs that are likely to be consumed.

KPMG identified and relied on the best available market information and benchmarks in respect of both the quantum and unit cost of the required resources.

Activity	Cost drivers	Benchmark
Billing, data Validation	Number of bills issued, which in turn is a function of the billing cycle (monthly or quarterly), plus reminder notices	Cost per bill
Collection	Number of customers and billing frequency	Cost per receipt
Customer transfer	Number of customers and transfer rates	Cost per transfer
Bad debt expense	Size of business	Electricity market experience based on revenue
Customer Information System	Size of business ¹⁷	Benchmark costs based on IT Utilities surveys
Call centre costs	Number of customers and the number of calls customers make to their retailer	Benchmark costs built up from call centre statistics
Management (Pricing, Risk management,	Size/scale of the business. We have assumed a size of business for a MMNE that requires the management	Benchmark staffing costs and occupancy costs, plus minor amounts for

The activities and drivers central to this benchmarking exercise include:



¹⁷ As discussed above, KPMG has assumed a MMNE retailer of sufficient size to justify investment in systems to achieve economies of scale.

Settlements, Regulatory)	infrastructure defined in this benchmarking exercise	licensing, and ombudsman.
Energy trading ¹⁸	Size of business	Salary and occupancy costs
Public relations	Size of business, with an allowance for mass marketing budget	Salary and occupancy costs plus an advertising budget based on regulatory precedents

This benchmark acts as the foundation for a MMNE retailer, to which it is necessary to add an additional margin to compensate for those operating costs which accrue to an incumbent retailer which would not accrue to a MMNE retailer.

4.3.4 Residual costs accruing the standard retailer

One of the implications of benchmarking operating costs against those of a MMNE Retailer is that the standard retail regulated price risks omitting a significant component of costs that are "left behind" to the standard retailer.

The observed behaviour of new entrant retailers is to target customers with higher consumption levels, and also customers from higher socio-economic strata. There are two key implications of this MMNE behaviour:

- The standard retailer is left with a large number of smaller customers of relatively lower consumption; and
- The standard retailer is left with a higher proportion of customers with payment and collection difficulties.

The costs associated with this dynamic are generally reflected in a higher cost to manage the energy portfolio for a given number of customers (the regulated retail portfolio being smaller in aggregate for the same number of customers), and a disproportionate incidence of collection expenses and bad debt expenses.

While EnergyAustralia applauds the approach of benchmarking operating costs and margins to a MMNE Retailer, it also submits that it is important to recognise the impact of these residual costs in setting the standard retail tariff.

These costs will be understandably difficult to quantify. EnergyAustralia recommends that the Tribunal apply a judgemental uplift factor, to either the total operating costs or the retail margin, to account for these residual costs.

¹⁸ Note that EnergyAustralia believes energy trading costs should be included in the cost of energy supply.

4.3.5 Costs to be included

In performing its benchmarking investigation, KPMG has conducted a cost tree analysis to identify the costs that should be reasonably included in the operating expenses of a MMNE Retailer. The purpose of this exercise was to distinguish those costs that should be reasonably included in an operating expenditure category from those that should reasonably be recovered through the retail margin. Those costs include:

- Billing and customer collection
 - Billing
 - Customer invoicing
 - Reminder notices
 - Data validation
 - Customer transfer
 - Credit collection
 - Bad debt expense
 - CIS
- Call centre costs
 - Labour costs
 - Overheads
- FTE employee costs and overheads
 - Office and administration service costs
 - Energy trading
 - Public relations and customer communications
 - Pricing and risk management
 - Settlements
 - Regulatory costs
 - · Labour costs
 - Ombudsman scheme
 - Licence fee

As discussed above, the costs associated with the energy trading and risk management functions should be recovered as part of the energy costs associated with meeting the needs of the regulated load.

EnergyAustralia's considers that the regulator's assessment of a reasonable level of retail operating costs should reflect the entire range of costs incurred by the retailer.



4.4 Mass market new entrant retail margin

The Tribunal seeks views on the appropriate mass market new entrant retail margin to be included in regulated retail tariffs.

EnergyAustralia submits that the appropriate level of net retail margin for a MMNE retailer is in the order of 8% on total revenue.

EnergyAustralia has identified the two most important considerations in determining the appropriate level of net retail margin for the MMNE Retailer:

- The margin must be sufficient to sustain investment in the retail business in the longer term; and
- The margin must allow for the MMNE retailer to recover its customer acquisition costs over the life of a normal retail contract.

Following on from the expanded definition of the MMNE Retailer, EnergyAustralia has engaged KPMG to conduct a review and benchmarking exercise to determine a reasonable level of MMNE retail margin to be reflected in the current price controls.

Retail margin by jurisdiction	Year	Net margin %
SA Electricity	2005	5%
Victoria Electricity	2003	4%
SA Electricity	2003	5%
Tasmania Electricity	2003	3%
ACT Electricity	2003	5%
NSW Electricity	2002	1.5 to 2.5%
Victoria Electricity	2001	2.5 to 5%
NSW Electricity	2000	1.5 to 2.5%
Tasmania Electricity	1999	1.5%

KPMG's jurisdictional benchmarking review found:

It is perhaps unsurprising that there has been more competitive activity in those markets where regulated margins are higher. For example, there has been a considerable degree of competitive activity and some new entry into the Victorian and South Australian markets. According to AGL, annual customer churn rates for

Victorian and South Australian gas and electricity are all at least 20%, whereas for NSW gas and electricity the churn rates are 4% and 9% respectively.¹⁹ New entry into the NSW market has been modest.

EnergyAustralia considers that a measure of retail margin is not suitable for a traditional bottom-up cost build up, as would be conducted in asset intensive business. A retail business does not have a large inventory of tangible assets on which to conduct a meaningful asset based cost build up.

Rather, EnergyAustralia is of the view that the appropriate level of retail margin should be ascertained by reference to the available market data. The market evidence is likely to provide the best available indication of the sustainable margin a MMNE might reasonably expect to earn, which might justify the decision to enter a market. Use of market data therefore focuses on evidence that addresses the level of a sustainable margin to a MMNE Retailer.

Relevant market evidence might include independent experts' reports, which are usually prepared in the context of de-mergers and certain takeovers, where a Scheme of Arrangement is required. For instance, Grant Samuel's report in respect of the (original) AGL de-merger proposal, in which Grant Samuel's analysis suggests an 8.5% EBITDA margin and a 6.2% EBIT margin.

Brokers' reports can also provide insights into the sustainable level of retail margins:²⁰ EnergyAustralia submits that there is sufficient reliable, independent market evidence available to allow the regulator to assess the level of a reasonable margin for the MMNE Retail with regard to market evidence, including:

- On 16 August 2006 AGL announced its full year results. It included for the retail business an increase in EBIT to sales margin to 7.7% from 6.6% (and a 2006 EBITDA of 8%). The result was based on gross margins of 13.2% for its electricity business.²¹
- An earlier report by ABN Amro expected an EBIT margin of 7% for the full year for AGL, broadly in line with the previous calendar period.²² It also argues that "retail margins are showing signs of being sustainable".
- Origin's final results for 2006 suggest that it earned an EBIT margin in its Australian natural gas and electricity retail business (ie. excluding LPG) of 7.8%

¹⁹ AGL, *2006 Full Year Financial Results*, 16 August 2006, page 17. The SA figures include retentions whereas the others do not. The SA Government also subsidised customer switching.

²⁰ Recognising the difficulties associated with the entity being part of a larger diversified utility business, size and diversification differences, and whether they are vertically integrated in the electricity sector.

²¹ AGL, 2006 Full Year Financial Results, 16 August 2006.

²² ABN Amro, Australian Gas Light, 'Solid result, but what happens next', 28 February 2006, p 2.

compared with 7.2% in 2005. This is \$110 per customer. 23 The gross margin for the electricity business was 17.3%.

- CitiGroup states in relation to Origin Energy that its medium term expectations for the retail business remain for a stabilised EBIT margin around the 6% level.²⁴
- Morgan Stanley values Origin Energy on a future EBITDA/sales margin for its retail business in the 8.4-8.2% range. This suggests an EBIT margin of 6.8-7.0%.²⁵
- Meanwhile, JP Morgan estimates gross margins for Origin Energy's retail electricity business in 2006 and 2007 of 16.3% and 16.1% respectively.²⁶

At first pass, the market evidence suggests that a MMNE in a competitive retail electricity market might reasonably expect net margins in the order of 5-8%.

Benchmarking the costs of a mass market new entrant, by definition, excludes additional costs (and/or obligations) that might be borne by incumbents but not by the mass market new entrant.

There are a variety of costs that incumbent retailers are required to incur that the market benchmarks do not cover. These costs are likely to include:

- the cost of existing legacy systems;
- the costs of a "retailer of last resort" facility (which would include additional costs for being able to quickly take over a substantial customer base and establish energy contracts to suit their demand); and
- the costs/obligations of meeting other requirements (eg. in respect of vulnerable customers).

It is also important to ensure the margin reflects a "like with like" service provision to ensure competitively neutral tariffs. To set cost reflective regulated retail tariffs it is also important to ensure that the benefits embodied in the regulated tariffs are correctly compared to the competitive alternative. The regulated retail margin should therefore reflect the cost of providing the product features or benefits that regulated tariffs provide.

There are several areas of service differential between regulated and market offers. These potentially include:

²³ Origin Energy, Directors' Review of Results for the full year ended 30 June 2006, 30 August 2006, p 17. These figures appear to be after an allocation of corporate costs.

²⁴ CitiGroup, Origin Energy Limited, 'No Contact', 28 June 2006, p 12.

²⁵ Morgan Stanley, Origin Energy Ltd., '2006 Interim Result and Merger with Contact', 21 February 2006, p 5.

²⁶ JP Morgan, Origin Energy, 'Upstream costs moderate growth outlook', 29 August 2005, p 3.

The flexible term associated with regulated tariffs;

Market tariffs typically involve a *fixed* price for a *fixed* term, sometimes with fees for early termination. Indeed, the fixed nature of the contract is its most fundamental attribute.

Market contract terms are typically 2-3 years and termination fees are up to \$125. Alternatively, some retailers embed the risk and cost of early termination in higher unit prices. Many similar products (eg. telecoms, insurance, home loans) have similar features.

Regulated tariffs, by contrast, typically involve a *fixed* price for a *flexible* term, with no fees for early termination. This is analogous to fixing the interest rate on a home loan while retaining the ability to switch, at no cost, to another supplier if interest rates fall.

Regulated tariffs therefore provide customers with an option to stay on fixed prices for as long as prices are set, but to move for free onto a market contract in the intervening period. A customer on a market contract does not have this luxury. Moreover, a competitive market is unlikely to provide this option, at least not for free.

The regulated offer, however, means that there is no cost to the customer of making no decision on choosing their supplier. In other words, in the event that both regulated and market offers are similar, the regulated customer retains the option and its value.

The reversion opportunity associated with regulated tariffs;

Reversion policies can compound this problem (eg. the option to leave the regulated tariff is reinforced by a further free option to return). The Government's Terms of Reference highlights the reversion policy and its attractiveness, which is precisely because of the optionality created.

Options are often quite valuable to customers, particularly when they face making decisions which involve considerable uncertainty. The retail energy purchase decision involves considerable uncertainty because the choice is quite new, the product is quite complex and customers are unlikely to devote much time to making a decision on their retailer.

To set regulated tariffs at cost reflective or competitively neutral levels, it is important that the margin incorporated into them accounts for the additional benefits they provide.

EnergyAustralia acknowledges that it would be very difficult to determine the value of the flexible term and reversion optionality from the available market data – a degree of judgement will be required. EnergyAustralia considers that it would be appropriate

to reflect this optionality by lifting the regulated retail margin by 1-2% relative to those reflected in the market data.

4.5 Network charges

The Tribunal seeks views on how best to ensure that network charges are fully recovered by retailers.

EnergyAustralia submits that, as network charges are subject to rigorous regulatory oversight, they should be passed through retail prices.

Network charges should be passed through to the customer. This will help ensure that price signals sent by the network business in their tariffs reach the customer. Side constraints should not prevent the collection of network charges off retail charges.

EnergyAustralia considers that network costs are subject to rigorous regulatory oversight and price control. This process involves a detailed review of capital and operating expenditure, depreciation, and the return on capital. Regulators also place stringent, audited controls on price movements for network charges.

It would therefore be inappropriate to subject network charges to some form of supplementary price control by imposing second-order constraints on the retail business. More importantly, it would be clearly inappropriate to curtail the activities and profitability of the retail business by imposing these second-order controls.

Experience has shown that the current Determination, in which a total bill price constraint (a secondary control) applies, has severely restricted the ability of the standard retailers to rebalance tariffs and to earn a fair, sustainable margin.

In this regard, EnergyAustralia is firmly of the view that network charges should be passed through to the end use customer in the N+R framework. The retailer should not be constrained in its ability to rebalance prices as a result of changes in network charges.

Importantly, where there has been a pass through of an increase in network charges (for example in response to the recent changes in the NSW Government planning and service standards requirements), it will be important that the impact of the regulator-approved pass through is passed through in the regulated retail tariffs in full.

One of the main arguments for allowing a pass through of network tariffs is the uncertainty caused by the misalignment of network and retail regulatory control periods.

The current NSW electricity network Determination expires in June 2009, one full year before the expiry of the subject retail price control period. Moreover, the next network price determination will be undertaken by the Australian Energy Regulator rather than by the incumbent regulator, IPART.

There is considerable uncertainty as to the level of network tariffs commencing 1 July 2009. Retaining the current 'N+R' form of regulation unreasonably forces the standard retailers to bear the risk of these future movements in network prices.

4.6 Cost of compliance with green energy obligations

The Tribunal seeks comment from stakeholders on the appropriate allowance for such costs and how they might change during the course of the determination.

The NSW Greenhouse Gas Abatement Scheme [GGAS] and the Federal Mandatory Renewable Energy Target [MRET] are designed to encourage the development of "reduced emission" generation capacity. Compliance with these schemes generally requires investment in new generation assets, typically requiring long term deals of at least five to ten years to underwrite their construction.

The NSW Greenhouse Gas Abatement Scheme features increasing compliance obligations over the course of this price determination period. It will be important for IPART to recognise these increased obligations in its assessment of the regulated retail tariff.

NSW Greenhouse Gas Abatement Scheme

A prudent retailer would need to contract in the longer term for NGACs and this requires new abatement capacity to come on line. The appropriate NGAC price would be based upon the NGAC subsidy required from a new combined cycle gas fired plant operating at an efficient load factor of 42% capacity factor to be competitive with a new base load super-critical coal fired plant operating at 90% capacity factor. This price is well above the original estimate of long-term NGAC prices of \$8 estimated by Frontier Economics in 2002.

A prudent retailer would have been purchasing its requirements in prior years and would not purchase its NGAC requirements "on the run". Therefore, it is appropriate to examine traded prices for NGACs from prior years and formulate a purchasing plan that either locks in forward contracts or purchases NGACs on the spot market and holds them for acquitting in future periods. The holding price, allowing 3% for CPI and 5% risk margin for holding the NGACs as a forward purchase, would require an 8.15% per annum premium. In most cases forward contracting is preferred over a "purchase and hold" strategy.

Federal Mandatory Renewable Energy Target

The MRET aims to achieve 2% additional renewable energy by 2010. It has been implemented as a 9500 GWh target with a maximum penalty for non-performance of \$40/MWh. This penalty is not indexed to CPI. The penalty is also not tax deductible, meaning that under current company tax rates, a liable party would be indifferent between paying the penalty or purchasing certificates at a price of \$57/MWh. This penalty would effectively provide a cap on the premium available for renewable energy. Whilst the Government has developed a ramp-up target schedule for each calendar year, a credits banking regime will stimulate earlier development of such projects.

The price of Renewable Energy Certificates in the spot market has fallen markedly since 2003, due to a looming over-supply of RECs caused by the contribution from solar hot water heaters and sufficient commitments of new renewable energy generation. There are currently sufficient resources to meet the target to 2020, assuming that committed plants continue to operate and existing hydro power stations operate above their baselines at recent levels.

The trading in spot RECs is quite thin, as new renewable generators need to contract their supply long-term to make their projects bankable. This means that the current spot prices are not a suitable indicator of the costs that would be incurred by a prudent new entrant retailer in sourcing substantial volumes of RECs; they are more an indication of how far in the future retailers are looking to buy their next requirements. Moreover, these spot markets do not have enough capacity to meet all the retailers' green energy obligations, it is therefore more appropriate to estimate average cost of RECs rather than the marginal value of spot RECs as indicated by current spot trading.

EnergyAustralia recommends the cost of RECs be valued using latest technology wind generation, and the cost of NGACs be valued using latest technology combined cycle gas turbine generation.

4.7 Retailer NEM fees

The Tribunal seeks comment from stakeholders on the appropriate allowance for retailer NEM fees, and on whether these fees are expected to change significantly from their current levels.

NEMMCO pool fees are readily observable and outside retailers' control, and hence should be subject to a pass through arrangement in price control formula.

Ancillary charges are to some extent within a retailers' control and hence a cost allowance should be recognised, based on equivalent compliance burden.

Irregular, one-off charges imposed by NEMMCO (such as reserve trader events) of a material nature should be subject to limited re-opener general pass through provisions.

In the current era of energy market reform, there is a significant possibility that the role and responsibilities of NEMMCO could change in the near future. The nature of these changes is uncertain, and accordingly, so is the cost impact. Forecasting these costs therefore establishes a risk for the standard retail that it is not able to manage.

EnergyAustralia considers that NEMMCO pool fees fit into a particular category of costs that are:

- Not subject to the influence of the retail businesses;
- Subject to some other from of review or oversight; and
- Readily observable.

This category of costs is suitable for pass through treatment in the regulatory framework. This pass through would be accomplished by a separate component or 'factor' in the price control formula. Given the public nature of NEMMCO's budget, it should be possible to develop a straightforward mechanism to estimate the NEMMCO pool fees for the following financial year and include this as a pass through amount in setting tariffs.

In its Issues Paper, IPART also recognises that retailers must also pay ancillary charges to cover the costs associated with the physical safety and co-ordination of the National Grid. As these costs can be traded, and hence to some extent are within the control of the business, it is suitable for IPART to establish a specific cost allowance for ancillary services. In setting that cost allowance, IPART would have to have regard to the future charges each retailer would be expected to incur.

The Issues Paper tends to refer only to those fees that are charged by NEMMCO on a regular basis. Yet NEMMCO may impose <u>additional</u> fees and charges if, in NEMMCO's view, certain situations arise. These may be one off type fees and charges – for example, a reserve trader event. Although not directly addressed by IPART in the Issues Paper, EnergyAustralia is of the view that these types of costs also need to be factored into the next Determination. EnergyAustralia considers that due to their nature, these fees are most appropriately captured by a limited re-opener pass through mechanism. This is addressed in more detail in section 4.10 and Appendix 3.

4.8 Energy losses

The Tribunal seeks comment on the appropriate allowances to account for energy losses in supplying electricity.

Distribution network losses should be subject to a pass through arrangement. Transmission network losses are more complex but less material, and could therefore be estimated and included in the wholesale cost allowance.

EnergyAustralia considers that distribution system losses also fit into a particular category of costs that are:

- Not under the influence of the retail businesses;
- Subject to some other from of review or oversight; and
- Readily observable.

This category of costs is suitable for pass through treatment in the regulatory framework. This pass through might be accomplished by a separate component or 'factor' in the price control formula.

With load generally increasing and network assets being better utilised, energy losses can be expected to increase over the period of the next Determination. This uncertainty, and the risks imposed upon a retailer as a result, make this item suitable for pass through treatment in the price control formula.

There is a degree of complexity associated with calculating a pass through for transmission losses, which could vary by network region. However, EnergyAustralia considers that transmission losses are relatively small compared to distribution losses, and could be included in the assessment of wholesale electricity cost allowance.

4.9 Optional Green Power to all new (or moving) residential tariffs

The Tribunal seeks comment on the most appropriate way to account for the requirement of energy retailers to offer a 10 per cent Green Power component to all new (or moving) residential tariffs.

No regulatory oversight should be applied to optional tariffs.

EnergyAustralia notes that there may be a requirement for electricity retailers to provide an option for customers to take up an accredited green energy product. Given that it is anticipated that this requirement be placed on all electricity retailers and is subject to customer choice, EnergyAustralia considers that it is not necessary to exercise regulatory oversight on this cost component.

Moreover, given its optional nature, EnergyAustralia considers that it is also not necessary to exercise regulatory control over the price or revenue associated with

this offer. This approach is consistent with IPART's previous views on the regulatory oversight of optional green power offerings.

EnergyAustralia notes that, under clause 43EB(3) of the Electricity Supply Act, the regulated tariff can be determined by IPART or using a methodology approved by IPART. EnergyAustralia submits that the limit of IPART's involvement in setting such a regulated tariff should be to identify the main features of the methodology to be used in setting such a tariff, rather than setting a particular level for that tariff.

Ultimately, EnergyAustralia considers that the scope for regulatory oversight required for this item should be restricted to a review to ensure compliance with the obligation to make the offer of 10% green power.

4.10 Mechanism to capture costs of new schemes

The Tribunal seeks views on:

- The appropriate form of the mechanism that should be included.
- Whether 'material' should be defined in terms of a particular threshold.

The regulated retail tariff should include a pass through mechanism for unanticipated items.

Materiality should be assessed on a case-by-case basis.

The costs used in calculating the X-factors in the price path are derived from estimates of each standard retailer's future energy supply, operating expenditure and retail margin. The retailers submit these estimates to IPART, who then subjects them to considerable analysis and independent review.

However, events could occur during the 2007-10 regulatory period that could affect the standards retailers' costs. The impact of these events has not been allowed for within these estimates – due to uncertainty about whether and when the events will occur, and if they do, what the cost implications will be.

Because the X-factors are fixed for the length of the regulatory period, the standard retailers bear the financial risk associated with these events if they occur. As part of its review of distribution network pricing, IPART considered that in some circumstances, it is appropriate for this risk to be shared with customers via a mechanism that allows the DNSPs to pass through certain additional costs in network prices, outside the weighted average price cap and price limits.

In light of their obligation to supply, EnergyAustralia considers that a similar mechanism is appropriately applied to the standard retailers.

4.10.1 Pass through mechanism

In the Issues Paper, IPART considers adopting a pass through mechanism that allows retailers to recover costs they have incurred that were not included in the cost of supply initially determined by IPART in the event that a new compulsory scheme is introduced that imposes material costs on retailers.

Given the myriad and volume of proposed reform in the Australian energy market, EnergyAustralia supports the introduction of a pass through mechanism to address new schemes that impose material costs on retailers. Such a mechanism is the most efficient and transparent way to manage potential increased costs.

A major theme of the Terms of Reference is the recovery by retailers of the full cost of supply. In addition, the Terms of Reference also require consideration of fees as imposed by NEMMCO under the National Electricity Rules – the issues paper seems to refer only to those fees that are charged by NEMMCO on a regular basis. NEMMCO imposes additional fees and charges if, in NEMMCO's view, certain situations arise. These may be one off type fees and charges – for example a reserve trader event.

Although not directly addressed by IPART in the Issues Paper, EnergyAustralia is of the view that these types of fees also need to be factored into the Pricing Determination. EnergyAustralia considers that due to their nature, these fees are most appropriately captured by a pass through mechanism. As discussed in section 3.1.2, these costs should be subject to an automatic pass through mechanism, rather than being subject to a separate pass through application.

EnergyAustralia suggests a form of the pass through mechanism based on the one contained in the SA Electricity Standing Contract Price Determination – December 2004 (SA Price Determination). In EnergyAustralia's view the pass through mechanism contained in the SA Price Determination is compatible with the form of regulation adopted and:

- provides a clear definition of eligible costs;
- keeps administrative costs to a manageable level;
- balances the interests of customers and retailers in terms of incentives for efficiency (it should not undermine incentive to minimise costs); and
- allows the change in costs to be readily distinguished from costs already incorporated.

Clear definition

The proposed mechanism deals with pass through amounts that are stand alone amounts; representing the occurrence of exogenous events. These amounts are the subject of separate assessment and controls at the time that the retailer initiates a pass through approval process. A statement must be made no later than 60 business days after an event occurs and the regulator is required to accept or reject an application within 90 business days of receipt.

Administrative costs manageable

The proposed mechanism is a simple one. The retailer makes an application for a proposed pass through event. The regulator is given time to consider the application and either accepts or rejects it.

Balances competing interests / Incentives for efficiency

The proposed process covers both increases and decreases in costs as a result of a relevant pass through event. Also, the regulator may require the retailer to pass on to customers the benefit of a pass through; even if the retailer does not apply to do so itself. The regulator is required to consult with the retailer before doing this.

Changes in costs to be distinguished

Retailers must inform customers of pass through amounts and the reasons for their inclusion in bills in a manner approved by the regulator.

On the issue of whether 'material' should be defined in terms of a particular threshold, EnergyAustralia is of the view that materiality should be assessed on a case by case basis.

When applying for a pass through amount the retailer should be required to demonstrate materiality. EnergyAustralia agrees that a materiality threshold is a good mechanism to ensure that the pass through mechanism is not used inefficiently or inappropriately. The problem with setting a threshold is that there are a number of ways of defining what is material in any given circumstances.

Also, determining the level of the threshold is problematic. Setting a particular threshold involves a number of complicated trade-offs between a number of competing objectives – if a threshold is set too high it may prevent a retailer from recovering its efficient costs. If it is set too low it may discourage efficiency on the part of the retailer. IPART adopted views similar to this in its final decision on its most recent review of revisions to AGL Gas Network Limited's Access Arrangement.

EnergyAustralia's proposed mechanism is set out in Appendix 3.

5.1 Security deposits

The Tribunal invites views on the appropriate level for security deposits, and on the circumstances in which a security deposit may be collected and refunded.

Security deposits should be proportioned to average bill amount, as per the current regulatory arrangements.

Security deposits should continue to be waived where a customer demonstrates satisfactory credit history or opts for an instalment or other payment plan.

EnergyAustralia reserves the right, not obligation, to charge up to the security deposit allowed to be charged by IPART.

5.2 Late payment fees

The Tribunal invites views on the appropriate level for the late payment fee and information on the costs incurred by retailers where a customer does not pay a bill by the due date.

Late payment fees should be increased from \$5 to \$10 (excluding GST) to cover both the costs involved and as a disincentive for customers who pay their accounts late.

The Terms of Reference requires IPART to ensure that regulated retail tariffs and charges are at cost reflective levels by the end of the Determination. EnergyAustralia believes that the current late payment fee allowance of \$5 (excluding GST) is insufficient to cover the costs associated with late-paying customers and hence is not "cost-reflective". These costs include, but are not limited to, the issuing of reminder notices and the extended working capital provisions required. EnergyAustralia has asked KPMG to conduct a cost build-up analysis to support the level of late payment fees.

When benchmarked against other utilities and other jurisdictions, as IPART has done to some extent in its Issues Paper, a fee of \$10 for paying late would not appear unreasonable.

5.3 Dishonoured bank cheque fees

The Tribunal invites views on the level of the dishonoured bank cheque fee.

Where the NSW Electricity Supply Act 1995 precludes recovery of electronic (ie. non cheque) defaults, these should be recovered in opex allowance.



"Target N+R"

The elements of the "Target N+R" approach that could be retained, and those that should be modified or discontinued, are discussed in detail below.

Features to be retained

Price control on tariffs as a whole

The level of price change controls is appropriately directed to tariffs as a whole (rather than individual tariffs). Applying price constraints to tariffs as a whole (that is, a complete 'basket' of tariffs) has provided more flexibility in setting tariffs than applying these constraints to individual tariffs.

EnergyAustralia considers that the main benefit of a complete 'tariff basket' approach is to provide the regulator and the market with assurance that the standard retailer is not exercising market power in its provision of service, while at the same time allowing the business the flexibility to develop its own tariffs. Applying an 'R' constraint to a tariffs as a whole is consistent with the Terms of Reference direction to achieve full cost-reflectivity.

Revenue 'weightings' based on previous year volumes

The current "Target N+R" approach relies on calculating a notional target revenue which is the product of the target price and previous years' volumes and equating it to notional allowed revenue which is the product of the actual price and previous years' volumes. The weightings applied are effectively the previous years' volumes.

In EnergyAustralia's experience, these volumes have been relatively straightforward to attain and apply, given the relatively small number of available regulated tariffs. The ease of application is a feature of the current "Target N+R" approach EnergyAustralia would like to retain - we believe it is consistent with our objective to have a form of regulation that is administratively easy to maintain, which in turn facilitates competition through diminished regulatory involvement.

Simple and straightforward target tariff structure

EnergyAustralia believes the structure of the target tariff under the current "Target N+R" approach is relatively simple and straightforward. The limited number of target tariff components (fixed, variable, off peak and extended off peak) is desirable as it offers the flexibility to construct regulated tariffs in such a manner as to pass through

to customers the underlying cost to supply them. Adding any additional tariff components to "Target N+R" (such as peak, shoulder and off peak for time of use pricing) adds an unnecessary degree of regulatory involvement.

Suggested modifications

Total bill side constraints

The imposition of total bill price constraints, however, has inhibited the transition to fully cost-reflective regulated retail tariffs. EnergyAustralia has experienced substantial increases in network tariffs, particularly as a result of the recent pass through of costs associated with the implementation of DEUS reliability standards and GCSS arrangements. The significant increase in network charges has limited the scope for EnergyAustralia to move regulated tariffs to a cost-reflective level while at the same time ensure that regulated tariffs are set at a level that ensures adequate revenue is generated to cover our efficient costs.

EnergyAustralia submits that if the 'N+R' approach was adopted for the new Determination, total bill price constraints should be removed completely.

Restrictions on tariff movement

The current Determination also allows retailers to increase over-recovering tariffs provided it can be demonstrated that such an increase improves cost-reflectivity. We consider the requirement to prove cost-reflectivity constitutes unnecessary regulatory intrusion. It should be recognised that the cost to supply electricity will vary with different customer segments and, to the extent that individual tariffs are directed towards these different segments, there should necessarily be different rates. These different rates need not be captured in additional target tariff components (as noted earlier, we are comfortable with retaining the current level of aggregation in the target tariff components). They are better determined by the retailer, who will have a natural incentive to price tariffs at their cost-reflective level. If the concern is that any one tariff may be consequently 'over-priced', then comfort should be taken that competition will effectively ensure that these customers are quickly lost to other retailers.

EnergyAustralia therefore submits that standard retailers should not be required to demonstrate to IPART that increasing tariffs beyond deemed target levels improves cost reflectivity, as this would be tantamount to constraining individual tariffs.

Features to avoid

Complicated target tariff structure

Earlier we stated that adding any additional tariff components to "Target N+R" (such as peak, shoulder and off peak for time of use pricing) adds an unnecessary degree of regulatory involvement. Despite IPART's best efforts to set target tariff components at an optimal level at the start of the Determination period, the cost of

supply will naturally change over the course of the Determination and the result will be an unintended shift <u>away</u> from cost reflective tariffs. This concept is demonstrated in a simplified manner below²⁷:



It can be seen that at the start of the Determination the target peak and target off peak prices were set such that they reflected the actual efficient price. Target peak is set at \$90 / MWh and target off peak set at \$70 / MWh. This is relatively straightforward as actual costs are known at the time and the target component price can be set with a reasonable degree of confidence.

However, at the end of the Determination period, it is evident that the relative cost between the peak cost and the off peak cost have changed. Target peak now costs \$100 / MWh because the wholesale cost of 'peak' energy has increased by \$10 / MWh and target off peak costs \$60 / MWh because the wholesale cost of 'off peak' energy has fallen \$10 / MWh. As a result, the target component prices at the end of the Determination period no longer reflect the true underlying cost to supply.²⁸

²⁷ The values used are for demonstration purposes only and do not constitute EnergyAustralia's view of the appropriate cost allowances for this review.

²⁸ Even though the average wholesale energy cost has remained the same, at \$60 / MWh.

In this example, consumption during the off peak period would be charged out at \$70 / MWh as per the target price but would actually cost only \$60 / MWh to supply and we would over-recover by \$10 / MWh. Conversely, consumption during the peak period would be charged at a rate of \$90 / MWh but actually cost \$100 / MWh to supply and we would under-recover by \$10 / MWh. A resultant cross-subsidy is evident and clearly cost reflectivity is not achieved.

However, if the target price is kept to a more aggregated variable component, EnergyAustralia would have the ability to adjust the peak and off peak charge relativities so as to ensure it can pass through the underlying change in the wholesale cost of energy.

To further extend the example, a variable 'R' target tariff component could be specified that could apply to peak and off peak rates (as is the case under the current form of price setting). As the underlying cost to supply changes, EnergyAustralia would be able to alter the peak and off peak rates charged while still, on average, remaining consistent with the variable 'R' target. In this case, EnergyAustralia could charge \$60 / MWh for off peak and \$100 / MWh for peak. The average rate is \$80 / MWh which aligns to the target price set at the beginning of the Determination.



Implicit in this preferred 'aggregate' variable is the assumption that EnergyAustralia will price in such a manner as to pass through underlying costs to the consumer. To use the first example to demonstrate the logic of this assumption: the regulated off

peak rate is set at \$70 / MWh, the cost is \$60 / MWh and hence the off peak rate is over-recovering by some \$10 / MWh. Competitors, offering a tariff-following product, will seek to 'cherry pick' those customers who have a bias towards off peak consumption in their energy usage and keep the additional \$10 / MWh 'margin'. EnergyAustralia will be left with the remaining customers whose consumption bias is towards the under-priced peak rate and we will consequently under-recover target revenue.

Weighted Average Price Cap

EnergyAustralia believes that a form of WAPC is consistent with its proposed methodology to allow the standard retailers to transition regulated retails tariffs towards cost-reflectivity. However, the WAPC would need to be constructed in such a way as to ensure it best delivers the benefits of efficient pricing. The following section discusses the requisite features of EnergyAustralia's preferred form of retail WAPC. EnergyAustralia believes that these features are consistent with the requirements of the Terms of Reference.

Complete tariff-basket approach

The level of price change controls should be directed towards a complete basket of tariffs, as opposed to individual tariffs or even 'sub baskets'. Applying price constraints to a complete tariff-basket will provide more flexibility in setting tariffs than applying these constraints at a more granular level. As noted earlier, EnergyAustralia considers that the main benefit of a complete 'tariff basket' approach is to provide the regulator and the market with assurance that the standard retailer is not exercising market power in its provision of service, while at the same time allowing the business the flexibility to develop its own tariffs.

Applies to 'R' component of regulated tariffs

EnergyAustralia believes strongly that any WAPC be applied to the retail component of tariffs only. Broadening its application (to N+R) would have the potential to override IPART's current NSW Electricity Distribution Pricing Determination. Indeed, it could also over-ride the following Distribution Determination which will commence in 2009/10, the final year of this retail Determination. EnergyAustralia believes it is incumbent on IPART to limit the focus of its review on regulated retail tariffs and charges only, so as to avoid intruding on and potentially distorting the intent of current and future Determinations for the NSW transmission and distribution networks. Furthermore, adding 'N' into the price control equation will be the analogous to the N+R price constraint which, as we have argued in section 3.1.1, should be discontinued.

Administrative simplicity

In order to implement a WAPC, IPART will need to define the 'weights' to be used. When determining the appropriate weights, IPART will need to be mindful of the level of administrative complexity and regulatory intrusion that will result. EnergyAustralia advocates a weighting approach that is relatively easy to adopt and administer; to minimise regulatory involvement. This is consistent with the key features that should characterise the proposed form of regulation in section 3 which in turn align with the implied objectives of the Terms of Reference.

Weightings could be based on actual audited volumes. EnergyAustralia believes this would be inappropriate for three main reasons:

- the variable cost nature of the unit price build-up does not necessitate the selfcorrection of lagged, actual volumes;
- implementation issues associated with the short period (14 days) provided to set prices for 2007-08; and
- the relatively low margins associated with retail pricing, and according the limited scope to absorb significant audit requirements.

1. Variable unit cost

To rely on actual data, there would need to be at least a two year difference between the year that the price is set and the volume data that relates to that price. This approach has been adopted by IPART in its use of a WAPC for the setting of NSW regulated distribution prices for the 2004/05 to 2008/09 regulatory period.

Using audited actual volumes is a necessary element of the operation of the distribution WAPC. Distribution prices are determined by reference to notional revenue building blocks and converted into prices by taking a view on forecast volumes. As a result, forecast volumes become a critical feature of the review process. To the extent that forecast volumes are wrong, a feature of weighting prices to actual outturn volumes is that the WAPC becomes self correcting. Hence, it is critical that actual values are correct and so must withstand a high degree of assurance.

EnergyAustralia submits that it would be highly inappropriate to adopt an approach that imposes highly onerous reporting and auditing requirements on the standard retail business. It would be unnecessary. It is a feature of the operation of a WAPC where volume forecasting is required to convert fixed revenue returns to prices. Retail costs, on the other hand, are largely variable in nature and so lend themselves well into conversion into price. They do not require the operation of a self correction mechanism as the Distribution business requires.

2. Short price approval period for 2007-08

There will be implementation issues given the limited time from the expected final Determination (14 June 2007) to the end of the financial year (30 June 2007) to calculate, approve and publish these prices.

3. Costly and intrusive audit requirements

There is limited scope to absorb significant audit requirements in a retail business where margins are very low to begin with.

EnergyAustralia submits that the most appropriate weights to apply are the volume weightings used in the current N+R approach, where prices for the current year are based on volume and customer number information from the preceding year. This will also allow the weights used to be the most currently reflective of the changes in customer mix caused by the continued erosion of the standard retail regulated customer base.

No Annual Pricing Strategy Statement

An Annual Pricing Strategy Statement as required by the Network business would not be necessary and hence not be appropriate. To be meaningful, such statements would need to reveal wholesale purchasing operations and tactics (where ETEF no longer becomes available) which is clearly a commercially-sensitive matter. Indeed, it would put standard retailers at an unconscionable disadvantage if they had to publicly release their pricing strategies

Pass through of uncontrollable costs in price control formula

EnergyAustralia believes that it is inappropriate to subject a standard retailer to the risk of a potential windfall gain or loss associated with incorrectly estimating cost allowances. Where it is accepted that these costs are uncontrollable and can be extracted from independent, publicly-available information, then these costs should be separated out and included separately in the price control formula. Examples include distribution line losses and NEMMCO pool fees. EnergyAustralia's proposed pass through mechanism is detailed in section 4.10.1.

EnergyAustralia also recommends the pass through provision apply to uncontrollable changes, similar to that in place for the network business. This is also discussed in more detail in section 4.10.1.

APPENDIX 2: REGULATORY FRAMEWORKS

Overview of Australian and international retail regulatory frameworks

Summary

It is uncommon, outside Australia, for jurisdictions to require retail businesses to provide fixed price retail energy while being subject to the risks of wholesale costs. In those jurisdictions that do, there are mechanisms in place to reduce the risk to the retail business. These mechanisms include frequent price changes to accommodate changes in pool prices, and reconciliation accounts to track differences in retail prices and wholesale costs.

Discussion

In order to make an informed response to this issue, EnergyAustralia engaged Network Advisory Services (NAS) to review the regulatory frameworks applied in a number of Australian and overseas jurisdictions to determine the form of regulation applied in those jurisdictions that oblige a retailer to provide electricity to customers at a fixed price while being exposed to wholesale market pressures in providing that service.

NAS reviewed the form of regulation applied in relevant Australian jurisdictions: South Australia, ACT, Victoria, Tasmania and Queensland, summarised below. NAS also reviewed the forms of regulation applicable in Alberta and Ontario (Canada) and Texas (USA), also summarised below.

NAS reviewed a number of jurisdictions, and discarded those that no longer had retail price controls: Malaysia, Korea, United Kingdom, California, New England and Pennsylvania.

EnergyAustralia was also able to source a paper from the Edison Electric Institute, *Resource Planning and Procurement: Case Studies of Regulatory Innovation*, which includes eight American case studies involving commitments to build new generation, and to manage the costs associated with procuring supply for non-market customers. Relevant cases are discussed below.

South Australia

- Obligation applies to small customers <160 MWh per year
- Decision for a 3 year term with provision for annual review of tariffs

- Regulation applied as a constraint on AGLSA's average "retailer tariff" cap (applied only to the non network costs) for the combined total of standing contract tariffs, based on forecasts of customer numbers and consumptions for each tariff in May each year;
 - Similar to a WAPC on the retailer component of the tariff
- Requires AGLSA to pass through the actual network charges of ETSA Utilities, and any changes in those charges when they occur
- Side-constraints on individual "retailer tariff" changes (ie excluding the network component). Residential CPI + 4%. Small businesses greater of CPI plus 4% or \$40.
- Pass through allowed for change in taxes, etc and for changes in network tariffs.
- Wholesale price for electricity is determined by:
 - the shape of the retailer's actual half-hourly load,
 - the extent to which the retailer enters into hedge contracts outside the spot market;
 - the strike price of these hedge contracts; and
 - other costs of participating in the NEM and buying energy.

An efficient and prudent retailer is presumed to use a combination of different types of financial contracts to manage its spot price risk exposure.

- Wholesale energy costs: \$65.48 in 2005/6, \$64.00 in 2006/7 and \$64.15 in 2007/8 (Dec 2004 \$'s). Retailers manage their own load within this. In Dec 2005\$ this would be \$67.31 in 2005/6, \$65.79 in 2006/7 and \$65.95 in 2007/8
- Total cost of energy at the meter (including renewables, line losses, etc): \$71.64 in 2005/6, \$68.73 in 2006/7 and \$67.00 in 2007/8 (Dec 2004 \$'s). In Dec 2005\$ this would be \$73.64 in 2005/6, \$70.65 in 2006/7 and \$68.88 in 2007/8.
- Retail operating costs calculated by interstate benchmarks and cost analysis. Not made public. Includes bad debts, but not depreciation or amortisation. \$80 per customer in 2003, \$82 per customer in 2004, escalates by CPI+2%. If CPI is assumed to be 3%, then the cost allowance for 2005 would be \$84.29 and would increase to \$93.07 by 2010 (in Dec 2005\$).
- Margin allowed: 10% of wholesale electricity costs and retailer operating costs. (\$52 per customer)

ACT

- Transitional Franchise Tariff (TFT) applied to customers less than 100 MWh per year.
- Operating costs not specifically escalated, rather, final TFT prices are escalated at the commencement of each financial year starting with CPI + 4.5% in 2003/04, CPI + 0.5% in 2004/05 and CPI + 0.5% in 2005/06.
- Bad debts incorporated in retail opex.

- Pass through for: Network tariff changes; wholesale market conditions affecting ActewAGL's proposed benchmark price;
- The wholesale energy cost includes:
 - the expected forward cost of purchasing energy at pool prices in the NEM;
 - trading and hedge management costs, including the costs of 'hedge mismatch' risks; and
 - a 5% risk allowance for 'other risks' (derived from ESCOSA Oct 2002 Determination)
- Retail operating costs calculated by interstate benchmarks and cost analysis.
 \$85 per customer. This allowance would equate to \$88.40 per customer in Dec 2005\$.
- Retail margin 3% on sales.

Tasmania

- Default tariff available to all customers.
- Escalated by CPI+0.8 in 2004, CPI+0.1 in 2005 and CPI in 2006.
- Bad debts included in retail margin.
- Price control applies to a tariff basket encompassing all retail tariffs.
- Side constraints apply to the entire (network inclusive) tariff.
- Pass through allowed for changes in distribution tariffs
- Wholesale energy costs covered by vesting contracts covering 75-90% of load. Not clear what mechanism applies post NEM entry.
- Retail operating costs calculated by interstate benchmarks and cost analysis.
 \$76 per customer, specified by activity. This allowance would equate to \$80.15 per customer in Dec 2005\$.
- 3% net retail margin

Victoria

- Default tariff applies to customers consuming <160MWh per year.
- Price cap applies to "average of all retail tariffs". Retailers manage tariffs within these averages.
- CPI-X regime where X varies by retailer.
- Bad debts not specifically allowed for.
- No ongoing side constraints.
- No specific pass throughs. Regime allows for the four year price path to be reviewed in limited circumstances, particularly when unexpected events create major financial impacts or windfalls for retailers. There is no public information on these provisions.

- Wholesale purchase costs determined with reference to contract volume and the time periods over which these purchases take place, and applying benchmark prices to cover the purchases.
 - AFMA data used to establish the prices. ESC used a monthly load, contracted by quartiles, as the main purchasing strategy.
 - The prices were established using only Victorian generation, which was acknowledged as the lowest cost in the NEM.
 - Wholesale purchase costs calculated at \$53 \$56/MWh
 - Energy procurement then left to retailer to manage.
- Retail opex determined by CRA analysis and cost advice from retailers. \$90 per customer. This allowance would equate to \$92.52 per customer in Dec 2005\$.
- Retail margin included in opex costs.

Queensland

NB – Queensland (practically speaking) sets the tariff by Ministerial decision. The process described here is used to manage the amount paid to the retailers as a CSO payment. However, this process could equally be used to manage retailers' risks as Government's risks. The Queensland Government uses an LEP (Long Term Energy Procurement) Deed to manage the risks of contracting for the franchise supply.

- Default tariffs apply to all consumers who have not entered the market.
- Tariffs set annually. LEP mechanism operates monthly until end 2007.
- Retail tariffs adjusted annually for CPI. Price caps applied to individual tariffs side constraints not applicable.
- Not clear how bad debts are treated. Ultimately they flow through to the CSO payment.
- Pass through for any losses reflected in CSO arrangements.
- Wholesale costs not addressed in setting tariffs, but is addressed in the CSO mechanism. Retailers required to forward contract:
 - 60% of the franchise load ("Part A load"), priced for swap contracts from Sydney Futures Exchange and other markets;
 - 30% of the franchise load ("Part B load"), priced on swap contracts for shaped products;
 - 10% of the franchise load ("Part C load") priced on shaped products and pool exposure.
- Amount of LEP allowance not publicly available, but back-calculation suggests about \$40/MWh.
- Hedge levels are enforced to ensure a level of security against adverse price fluctuations in the market. The arrangements do recognise a residual risk faced by retailers with an obligation to supply in a volatile spot market.

- CSO payment mechanism also includes network costs, renewable energy costs, ancillary services and pool fees, etc. and a non-specified gross margin.
- Retail operating costs and margin not publicly available.

Texas (USA)

Texas uses a "price to beat" mechanism rather than a regulated retail price. The "price to beat" is structured as a base rate which is at least 6% less than the rates in effect in 1999, and then subject to adjustments based on the cost of fuel. The retailers must assess the price of fuel using a 20-day average of the forward 12 month average market clearing price of natural gas traded on the New York Mercantile Exchange (NYMEX) at the Henry Hub delivery point with a 5.0% materiality (or significance).

- Applies to residential consumption with a peak demand less than 1000kW
- Must be offered to contestable customers for first 36 months of their contestability.
- A regulated cap on prices with a variable fuel escalator to account for changes in wholesale prices.
- Adjustment for fuel factor allowed no more than twice per year, on application to the regulator.
- The price to beat is structured as a base rate which is at least 6% less than the rates in effect in 1999, and then subject to adjustments based on the cost of fuel.
- The cost of fuel adjustments have resulted in increases of around 200% (in total) since the price to beat was first established in 2001.
- The retailers must assess the price of fuel using a 20-day average of the forward 12 month average market clearing price of natural gas traded on NYMEX.
- There has been heated discussion about providing headroom and the scope to cover non-controllable costs through a greater headroom allowance.
- Retailers are responsible for purchasing load through bi-lateral contracts (there is no power pool).
- As affiliated [incumbent] retailers must sell at the price to beat for 36 months after a customer becomes contestable, non- affiliated retailers therefore bear the full risks of procurement, while affiliated retailers are provided with a fuel cost passthrough twice a year under the price to beat.

Alberta (Canada)

- The Regulated Rate Option (RRO) Regulation compels a retailer to provide a regulated rate tariff to residential, farm, irrigation, and small commercial customers consuming less than 250,000 kWh/year within that retailer's service area.
- Scheme operates until 2010

- Each RRO rate is based on load forecasts and monthly forward market electricity prices
- The RRO requires retailers to hedge their load by monthly or longer term hedging arrangements in varying ratios until 2010. Retailers are responsible for managing their own procurement, however are now only required under the RRO to maintain a retail price cap for one month in advance.
- Costs and margin are included in the RRO subject to regulator's approval.

Ontario (Canada)

- If a customer is part of the Regulated Pricing Plan (RPP) then they pay a retail charge based on
 - (a) a regulated wholesale charge approved by Ontario Energy Board (OEB),
 - (b) a delivery charge which is set separately by the OEB for network supply,

(c) a regulatory charge which pays for the costs of administering the wholesale electricity system and maintaining the reliability of the provincial grid, and

(d) a debt retirement charge to pay down the residual stranded debt of the former Ontario Hydro.

- Includes (until 2008) customers whose annual electricity usage is less than 250MWh or less. After 2008, scheme will be limited to 'residential customers and general service customers using less than 50 kilowatts'.
- New RPP prices are computed at six-month intervals and are the result of an integrated consideration of re-basing and true-ups. The RPP therefore acts to smooth the wholesale costs rather than protect against them
- Wholesale costs currently (2006/07) C\$62.56/MWh.
- The average RPP price will therefore be the sum of:
 1. the prospective recovery of the forecast RPP supply cost and
 2. the retrospective recovery of the cumulative unexpected variance.
- The scheme also includes an exit charge for customers choosing to leave the scheme, where the amount paid through the RPP for wholesale costs is less or more than the actual wholesale cost to the retailer. The customer pays these amounts to the retailer.

Idaho Power Company (USA)

- There is no retail competition in Idaho.
- Idaho has seen significant price volatility due to reduced river flows for hydro generation.
- Regulator is involved in setting the appropriate risk tolerances in the hedging strategy
- The company maintains close contact with the Regulator who can adjust prices to market conditions.
- The company has since used this mechanism to gain pre-approval to build generation facilities.

National Grid USA

- Provides a "Default Service" for new customers and those returning from the competitive market
- Regulator requires the company to procure the supply for this service through a competitive bid process
- Required to procure 50% of its small customers' annual load every 6 months for supply one year in advance.
- Bid prices are flowed directly into retail rates.
- Bids are for load-following, all requirements service, bid on a flat monthly per kWh basis.
- Bids are selected based on load-weighted price.
- Fuel risks are borne by energy suppliers.
- The process has had difficulties coping with the non-volumetric charges such as Locational Marginal Pricing and Installed Capacity Payments.

Portland General Electricity Company (USA)

- Operated a balancing account mechanism that shared the variations in purchased power costs between shareholders and customers;
- Subject to a deadband of about \$28 million per quarter
- The definition of the mechanism also (inadvertently) shared variances in load. Increases in power costs were masked by an 8% drop in load in 2001. When load recovered, the balancing mechanism required large increases and became politically unpopular, resulting in increased intrusive regulatory involvement
- The plan expired in December 2002 and was not renewed.

Public Service Electric and Gas Company (USA)

- New Jersey Legislation required electric utilities to provide Basic Generation Service (BGS) for 3 years.
- Several NJ utilities procure BGS supply through a state-wide on-line auction managed by NERA and overseen by the Utility Commission's consultant, Charles River Associates.
- The product procured for small customers is a fixed-price, full requirements supply, in cents per kWh.
- One third of the load is contracted for each of one year, two years, and three years out.
- The auction prices are directly reflected in customer rates PSE&G derives no profit from providing the BGS service, but also bears little risk.
- The business uses weighting factors to allow it to design block tariffs, etc that will generate the same revenue as the BGS bid costs.
In summary the process is as follows:

1. In addition to other rights to amend regulated retail tariffs under the Pricing Determination, the retailer may also vary regulated retail tariffs if it complies with the following provisions.

2. No later than 90 business days after a *relevant pass through event* occurs the retailer may (in the case of a *positive pass through amount*) and must (in the case of a *negative pass through amount*) give the regulator a statement of the relevant pass through event specifying:

- Details of the relevant pass through event,
- An explanation of why the relevant pass through event is material;
- The date the relevant pass through event took effect or takes effect;
- The estimated financial effects of the *relevant pass through event* on the provision of services under a standard form customer supply contract;
- The pass through amount the retailer proposes in relation to the relevant pass through event;
- The basis upon which the retailer proposes to apply the *pass through amount* to regulated retail tariffs; and
- The date from, and the period over which, the retailer proposes to apply the *pass through amount*. The date must not be less than 90 business days from the date of the notice.
- 3. The regulator must place a copy of the statement on the regulator's website.

4. If a statement under paragraph 1 is received, the regulator must decide whether the *relevant pass through event* occurred or will occur and, if the regulator decides that it did occur the regulator will:

- Decide the pass through amount;
- Decide the basis upon which the pass through amount may be applied to regulated retail tariffs;
- Notify the retailer of its decisions in writing within 90 business days of receiving the statement; and
- Publish a notice on its website advising of the regulator's decision to approve the pass through amount.

If the regulatory does not notify the retailer of its decision within 90 business days of receiving the statement, the regulatory will be taken to have notified the retailer of a decision to approve *the pass through amount* provided in the retailer's statement under paragraph 1.

5. If, after receiving a statement under paragraph 1 the regulator decides that the *relevant pass through event* did not or will not occur or that it was not material the regulator must:

- Notify the retailer of that decision and the reasons for it within 90 business days
 of receiving the statement; and
- Publish a notice on its website advising of regulator's decision that the *relevant* pass through event did not or will not occur or that it was not material.

6. When making a decision after receiving a statement under paragraph 1, the regulator must take the retailer's statement into account.

7. If, in the regulator's view, a relevant *pass through event* occurs and the retailer has not given the regulator a statement under paragraph 1, the regulator may require the retailer to pass through a pass through amount. In these circumstances the Regulator will decide:

- The pass through amount;
- The basis upon which the *pass through amount* may be applied to regulated retail tariffs; and
- The date from and period over which the pass through amount must be applied.
- The regulator must consult with the retailer before making a decision under this paragraph 7.

8. Before the regulator makes a decision under paragraph 7, the regulator must consult with the retailer and take into consideration any information provided by the retailer. The regulator must notify the retailer of its decision and the reasons for it. The retailer must comply with the regulator's decision.

9. The regulator must seek to ensure that the financial effect on the retailer associated with a *relevant pass through event* is economically neutral taking into account:

- the number of customers subject to each regulated retail tariff type;
- the time cost of money for the period over which the pass through amount is to be applied;
- the basis on and period over which the pass through amount is to be applied;
- the financial effect on the retailer associated with the provision of services directly attributable to the *relevant pass through event* and the time at which the financial effect arises; and

any other matter the regulator considers relevant.

10. The retailer may apply a pass through a *positive pass through amount* after receiving a notice permitting it to do so and ensuring that regulated retail customers are informed of the amount, the circumstances giving rise to it and so on.

11. The retailer must apply a *negative pass through amount* after receiving a notice requiring it to do so ensuring that regulated retail customers are informed of the amount, the circumstances giving rise to it and so on.

12. The Tribunal must approve the form and content of notice given to regulated retail customers of the pass through amount. The retailer must comply with any relevant provisions of the Electricity Supply Act 1995 (NSW) regarding the publication of regulated retail tariffs.

Relevant definitions

Change in tax event. An event which results in a variation cost to the retailer of any new or varied tax, fee or charge imposed on the retailer in relation to the purchase of electricity by the retailer for sale to regulated retail customers or the purchase by regulated retail customers of electricity or services from the retailer

Material. In respect of a relevant pass through event means that the cost or saving to the retailer of the event is not less than \$500,000.

Negative pass through amount. An amount that the retailer is required to pay to its regulated retail customers or the text of the reduction in payments by regulated retail customers to the retailer.

Pass through amount. A positive pass through amount or a negative pass through amount.

Positive pass through amount. An amount that regulated retail customers are required to pay to the retailer or the extent of the increase in payments by regulated retail customers to the retailer.

Regulatory event. Any decision made by an authority or any amendments to laws which has the effect of substantially altering the manner in which retailer is required to provide services under the standard form customer supply contract resulting in higher or lower costs in providing such services than it would have incurred but for that event. A regulatory event does not include a change in tax event.

Reserve trader event. The payment of an amount to NEMMCO or the receipt of an amount from NEMMCO calculated in accordance with clause [3.15.9] of the NER as

a result of which retailer would incur materially higher or lower costs in providing services under the standard form customer supply contract than it would have incurred but for that event.

NEMMCO directions event. An event where NEMMCO has issued a direction under clause 4.8.9 of the NET as a result of which retailer would incur materially higher or lower costs in providing services under the standard form customer supply contract than it would have incurred but for that event.

Relevant pass through event. A change in taxes event, a regulatory event, a reserve trader event or a NEMMCO directions event.