

17 November 2011

Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

Dear Mr Pierce

Potential Generator Market Power in the National Electricity Market

Alinta Energy welcomes the opportunity to make a submission in response to the Australian Energy Market Commission's (AEMC) directions paper on the National Electricity Amendment (Generator Market Power in the NEM) Rule 2011.

The proposed assessment framework and engagement process represent a comprehensive approach to dealing with what is a significant and potentially transformative rule change.

Alinta Energy's broad support for the AEMC's approach is tempered by concern with some of the proposed assumptions and parameters. As such, the attached submission outlines a number of suggested improvements to compliment the assessment framework and details additional matters not raised in the AEMC's directions paper.

Alinta Energy looks forward to further engagement with the AEMC on this matter and welcomes it's consideration of the attached submission.

If you wish to discuss these matters please contact me on, telephone, 02 9372 2633.

Yours sincerely,



Jamie Lowe
Manager, Market Regulation

Submission to the Australian Energy Market Commission

Directions Paper -

**National Electricity Amendment (Generator Market
Power in the NEM) Rule 2011**

11 November 2011

Introduction

Alinta Energy is an active investor in the energy retail, wholesale and generation markets across Australia. Alinta Energy has over 2500MW of generation facilities in Australia (and New Zealand), and maintains over 620,000 retail energy customers in Western Australia and South Australia with a commitment to growth in the National Electricity Market.

Alinta Energy is committed to contributing to energy market developments across Australia and in all regions of the National Electricity Market (NEM) as it pursues its forward growth strategy.

Alinta Energy welcomes the Australian Energy Market Commission's (AEMC) thorough approach to consideration of this significant proposal. The decision tree (AEMC pg 3) provides an appropriate guide to participants of the matters that need to be addressed by the AEMC in order to rule in favour of the proposed rule.

The submission outlines that the strengths of the overall assessment framework at 'step 1' are likely to be undermined by a number of assumptions and parameters which weaken the approach as well as identifying matters yet to be considered by the AEMC.

This submission is divided into the following parts.

1. Perspectives on the AEMC's assessment framework as set out in the directions paper.
2. Review of tests which form part of the AEMC's assessment framework.
3. Alternatives approaches to assessments of the proposed rule.
4. Additional issues relevant to the AEMC's analysis.

1. AEMC's assessment framework

Market power in the context of workable competition and price spikes

Alinta Energy appreciates the informative value of academic models of market power and its impact on markets. That said, in relation to this rule change the use of such models in isolation would suggest outcomes that don't reflect the actual operation of the market and should not be supported.

Hence, we welcome the AEMC's analysis of market power and specifically the distinction between market power and substantial market power. The AEMC has appropriately concluded that substantial market power is the relevant concept to apply in a market characterised by workable competition.

Alinta Energy operates in the NEM in the expectation that prices will exceed costs for enough time to ensure recovery of fixed and variable costs and provide profitable return on investment for our shareholders. Alinta Energy's skill base reflects these expectations and our business portfolio seeks to exploit that skill base.

This means our products, portfolio of assets, and expertise is not directly substitutable with our competitors in the energy market.

This reflects the fact that the NEM, and the broader energy market, is not comprised of firms producing homogenous products, with identical short-run marginal costs curves, skills bases, asset portfolios, customer strategies and, given the need to incur large sunk costs, this market can not be assessed in the same manner as a perfectly competitive market.

Hence, the AEMC and NERA view that perfectly competitive market rarely exist is an accurate conclusion.

In this regard, acceptance of the possibility for repetitive and sustained periods of price spikes, the existence of transient pricing power, and price outcomes in excess of a generator's long-run marginal costs (LRMC) consistent with the market design, as intended and as functioning, and consistent with real-world competition is welcomed.

The AEMC's view that regulatory intervention to remove transient pricing power is likely to impede efficiency, in particular, long-term dynamic efficiency (pg 12) is also endorsed.

Definition of 'substantial market power'

The distinction between 'market power' and 'substantial market power' is welcomed and Alinta Energy supports the definition, provided as:

Substantial market power in the context of the NEM is the ability of a generator to increase annual average wholesale prices to a level that exceeds LRMC, and sustain prices at that level due to the presence of significant barriers to entry.

The AEMC indicates that this definition, based on the NERA report, provides that a firm only has substantial market power in the NEM where (AEMC pg 12):

- 'it has the ability to increase average spot prices to such an extent and with sufficient frequency that they exceed the LRMC of adding capacity; and
- it is insulated from the forces of competition due to significant barriers to entry and expansion that enable it to sustain average prices at that level.'

The problem with the definition is its vagueness and reliance on judgement.

Clearly, the usability of this definition depends upon how LRMC is defined, the time prices need to be sustained above LRMC, and any consideration of barriers to entry.

More concerning the phrasing of 'the ability' suggests a broad range of judgements based on the evidence is possible.

Average annual wholesale prices

Alinta Energy concludes that annual wholesale prices are an appropriate measure for price outcomes, but does not endorse the AEMC's conclusions on timeframes and is concerned by the following tract within the commentary (AEMC pg 17):

'... do not mean that a generator only has substantial market power if there is evidence of several years of above-LRMC pricing in the recent past. The Commission's proposed definition requires that a generator has an 'ability' to sustain prices above that level.'

The AEMC suggests a combination of factors can be used to demonstrate this ability, including future price expectations. Alinta Energy does not support this approach.

The use of annual average wholesale prices as the deterministic measure to justify further inquiry lacks credibility if, in the absence of meeting the thresholds outlined, it can then be supplemented by judgements of behaviour and expected future prices.

Treatment of barriers to entry

Alinta Energy notes the AEMC's perspective on barriers to entry and endorses the view that barriers to entry are a pre-condition of substantial market power. There is a perspective that barriers to entry should be examined as a preliminary step in the AEMC's analysis prior to further analysis of price outcomes.

While Alinta Energy is not adverse to this alternative approach, we do not believe the sequencing of the AEMC's analysis is any less relevant in the order proposed. The material issue with barriers to entry is ensuring barriers are appropriately defined. Given there is no single position on barriers to entry there may be value in preparing an information paper on barriers to entry to inform the discussion going forward.

The clarification of barriers to entry would illustrate that high prices are not of themselves an indication of barriers to entry and that high costs of entry, for instance building a generating unit, is not a barrier to entry.

The AEMC also makes reference to strategic barriers. In citing the issue of strategic barriers (AEMC pg 16) the AEMC suggests:

'Strategic barriers can be important in electricity markets where significant sunk costs will be incurred by a new entrant and as a result potential entrants require reasonable confidence that they will be able to recover those costs once they have entered the market.'

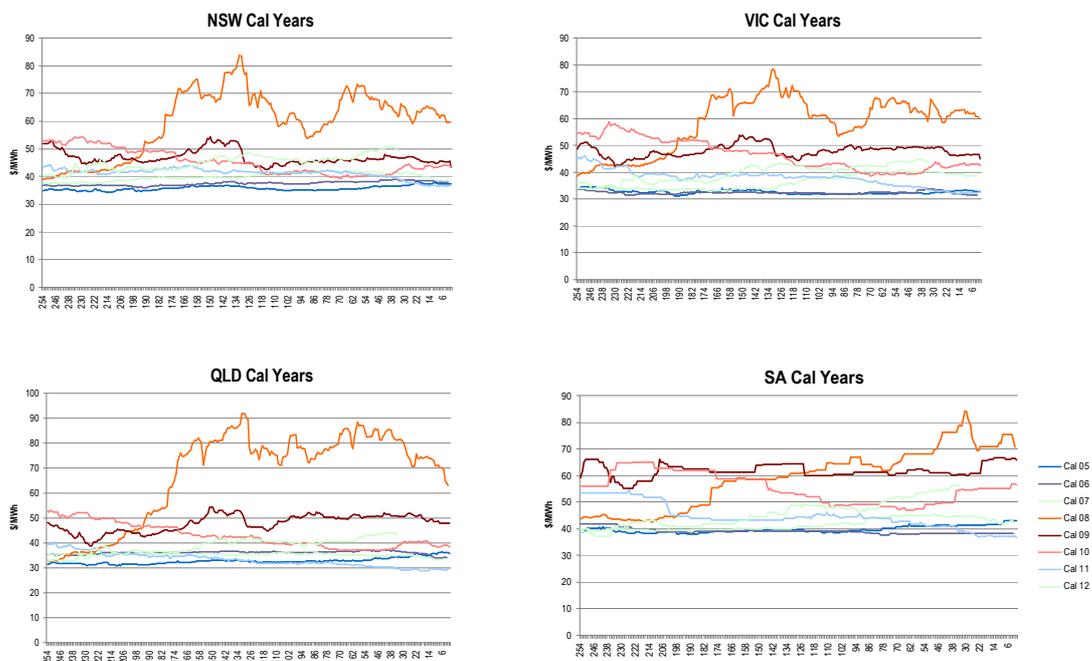
Alinta Energy agrees with this statement but suggest its significance is not the concern that an incumbent may be able to lower prices upon a new entrants arrival – an outcome that would damage both the incumbent and the new entrant – but as an illustration as to why new entrants are not likely to be immediately responsive to above LRMC prices. We address this issue further in part 2 of this submission.

Spot and contract prices

Alinta Energy notes the AEMC's perspectives on the relevance of both contract and spot markets. Alinta Energy broadly agrees that both these markets are relevant to the analysis at hand with some notable exceptions.

First, Alinta Energy notes that reliable contract data, in the form of futures prices, is readily available and the prices posted for over-the-counter trades and futures reflect the bulk of contract trades. Any bilateral trades, not publicly detailed, are made in full knowledge of publicly available prices and in reference to more liquid regions. Arbitrage between those regions and forms of contract would be expected to bring prices broadly into equilibrium when regional variables and non-price terms are accounted for.

On that basis, the correlation between the charts below is not surprising, notwithstanding the implications of drought, transmission constraints, inter-connector capability, fuel and generation profiles, extreme weather, demand and load differences.



Second, Alinta Energy does not support the implication that a generator can exercise substantial market power to lock in above-LRMC priced contracts and that their substantial market power is therefore not manifested in average spot prices. This suggests contracting outcomes is a one-shot game between the generator with substantial market power and all load with equilibrium between contract demand and supply. This implication requires investigation as:

- contract price outcomes are competitively set;
- as futures and OTC contracts are homogenous sellers compete based on price, therefore an incumbent generator seeking to inflate prices will face competitive pressure from existing incumbents and intermediaries; and

- the threat of new entry overshadows this strategy.

Even including bilateral contracts, unless one generator has absolute control over all available contractual options, both intra- and inter-regional, than any attempt to inflate prices will be unsustainable moving forward. This is because all loads that require contracts will not contract with a party where alternative contractual options exist that are cheaper, either OTC, futures or bilateral (or other tools).

As it relates to bilateral contracts, all things being equal, generators will have a preference for more attractive less risky loads and contracts that meet their requirements for the longest available time period. This means generators will compete for the most valued customers.

Hence, a single generator seeking to use substantial market power to lock in above-LRMC contracts in a region where more than one contract option exists for load to select from, will be less likely to secure the most valuable load. Hence, their counter-party risk is likely to be greater.

Additionally, the generator without substantial market power, under this scenario, is likely to be more attractive for premium load which provides an additional incentive for that generator to expand. Additionally, competitors of the generator with substantial market power would have an increased incentive to lock in customers to ensure they had greater control over revenues.

Furthermore, if NERA was correct, and a firm with substantial market power did not exercise its power in the spot market as it was highly contracted, it would be in the interests of the larger most sophisticated loads to not contract as spot price outcomes would be below-LRMC (unlike the above-LRMC contracts proposed in the analysis). While loads may be caught out once, the fact hedges are revisited over time, and often over short-periods of time, means this strategy is unlikely to yield long-term benefits.

Nevertheless, conceptually we agree with the view that contracting and vertical integration should constrain the use of market power, should it exist, but we do not prepose that the ability of one firm to create volatility in spot prices, from time to time, has a guaranteed and ongoing long-run impact on contract markets. A generator with substantial market power would need to manifest this power in spot market outcomes over the long-run in order to generate any substantial benefit for a generator with substantial market power.

Third, the affects of carbon price uncertainty is a necessary consideration when examining spot and wholesale price outcomes over recent years. This uncertainty may have affected contracting outcomes.

Fourth, the analysis is underpinned by NERA's principled approach that average spot prices (driven by short-run marginal cost [SRMC]) and LRMC should be closely linked over the long-run. While Alinta Energy agrees with this view, we are not aware whether it has been conclusively demonstrated that this has been the case over the life of the NEM.

It is just as conceivable that in the spot market factors that affect daily prices are not readily identifiable and therefore will not be considered in any LRMC calculation. For contracts, there is a view amongst some energy industry professional that the links with spot markets are not

the prominent driver of contract price outcomes. Hence, spot market price spikes have only marginal impacts.

There is a view that the contracts market, particularly futures and OTC, reflects individual participant risk tolerance and appetites more generally.

Long run marginal cost

Alinta Energy supports the use of LRMC to inform the discussion on potential generator market power in the NEM. Our specific comments regarding the LRMC approach taken form part 2 of this submission.

Defining exercise of substantial market power

The AEMC proposes the following definition of the 'exercise of market power' (AEMC pg 20):

'A generator exercises substantial market power where it engages in conduct that has the effect of increasing annual average wholesale prices to a level that exceeds LRMC, and the generator is able (or is likely to be able) to sustain prices at that level due to the presence of significant barriers to entry.'

This definition, which is reasonably workable, inappropriately contains the term 'or is likely to be able' and fails to provide a time frame around the LRMC measure. This appears to have been included on the basis of the following analysis (AEMC pg 18):

'... a generator that has contracted all of its capacity in the forward market may have an ability to affect the wholesale spot price, but it will have no incentive to do so and it is therefore highly unlikely to exercise any substantial market power that it may have in the spot market.'

This thinking, while not inaccurate, appears to be over-weighted in the AEMC's analysis. This concept, and the concept of economic withholding, conflates and confuses the issues of market power, incentives to contract, strategic bidding and spot market outcomes.

The phrase 'likely to be able' is only relevant if you conceive of NEM pricing outcomes as a static model. In this case, the implication being that a firm with generator market power is not acting upon that power as they have 100% of their capacity contracted. This is inaccurate on both counts and conflicts with the evidence provided.

For instance, Origin Energy detailed the nature of generator contracting in their submission to the consultation paper as:

'Industry standard risk management for generators is based on an N-1 level of contracting level against total capacity. This means for a 4 unit generator, 3 of its units will have contracts sold against them, and in order to avoid a potentially large unfunded difference payment against them, these units (representing 75% of capacity) will be bid at (or near) SRMC to ensure that the contracted volume is dispatched.' (Origin Energy submission to consultation paper, pg 14)

Alinta Energy endorses this point and notes it reflects the reason why many base load and private generators are particularly concerned about exposure to high prices during transmission constraints.

Alinta Energy recommends removal of the term 'is likely to be able' as it

- presupposes that the analysis can identify a firm with substantial market power even when that firm has not exercised said power;
- suggests the AEMC, or another party, needs to assume a party may have market power in spite of the absence of evidence given the absence of incentives not an absence of intent;
- suggests spot price outcomes that do not justify new entry over the medium-term would not prevent a conclusion that there has been an exercise of market power if it is judged that barriers to entry exist;
- inappropriately draws economic withholding into the market power analysis given the broadness of the definition; and
- is not consistent with existing legal precedent and legislation.

As it relates to the final point above, we contend the definition as drafted is not consistent with the *Competition and Consumer Act 2010* and the conclusions presented in *Australian Gas Light Company v ACCC (No 3) [2033] FCA 1525*.

Additionally, we suggest the word "unilateral" be inserted prior to the word "conduct" in the definition. This would denote that the participant's conduct is the primary contributing factor to the measured price outcomes. We recommend this on the basis that a firm's substantial market power must materially facilitate the measured outcomes in order for those outcomes to be instructive of the exercise of market power.

Economic withholding and price spikes

The public forum furthered the concept that economic withholding is a particular problem in the NEM. An example was provided where generators rebid to leverage high demand to maximise revenue. On the basis of this discussion there is a sense some stakeholders believe the market can or should distinguish between "artificial scarcity" and "real scarcity". This led to some at the public forum implying that there is in some way an "ideal" number of high priced events.

The analytical lens which is being applied to economic withholding is not dissimilar to the lens being applied to argue the economic efficiency of 'good faith' rebidding in the NEM. Each argument presupposes that the actions of the individual firm, impacting on spot price outcomes, are broadly inefficient, while not accounting for the difference between long-run and short-run effects.

In Alinta Energy's view the issue is not whether economic withholding exists and whether that "gaming" from time to time may influence price outcomes, in particular by exacerbating

reactions to pre-existing exogenous factors, but whether such withholding illustrates systemic inefficiency.

Alinta Energy holds the view that the NEM functions in a relative efficient manner consistent with the AEMC's perspectives on workable competition.

As part of its operation firms bidding into the NEM and contracting must respond to not only underlying supply and demand but exogenous shocks. These primarily take the form of weather events and the corresponding step change in demand. Concern around rebidding and in turn economic withholding seems to be that bids reflect not a response to underlying market conditions and exogenous events but strategic gaming.

For example, responses to demand shocks are likely to balance participants seeking to leverage high demand to recover fixed costs and firms seeking to suppress price outcomes reflecting contract positions and retail exposure. The manner in which this occurs is not the primary of concern. The issue is whether responses to those shocks (call the responses strategic or good faith or otherwise) have the effect of stabilising the market by reducing the effect of such shocks vis-a-vis had no action otherwise occurred.

Alinta Energy would expect that bidding around demand shocks and similar factors would ultimately lead to the efficient management of those factors. In other words, leaving aside the outcomes within individual 5-minute pricing intervals, outcomes across the period effected by an exogenous factor (i.e. a hot afternoon or series of days) suppress initial price responses.

Similarly, for economic withholding to have relevance within the existing debate a generators ability to game could only arise if its response to an exogenous shock, primarily a demand shock, did not give rise to any counter bids or actions which muted the impact of that gaming for the duration of that shock.

Furthermore, to (negatively) distinguish economic withholding from general rebidding, over the longer term sufficient barriers to entry would need to exist to impede a competitor entering the market to respond to exogenous factors and price spikes which form a valid market signal.

The above analysis demonstrates that the difference between "gaming" or economic withholding and rebidding in response to new information is a matter of degree and perception. It also suggests that efforts to determine what actions are a result of or in response to "real scarcity" versus "artificial scarcity" is of itself an artificial construct and ultimately flawed.

The impact on productive efficiencies has been raised by some stakeholders and has resulted in some interesting analysis. This matter is dealt with in section 4 of this submission.

Definition of the market

The market needs to be appropriately defined by the AEMC. Alinta Energy has some concerns that the predisposition to defining the market based on temporal and geographic dimensions (as evidenced by the election of the SSNIP test) inappropriately emphasise the perspective that

an inability to secure a contract in year X, in region Y, is primary indicator of substantive market power and of market boundaries.

While Alinta Energy supports the use of the proposed market dimensions, we recommend that the market be analysed in two ways in order to appropriately assess the rule change:

1. the forum of exchange (systems and rules) which is the spot market and is the defined component of the NEM (even though the term NEM is universally used to incorporate a wider market than the spot market operated by AEMO); and
2. the broader market, of which the spot market is one part, that sits within a less definable boundary but that does include:
 - the competitive contracts market;
 - futures, OTC and bi-lateral contracts.
 - retail markets;
 - transmission and distribution networks;
 - other fuels, including gas;
 - embedded generation; and
 - related commodity markets.

Assessment of the proposed rule on market efficiency

Any assessment of the proposed rule needs to assess the impacts on market mechanism efficiency and outcome efficiency.

Market mechanism efficiency relates to the impacts on efficient resource allocation. Presently, the NEM spot market works well to reveal participants preferences through transparent price discovery. It also does this at low cost.

Outcome efficiency concerns the overall societal welfare maximisation. This requires careful consideration given outcome efficiency must consider the broader market the NEM sits within which is less easily definable but is a primary driver of investor decision-making.

Additionally, AEMC rule-making does not universally cover this broader market even though any proposed rule regulating the operation of the NEM (within the AEMC's remit under section 34 of the NEL) would impact it generally and possibly directly.

While we appreciate that the broader market is difficult to limit, and complicates the analysis, it is an essential part of an investor's decision-making framework. Hence, any discussion and analysis, including modelling, needs to be considered in the context of this broader market.

Tacit collusion and coordinated market power

The AEMC's position on tacit collusion and coordinated market power is appropriate in the context of the proposed rule change.

2. Proposed tests within the assessment framework

The relevant step of the assessment framework comprises two specific tests:

- measurement of price outcomes against a LRMC benchmark; and
- SSNIP test (small but significant and non-transitory increase in price).

LRMC benchmark

Alinta Energy supports the use of a LRMC benchmark to aid in the assessment of the proposed rule but suggests:

- the form of the LRMC benchmark proposed is not appropriate on its own;
- the assessment framework's expectations around new investment responses have little relevance to investment dynamics of the NEM;
- there is limited value of using a LRMC over the short-term given that electricity markets can remain in disequilibrium for long periods of time;
- limited value can be derived from backward-looking measures;
- forward-looking indicators are overly subjective; and
- any LRMC benchmark on its own does not provide a justifiable basis for intervention.

Form of the LRMC benchmark proposed by NERA

The AEMC notes that NERA report provides that the LRMC of the market is the "cost of serving an incremental change in demand in a market, assuming all factors can be varied" (AEMC pg 16). The system wide approach, which appears desirable, seems to attempt to use an optimised LRMC to measure the marginal change in system costs to satisfy a marginal change in demand.

Seemingly, the proposed approach requires forecasts of future demand and technology costs to calculate the cost of bringing forward the next increment of investment. This may be possible in a regulated environment, for instance water regulation where average incremental cost has been recommended by the World Bank for water supply projects; however, we are less comfortable with its use in the NEM as an energy-only market dependent on private sector investment to guarantee reliability of supply.

For instance, the treatment of demand forecasts, capacity factors and system reserves, options value in the face of policy uncertainty, competitors' action, risk appetite of investors and all

capital getting a rate of return are likely to be matters that have a significant bearing on the outcome of the LRMC and also its value as a system-wide measure.

Relevance to new investment in the NEM

As such, an LRMC for the market which includes all options available throughout the system (new generation, retirements, transmission, and demand-side options), is unlikely to be informative as to why investment has or has not occurred.

Additionally, given the nature of energy industry investments – irreversible expenditures which form large sunk costs are best delayed in the face of uncertainty - we do not think it is reasonable to expect investors to respond to the LRMC of the market proposed by NERA.

Given this uncertainty the LRMC used by an investor is likely to be significantly higher than the one proposed by NERA. Therefore, if used as a 'test' of market power, it is likely to lead to false positives. This suggests the net present value approach of bringing an increment of investment forward based on the LRMC of the market is not an appropriate measure.

Additionally, investors are firmly aware of the impacts of new entry on wholesale prices. Hence, a LRMC that suggests new entry is warranted is not attractive if prices post-entry are below LRMC. And this is the LRMC of the specific proposed project and not the market.

In the present climate investors value the option of investments with lower capital reflected through construction of combined cycle gas turbines. Therefore, it should be expected that an investor would assess projects based on the LRMC of a gas project which is likelier, given its capacity factor, to be notably above the LRMC proposed by NERA.

Additionally, project investments are likely to be forward weighted with a need to make enough returns in the initial years to guarantee viability, ensure avoidance of bankruptcy and to meet financier obligations. This means investors need assurance that a return can be made post-entry by not pushing the price below LRMC. This is particularly important as the actions of other participants and government will be more difficult to forecast the further away from the year of entry.

To have traction with industry Alinta Energy suggests the AEMC needs to use the LRMC required by an investor in order to bring on the marginal plant required to satisfy demand in the NEM. This would effectively be the levelised cost of investment in a single gas-fired peaking plant. Such an analysis may be captured by the AEMC's proposed approach, but if not, it should supplement, if not lead to the revision of the proposed assessment framework.

Disequilibrium and the relevant timing of investment

It is important to be conscious of the implications of entry decisions by firms.

Fundamentally, given generation investment is brought on in lumpy increments the whole number of plants at any point in time may lead to a sustained over-supply or sustained under-supply of capacity.

This means, and should be explicitly recognised by the AEMC, that even if an assessment of the market suggests prices are in excess of LRMC of new entry, let alone the market, this does not imply that the market is not working properly.

This is because potential new entrants may not be able to capture enough demand at the required price to justify entry given they can only bring on large lumpy investment. This would not be the case if electricity assets were perfectly divisible.

Conversely, acceptance of market disequilibrium for extended periods of time means that there will also be circumstances where the market operates below the LRMC required to provide a return on assets. An expectation of market amendment to supplement loss-making generators during times of below LRMC wholesale prices is no less valid than suggestions of intervention in the face of perceived above LRMC returns.

Fortuitously, J. P. Morgan this week released a report entitled 'Merchant Utilities: Who gets the missing money?' in which they provide a comprehensive analysis of the market over the past decade to conclude that the persistent overhang of capacity has depressed prices. An outcome they expect to continue for the next 3-4 years.

The implications of disequilibrium and realities around the timing of investment are pithily summed up by J. P. Morgan in their report (JPM pg 9) as follows:

'The capital intensive nature of the power generation industry means that managers and boards face the unenviable task of having to time investments to avoid periods during which the issue of the missing money is most acute. This is no easy task, particularly when the average life of a power station is at least 25 years.'

LRMC measurement time frame

The significance of the above analysis for the AEMC is the time horizon suggested in the assessment framework is inadequate. Alinta Energy believes there is limited value in assessing spot market and contract market outcomes over a period between one and three years. It is premised on the expectation that investors will respond to an LRMC of the market in that time frame. This expectation is not practical.

Furthermore, the long-run is inherently difficult to measure, this is not surprising, and hence attempts to capture dynamic responses are fraught. The process becomes more difficult if an appropriate timeframe is not used. The NEM itself has only been in existence for over a decade, which is of itself not necessarily consistent with long-run measures especially given the nature of electricity consumption and the asset base; however, a period of ten or five years is more suitable than one or three.

Value of backward-looking and forward-looking indicators

As it relates to the analysis, we note both forward-looking and historical models are of limited value in isolation. For instance, it is unclear what a retrospective analysis, which indicated a perceived issue in year X would provide. It certainly does not provide a basis for intervention

and ultimately is just as likely to indicate that outcomes vary over time as expected in a dynamic market.

A forward-looking indicator is inherently subjective and based on limited assumptions. For example, it needs to assume a future technology mix and forecasts of future demand. Therefore, it can only be inaccurate. As such, while informative it does not form a basis for justifiable intervention.

Basis for intervention

We understand the value of conducting modelling to inform the analysis and in identifying the limitations in the NERA approach support an extension or recasting of the assessment. Nevertheless, given the dynamic nature of the market we do not endorse the LRMC test as a basis for altering the current market arrangements.

Electricity markets by their nature are artificial constructs that can only be expected to develop over time if not subject to constant distortion and intervention. Thus, the evidential bar for major reform must be set appropriately high. As it stands, neither the rule change as presented by the MEU, or the LRMC approach proposed, could provide sufficient justification to change.

SSNIP test

It appears likely that given the workings of the SSNIP a conclusion that the market exists on a regional basis will arise. In short, the markets reach into other regions is limited by inter-connected capacity, determined by regulated networks, not firms. On this basis, a case for regional markets can be readily made.

Customers' consumption is not easily substituted in practical terms (electricity is not storable) and therefore customer responsiveness to prices is difficult to measure. Therefore, it is unclear how this test reflects customers' experiences.

Alinta Energy understands the view regional outcomes are of primary interest for major load and independent retailers; with both preferring to seek contract solutions in their region. However, the question is not whether the market *can* be regionalised but whether it *is* regionalised and thus separate markets.

Alinta Energy does not believe this to be the case. This is because prices in one region can not outstrip prices in an alternative region adjusted for the provider's appetite for inter-regional basis risk.

Hence, incentives for regional solutions for load, retail, vertically integrated entities and generation are similar as it minimises price risk and avoids inter-regional risk. Yet when the incentives are there: independent retailers will take uncontracted positions or hedges from other regions; vertically integrated companies will take retail exposure without matching generation; major load will sign contracts with firms in other regions or take spot; and generators will take bi-lateral exposure in other regions or increase their spot exposure.

Therefore, a preference for contractual or other solutions in a firm's home region from a risk management or familiarity perspective does not demonstrate itself the existence of separate markets. Therefore, any attempt to structure such an outcome conflicts with the evolution of the NEM and legal precedent.

3. Additional measures to inform the assessment framework

Alinta Energy believes the AEMC assessment framework can be enhanced by additional measures and in turn the impact of the MEU proposal on these measures requires further consideration. In particular:

- analysis of new entry over life of the NEM;
- reserve margin;
- reliability;
- industry profitability;
- market liquidity; and
- availability of alternative risk management options.

These points are discussed below.

Analysis of new entry over the life of the NEM

The history of new entry in the NEM is a fundamental component of any analysis of market power given barriers to entry is a pre-condition for the exercise of market power. It is noted that the history of new entry in NEM is likely to feature in the next stage of the AEMC's analysis.

Reserve margin

In order to maintain market power, in the form defined by the AEMC, there needs to be inadequate levels of generation competing to meet demand. One measure of adequacy of generation capacity is reserve margins.

According to the previously cited J. P. Morgan paper the rule of thumb measure for reserve margins is 15 per cent. The average reserve margin in the NEM is provided as 27 per cent, significantly in excess of this. Interestingly, this is consistent with generators contracting on an N-1 basis i.e. existing demand covers 75 per cent of generator's capacity.

Industry profitability

At its simplest, market power is used to generate profitable outcomes. If average wholesale prices have remained above the LRMC of the market one should expect, if that metric has any relevance, for firms to be making corresponding supernormal profits. On this basis, an understanding of industry profitability may be informative. A range of external data is available to assist with this analysis.

In that regard, the J. P. Morgan report, previously cited, estimates that declining demand and high reserve margins has placed downward pressure on prices. The corresponding estimated impact on generators over the past decade is “amassed economic losses in the order of \$6bn’ (pg 5). J.P. Morgan calls this evidence of the missing money.

Market liquidity

While market liquidity of itself is not a goal; a liquid market for hedges across the NEM is beneficial and allows firms to choose from a variety of sophisticated derivatives. Alinta Energy suggests there is an absence of evidence the current hedging opportunities across the NEM cannot satisfy the requirements of market participants and major energy users.

As for the impact of the proposal on market liquidity; we endorse the position presented by the Australian Financial Markets Association that the MEU proposal would have negative impacts on market liquidity and the role of derivatives. This applies equally to funding new investment and hedging participant risk.

Alternative risk management options

The forward contract markets are but one opportunity to hedge price risk in electricity markets. The use of weather derivatives, insurance, power purchase agreements, demand management and embedded generation are all valid methods used to varying degrees. These options should feature in the AEMC’s analysis.

Reliability

The market power argument suggests that generators have significant control over wholesale price outcomes. This proposition is difficult to reconcile with a workably competitive market that has excess capacity and high-reserve margins. Interestingly, the NEM has and continues to operate within the reliability standard.

4. Additional issues relevant to the AEMC’s analysis.

Misplaced concern with productive efficiency

The discussion of productive efficiency seems to focus on the degree of inefficiency that can arise within any 5-minute interval or spot price period as a consequence of firms bidding decisions.

However, it is more important that the market is designed efficiently and gives rise to bids and prices in which the preferences of participants are revealed accurately. In this manner, the relevant metric is the opportunity cost of gains from trade being secured (or not secured) determined by an individual firm not the measure of the resource costs of that trade.

As a consequence productive efficiency is not the appropriate measure of spot market arrangements. Clearly, it can be expected that over short periods of time, as illustrated by some stakeholders, that productive inefficiencies will arise. Some of these may be large; however, if the market design is efficient than this fact is not pertinent as overall welfare will be maximised.

Risk management by major load

Alinta Energy made a presentation at the AEMC Public Forum on behalf of private generators in which it was suggested by this group that the proposed rule-change reflected a desire to alter the dynamics of the market to minimise risk exposure for a specific category of participants. Hence, the introduction of a price cap would have the effect of replicating cover for price risk without large consumers needing to implement hedging strategies or enter the retail market. Alinta Energy supports this view.

Alinta Energy is of the view that the existing market settings and available risk management tools suit the needs of market participants. Should customers seek an additional level of risk management to suit their risk appetite they should either seek the certainty of competitive retail prices or seek appropriate contractual hedges.

In that regard, Alinta Energy considers if it would be prudent to investigate the management of electricity price risk by major load to determine whether the rule change has emanated from genuine concerns or is a consequence of particularly poor decision-making across the price cycle by a limited number of firms.