
ESTABLISHMENT OF FIRST COMPENSATION GUIDELINES

Expert Panel Advice to the Australian Energy Markets Commission

15 April 2009

1. INTRODUCTION

The Australian Energy Markets Commission (AEMC) published proposed compensation guidelines on 5 March 2009 and invited interested parties to make submissions. The compensation guidelines will support operation of clause 3.14.6 of the National Electricity Rules (Rules) which describes how compensation is to be determined by the AEMC if a claim is made by an eligible party following the application of an Administered Price Cap (APC) during an Administered Price Period (APP), market suspension, and in certain circumstances the Value of Lost Load (VoLL) or market floor price

The AEMC has established an expert panel to provide advice on “the practical implementation of the proposal and final compensation guidelines including identification of any requirements, ambiguities and omissions that would make the guidelines difficult to apply”¹. The panel has been asked to provide its initial advice as a submission.

SUMMARY OF KEY POINTS

In summary the Panel considers that:

- There is scope to redesign the guidelines to separate the explanation and detailed examples from the guidelines themselves
- Confidentiality provisions should be clarified and provision for independent but confidential review of claims included
- The statement and discussion of the objectives should reflect the inability of compensation based only on direct costs to create incentives for investment per se
- Discussion of elements of costs that can be claimed be clarified to align with the basic formula proposed in the guidelines to ensure that normal costs and wear and tear will not inadvertently be excluded

¹ Letter to Dispute Resolution adviser, Establishment of first compensation guidelines ns lines under the National electricity Rules, John Tamblyn Chair, Australian Energy Markets Commission 22 January 2009

- Principles for calculation of opportunity costs for both generators and scheduled loads including treatment of fixed or indirect costs be reviewed and simplified
- Applicants carry a share of costs to claim compensation but that this amount should be capped.

STRUCTURE OF THE REPORT

The panel's advice is structured as follows:

- Section 2 describes the establishment of the expert panel
- Section 3 comments on the overall structure of the guidelines
- Section 4 provides commentary on confidentiality
- Section 5 comments on eligibility for compensation
- Section 6 discusses the objectives of the guidelines
- Section 7 comments on the principles of the guidelines
- Section 8 looks at information requirements
- Section 9 provides the panel's comments on the methodology to calculate compensation.

2. ESTABLISHMENT OF THE EXPERT PANEL

The AEMC established a three member expert panel comprising Greg Thorpe, Geoff Swier and Jim Truesdale. The panel members note that from time to time they provide advice or hold governance positions with a range of participants in the NEM and that these roles may give rise to potential conflicts of interest. Summary profiles for the panel members and a statement on conflicts of interest are attached as Annex 1.

3. OVERALL STRUCTURE OF GUIDELINE DOCUMENTATION

The draft guidelines document is a mixture of explanatory narrative and guidelines per se. We suggest that it may be better to separate the guidelines from the Commission's explanation, for example by publishing guidelines and a separate discussion or explanatory document. This would simplify the guidelines, clarify to stakeholders how to develop a compliant claim for

compensation, and help to make responsibilities clearer². For example, for schedulable generators' claims, the core guidelines might simply:

- Define eligibility for a claim - a claimant must be able to demonstrate that in complying with dispatch instructions during an APC event the sum of its direct costs and opportunity costs exceeded spot market revenue.
- Define direct costs – actual costs incurred because it was operating (and list some examples – which could be elaborated on in annexed material if considered necessary).
- Define opportunity costs – opportunities foregone as a result of the declaration of an APP during which the claimant had flexibility to use resources more profitably at another time (and list some examples with elaboration in annexed material as appropriate).
- State the basis on which claimed opportunity costs will be considered by the Commission and panel – clearly demonstrated flexibility to use constrained energy resources at another time and on an expected value basis spot prices at that time (the value of traded caps or appropriate alternatives).
- State clearly that the burden of proof regarding costs incurred, and the provision of information, analysis and/or models, rests with the claimant.

4. CONFIDENTIALITY (SECTION 4)

Under the proposed guidelines, a participant submitting a claim may identify information it considers confidential although the Commission will ultimately decide which information it will publish during the consulting process. Exposing the details of a claim to wider scrutiny should help to counter the possibility of misleading information or inflated claims and provide greater assurance to the Commission before making a final decision. On the other hand, the prospect of sensitive information being published at the Commission's discretion could impede full disclosure and affect the quality of information made available to the Commission and panel. We note that some of the information to substantiate a claim may involve terms and conditions for the purchase of fuel and may be subject to confidentiality within the relevant contracts. As claimants are likely to be "innocent parties" who stand to incur an operating loss despite having offered a cost reflective price to the market which was accepted but coincided with an APP, we consider confidentiality should be respected. Given these potentially competing tensions, it may be helpful if the guidelines were to provide for:

- The Commission to consult beforehand with a claimant about specific information it proposes to publish and that it should not have a discretion to release information claimed to be confidential but to have a process that allows claims to be fully reviewed;
- Appropriate arrangements, perhaps through a third party, whereby another participant could confidentially review claimant information where the Commission is satisfied that this could assist it or the panel to ascertain the validity of certain information that is material to the claim.

² This is not sufficiently clear in the guidelines as proposed and the style of narrative (e.g. 9.3.2.1) could be interpreted as a greater onus on the Commission or panel to undertake detailed modeling than intended.

5. ELIGIBILITY FOR COMPENSATION (SECTION 5)

The compensation provisions apply only to participants that have complied with dispatch instructions issued in accordance with their bids and in doing so have incurred costs (direct and opportunity) in excess of market revenue. For example, a generator that fails to comply fully with a dispatch instruction during an APP will not be eligible for compensation. However, it may be worth clarifying in the guidelines whether a partial compensation claim will be considered if it can be demonstrated that it was not practical to fully comply with a dispatch instruction because of a reasonably unforeseeable/ bona fide physical failure. i.e. eligibility for a claim relating to losses incurred during an APP prior to the plant failure occurring. Participants may otherwise bid conservatively during an APP (for example not offering overload capability) when reliability and efficiency may be enhanced by participants being prepared to bid on a more physically risky basis.

It may also be worth clarifying in the guidelines that any repair costs relating to plant failure during an APP are to be excluded from a claim (on the basis that bids and offers are submitted voluntarily and the declaration of APP does not change the operation of any plant – simply the price).

6. OBJECTIVES OF THE GUIDELINES (SECTION 6)

a. CLARIFYING OBJECTIVES – MEANING OF INCENTIVES TO INVEST

We note that the objectives for the guidelines are part of the NER and include inter alia*to maintain incentives for investment*. There is an inherent conceptual difficulty for compensation based on essentially short term “out of pocket” costs to achieve this objective. Short term and direct costs by definition do not contribute to capital costs which are an essential requirement for participants to undertake investment. (We note however that energy constrained flexible plant that is compensated on the basis of future opportunities could potentially recover some fixed costs. This point is discussed further later in this report.)

We do note however that the broader context in which an administered price will apply, and that compensation may be payable, can be said to facilitate investment as the cumulative price threshold that will trigger an administered price will only be triggered after a number of hours of high prices. Further the CPT is selected to maintain an investment signal.

Hence compensation that ensures short term cash costs are payable can be said to not create a material disincentive for investment in the context in which it operates.

A more problematic issue is that the final paragraphs of section 9.3 of the draft Guidelines allow claims for costs not otherwise covered. We understand and support a provision that offers discretion that can be used when the more prescriptive elements of the guidelines “results in a level of compensation which is demonstrably insufficient.....”. However we have concern that this provision may be linked to the objective to maintain incentives for investment and there will be argument that, if successful, would undermine the intention to provide for short term costs but

not to compensate fully for loss of contribution to fixed costs. We suggest consideration be given to clarifying the assumptions that apply to the incentives to invest referred to in Section 6(a). This would assist in understanding the overall operation of the Rule and avoid the wording of the “Exceptional Cases” provision leading to claims for compensation for return on, and of capital.

7. CLARIFYING PRINCIPLES OF THE GUIDELINES (SECTION 7)

We note that in a number of places the drafting implies that the compensation is for costs incurred because an administered price has been imposed (for example in section 7(a)). We are concerned this leads to some confusion and potentially erroneous assessments of compensatable costs. We consider that the norm will be that revenue from payment at the Spot Price from dispatch resulting from validly submitted bids and offers may not cover all of the direct costs underpinning bids/offers as a result of imposition of administered price. That is, it is the capping of price which creates a loss that compensation is intended to remedy rather than that the costs are incurred because of administered price.

The discussion in section 9 below elaborates on this point further.

8. INFORMATION REQUIREMENTS (SECTION 8)

The guidelines require NEMMCO to verify facts identified in a claim. We assume NEMMCO is not being asked to verify facts beyond those related to market and power system outcomes and that it may be necessary to clarify this point.

In some circumstances, the Commission and or the panel may need the ability to request a third party to verify certain information where it is outside the direct knowledge of NEMMCO. An example would be in relation to events in the gas market that affect the cost of gas. It may be desirable to clarify this as an additional step in Section 8. Appropriate arrangements for confidentiality may be required as discussed in section 4 above.

There may be benefit in providing an opportunity for claimants to work with AEMC staff to informally help claimants understand and interpret the guidelines with the objective of determining whether there is a valid claim and if so, submitting a fully compliant claim. Discussions with AEMC staff would not bind the Commission or a related Panel. This approach is followed by the staff of the Australian Energy Regulator. In the view of this Panel this approach would assist in the good functioning of the process of a claim.

9. METHODOLOGY TO CALCULATE COMPENSATION (SECTION 9)

a. CALCULATION OF DIRECT COSTS

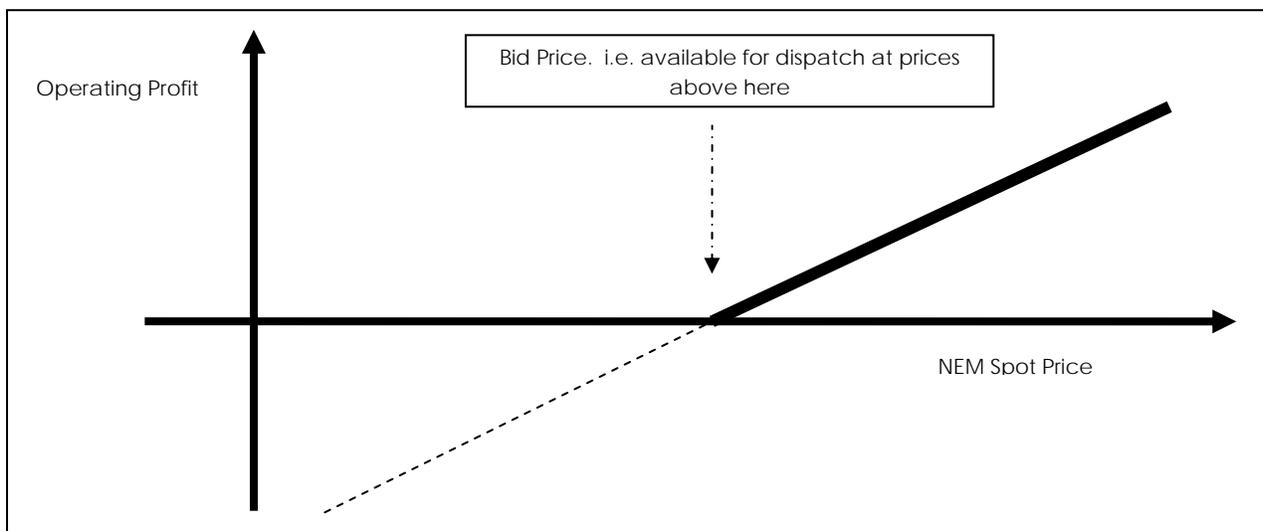
We note that the calculation proposed in the guidelines takes the difference in total actual direct costs and revenue received from spot payments. We support this approach.

However, we suggest this is potentially at odds with the detailed descriptions in section 9.2 and we believe the apparent exclusion of normal wear and tear proposed by section 9.2.4 is not appropriate. (See discussion below).

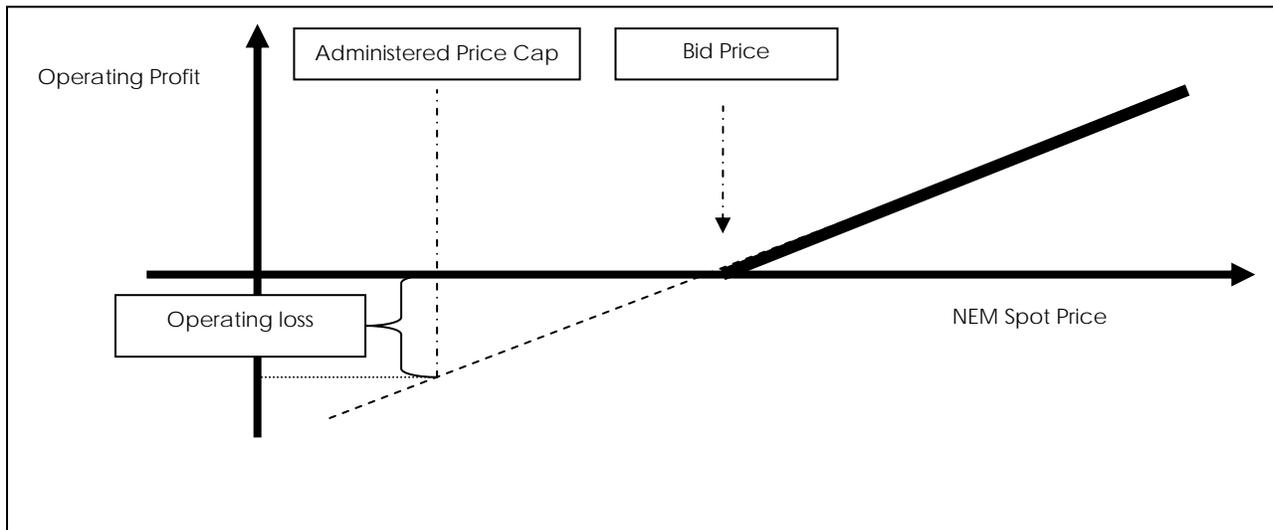
b. FUEL COSTS AND ABNORMAL WEAR AND TEAR

The discussion in section 9.2.1 refers to costs not covered by normal coal/gas supply, fuel costs for start up of generators in abnormally high demand conditions and fuel costs for operation away from optimal operating conditions. It references a source of information about normal costs. We have concern about the relevance of reference to normal and optimum costs.

The NEM operates on the principle that bids and offers represent the price at which the participant is indifferent as to whether they are dispatched. In particular a participant that is prepared to use high cost fuel or to operate inefficiently in order to increase capacity or to incur greater wear and tear on plant and equipment can do so at anytime. These participants are expected to submit bids and offers that recoup those costs. High prices at times of low reserves are intended to signal that this practice is beneficial and to remunerate it. In the absence of an APP, if bids formed on this basis are dispatched the spot price will in most situations be at least equal to the price in the bid and therefore the participant's costs will be covered.³ It is only when the APC is imposed that this will not occur as the APC is by definition generally inconsistent with the dispatch. This point is illustrated for direct costs of a generator in the following simplified figures of operating profit against NEM spot price. Operating profit is the difference between electricity revenues from the Spot Market and operating costs. The first figure shows how operating profit per unit of potential production will be negative until the spot price rises above a breakeven point – this would be the minimum economic bid that could be submitted. The second plot shows what happens if the unit is dispatched with a bid price at the breakeven point but the APC is invoked and the APC is lower than the breakeven cost. This results in an operating loss.



³ Price may not necessarily be set from the highest priced bid under some network constraint conditions.



We assume that the intention of the compensation arrangement is that if bids and offers based on actual costs are accepted, (regardless of whether the costs are “normal” or result in operation at “optimum” plant efficiency), but the APC is imposed, the compensation will assess and pay relevant and genuine costs. We also note that the level of APC that has been set in the NEM will in most, but not all, situations cover normal and optimal direct costs. Therefore a claim for compensation for direct costs is more likely when abnormal and sub optimal costs are being incurred. Note of these factors is relevant in discussion as a part of the total direct cost. As the proposed calculation does deal with total costs, our concern in this regard may be more a question of choice of words than a matter of principle.

Therefore we suggest the discussion in section 9.2.1 be simplified to note the intention is to identify **total** direct costs. Also, that it is recognised that a claim for compensation may be based on a participant having incurred higher than normal or sub-optimal costs of the type noted in sections 9.2.1 – 9.2.3, being careful **not** to imply that this should exclude the normal or optimal cost components.

C. EXCLUSIONS

General wear and tear is a part of normal operating cost – it is commonly referred to as the Variable Operating and Maintenance Cost (VOM) and forms part of the short run marginal cost (SRMC) for operation of generators. Participants are expected to account for VOM in their bids/offers and in the normal course of events the Spot Price will provide revenue to cover it. The calculation of the term “DC” in the proposed formula for calculating compensation would seem to include “normal” level of VOM and we believe this is appropriate. To exclude it would mean that a participant would not receive payment for this component of normal costs.

Therefore we question whether the material on exclusions is needed. As drafted, this section (and also the references in earlier sections relating to abnormal costs) would be consistent with

preparation of a claim for compensation when the additional costs have been incurred as a result of different scheduling instruction such as during a direction from NEMMCO in other circumstances. In those circumstances spot revenue will be expected to cover "normal" costs but compensation may be needed to cover additional costs. We suggest the entitlement to claim compensation during an APP can be fully described by reference to demonstrable total direct costs incurred compared to revenue received from the spot market. In the form that compensation is to be calculated under the guidelines the text of the section relating to exclusions risks preventing a participant from being paid for normal wear and tear.

In principle a more problematic situation could arise if the APC is applied at a time away from peak demands when maintenance had been (sensibly) scheduled on a plant with relatively high SRMC, for example a gas turbine operating on distillate, and a number of coincident generator outages or unseasonably high demand occur. The plant might be brought back into service by cancelling maintenance (at considerable cost to the participant) in response to an emerging shortfall and sequence of high prices, just in time for the APC to be imposed. High costs would have been incurred in the hours and days before the APC was imposed, but during the APP the generator's SRMC would be of the order of the APC. Returning a plant to service in circumstances such as these is efficient but would be discouraged if there was a risk a participant would be out of pocket for the additional costs incurred. Presumably this could be covered as an exceptional case; however, the guidelines appear only to allow for exceptional cases of opportunity cost. The guidelines could therefore include examples of how costs of this nature would be covered in particular what would need to be submitted to substantiate a claim.

d. CALCULATION OF OPPORTUNITY COSTS

The following is the summary of our views on calculation of opportunity cost, which are further elaborated below.

- a. As discussed in Section 3 above we suggest simplifying the guidelines by distilling the key elements of the guidelines and publishing the Commission's explanation separately
- b. We suggest identifying the principles that should be considered in determining the value of opportunity cost. In part this is because in some cases use of market based values such as the value of traded caps may not be available or inappropriate, and there may be a need to use other valuation methods. The panel considers the application of the principles need to be tested as to how they operate in practice (see below)
- c. The valuation of expected Spot Prices and traded caps should be incorporated in the guidelines as a way of illustrating the application of the principles
- d. The burden of proof should be placed on the applicant to demonstrate an appropriate valuation having regard to the principles
- e. We are unclear as to exactly how easy it will be to apply valuation principles in practice. In particular we note that the draft guidelines provide for loss of value from energy

limited facilities only in the context of lost future opportunities whereas opportunities may have already been given up prior to the application of an APC. Also the timing of exactly when opportunity cost is assessed may not be clear. We suggest that analysis needs to be undertaken of how principles would apply in a number of specific scenarios to address these points

- f. Opportunity costs based on market prices will generally reflect both variable and fixed costs. Compensation to flexible energy constrained plants based on the full loss of spot revenue will unavoidably compensate for loss of fixed costs. This will be inconsistent with the principle of compensation for direct costs of plants with limited flexibility but appears to be a consequence of the current draft guidelines. This matter may require additional policy consideration. A similar difficulty arises in the compensation for scheduled loads.

e. PROBLEMS IDENTIFIED

This section discusses the problems we have identified in respect of opportunity costs.

Concept of expected value

The panel considers that guidelines should refer to the concept of expected value. Determining opportunity costs is essentially concerned with the expected future value of electricity in a particular region of the NEM over a particular time period. The value of a traded cap is one means of determining the expected value of spot prices over \$300 in a region, with the value of traded caps providing a useful benchmark, but it is not the only method.

Market valuation may not be available or appropriate

The panel agrees that in principle the ideal method of valuation is a market determined (traded) instrument, which could be the market value of an appropriate cap contract. A market determined value (provided it is available) has desirable characteristics including that: it is unambiguous; and incorporates a range of market views on future expected values and risks at a point in time. Market value avoids the need for the AEMC to retrospectively assess and test the claimant's view of opportunity costs.

However in some circumstances it may be difficult to use traded values of a capped contract to determine expected value proxy for opportunity cost:

- There may not be information on traded values for a relevant region. For example it is conceivable that there may not be any relevant traded information on capped contracts for Tasmania;
- There may not be information on traded values for the relevant time period. We understand that exchange based trading of quarterly options ceases 6 weeks ahead of the quarter. Also, the true value of capped contracts may change to a material extent due to the event(s) that have led to the impositions of APC, market suspensions, VOLL or the market price floor. For example it is conceivable that in the period between a major event occurring (say a major transmission outage) and the event ceasing, that no trading takes place in capped contracts, even though the true underlying value of those contracts, and therefore opportunity cost, may have materially changed.

- A cap contract may not have a structure (strike price and / or duration) that closely matches the economic characteristics of the generation plant in question. For example
 - If the only information is on the value of traded cap contracts with a quarterly duration, whereas the relevant time period for assessing opportunity cost was a week, then the available traded value for a cap contract may not provide a reasonable proxy of opportunity cost
 - Typical traded cap contracts have a strike price of \$300. This may not provide the right relationship between premium and the expected value of the payments made under the cap contract.

If an appropriate traded cap contract value is not available, or if available market data cannot be easily adjusted to account for the factors noted above, then alternative methods are required. Alternatives the panel has identified are

- Opportunity valuation based on market data for a similar period in the past
- Opportunity cost value based on process and models used by the applicant for determining their dispatch offers and managing their trading risks.

Under this approach the applicant would be required to

- Explain the relevant details of the model(s) and processes
- Demonstrate that the model and processes were used to formulate dispatch offers and manage trading risk
- Demonstrate that any inputs to any model were reasonable

The panel expects that in general, those applicants should have in place such models and processes. These models and processes may provide a reasonable alternative source of information for valuing opportunity costs in the event that the information from market values is considered inappropriate.

Principles for choosing a method for valuing opportunity cost is unclear

The discussion in the previous section highlights that the underlying principles for choosing a method for valuing opportunity cost is not clear in the current guidelines.

Previously lost opportunities

The draft guidelines provide for loss of value from energy limited facilities only in the context of lost future opportunities. There is also reference to moving energy from a higher priced period into a lower administratively priced period and this conveys an impression that timing of dispatch has changed as a result of the declaration of administered price. As noted earlier this is not likely to be the case as the bidding and scheduling process will continue unchanged but the Spot Price will be capped during an APP.

In addition there are situations where participants may have responded “perfectly” by anticipating emerging high prices and rationing storable fuel for dispatch during the most critical time only to have an administered price imposed at the time.⁴ In this circumstance the participant will have foregone revenue by rationing its available fuel at possibly moderately high priced periods in the hours and days before an administered price is imposed. It will in that sense have effectively moved fuel, for example water, from a high priced period into an APP – but as a result of the capping of price, not by involuntary change of dispatch. If the participant had known there would be an APP, to the extent possible, it would indeed have shifted its water to periods when the APC was not to be in force if it will incur a net (risk adjusted) loss.

Calculation of compensation in this situation is fraught. Compensation at anything less than the full uncapped spot price risks participants with highly flexible but limited fuel supply second-guessing the move to set an APC, by using the fuel earlier. This action, although commercially rational, would undermine reliability and efficiency of the market at a time of greatest stress. However, compensation based on the uncapped price for these plants would to some extent be inconsistent with the underlying direct cost basis for compensation that applies to other less flexible generators in that uncapped prices contribute to payment for fixed costs – as we note in section *h* below, a similar difficulty arises in respect of scheduled loads. There is however a case for compensation to recognize that flexible energy limited plants will by definition be restricted in the number of hours they can operate and therefore recover fixed costs. By implication the existing arrangements presume the lack of recovery of fixed costs during an administered price period is immaterial in the longer term. Hence the impact on recovery of fixed costs will be relatively greater for these plants. Reconciling these matters is difficult.

Distinction between high flexible and limited flexibility plant

The panel considers that whether plant has a high level of flexibility or limited flexibility that it is appropriate to follow a similar process for evaluating the opportunity forgone and estimating the expected value at the time the decision for bids during an APC was made. As noted above, the option value of a cap is an “expected value” approach to estimating future spot prices above \$300. Therefore it is not clear why, as indicated in the draft guidelines, actual spot prices in subsequent periods should be used for valuing shorter term flexibility. It should also be noted that in relation to very short term flexibility, “expected prices” might be much higher than normal given the circumstances at the time the offers in question were constructed. Otherwise, using actual spot prices assumes perfect foresight when offers were constructed.

f. STRUCTURE OF GUIDELINES

In light of the above comments we suggest simplifying the guidelines as follows:

- Set out a succinct definition of opportunity cost

⁴ We use the term “perfect” rationing to highlight the situation where the participant may have optimized the amount of energy available to the market such that maximum capacity was retained for the time of greatest threat to reliability and optimum price.

- Set out a hierarchy of principles for determining the value of opportunity cost
- Define particular valuation methods and outline how they relate to the principles

g. PRINCIPLES FOR CHOICE OF METHOD FOR VALUATION OF OPPORTUNITY COST

The panel suggests the guidelines include a hierarchy of principles for choosing a method for valuing opportunity cost along the following lines:

The choice of method (or methods) for valuation of opportunity cost should reflect the following principles

- *A market based valuation of opportunity cost is preferred because it is unambiguous and simple to verify.*
- *A market based valuation of opportunity cost should reasonably closely reflect the characteristics of the relevant energy limited facility being its location, the time period over which opportunity cost is assessed and its cost structure.*
- *If an appropriate market based valuation is not available then the use of market values over a similar past period should be considered.*
- *If the use of market values over a similar past period is not available then opportunity cost valuation should be based on processes and models used by the applicant for determining their dispatch offers and managing their trading risks.*
- *It may be necessary to use a number of methods, undertake a comparison of the advantages and disadvantages as each method to arrive at conclusion on appropriate opportunity cost*

h. METHODOLOGY FOR VALUATION OF OPPORTUNITY COST FOR SCHEDULED LOADS

Section 5 of the guidelines states that market participants submitting dispatch bids may seek compensation from NEMMCO in respect of a scheduled load. Where a load is dispatched off at a bid price above the APC then the market participant could be out of pocket due to lost production/ downstream costs not fully recovered – an opportunity cost arising as a result of the application of the APC.

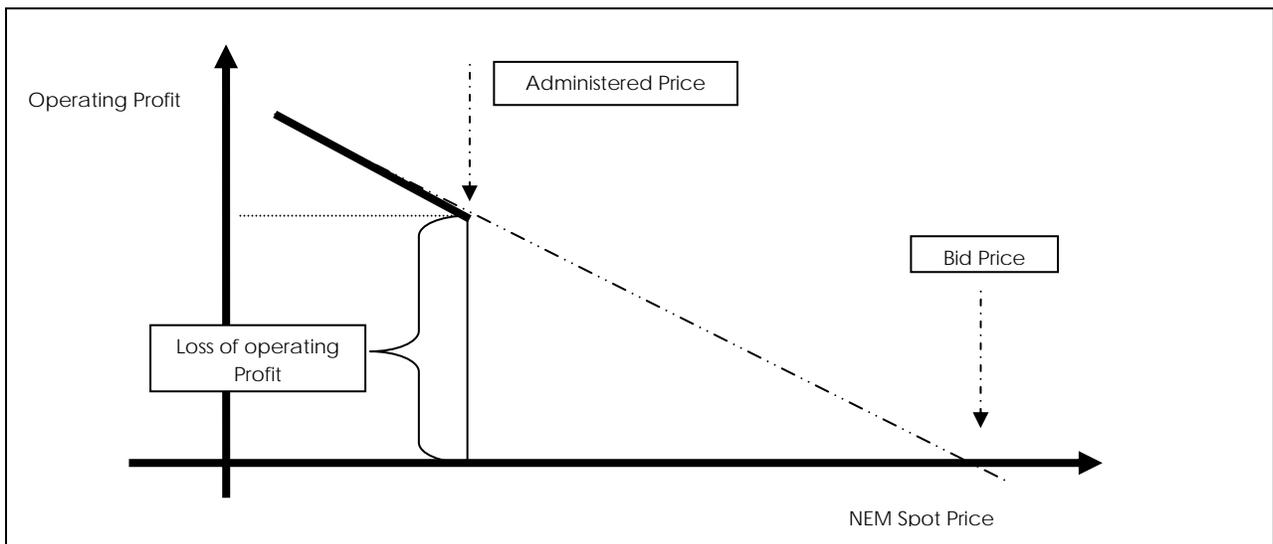
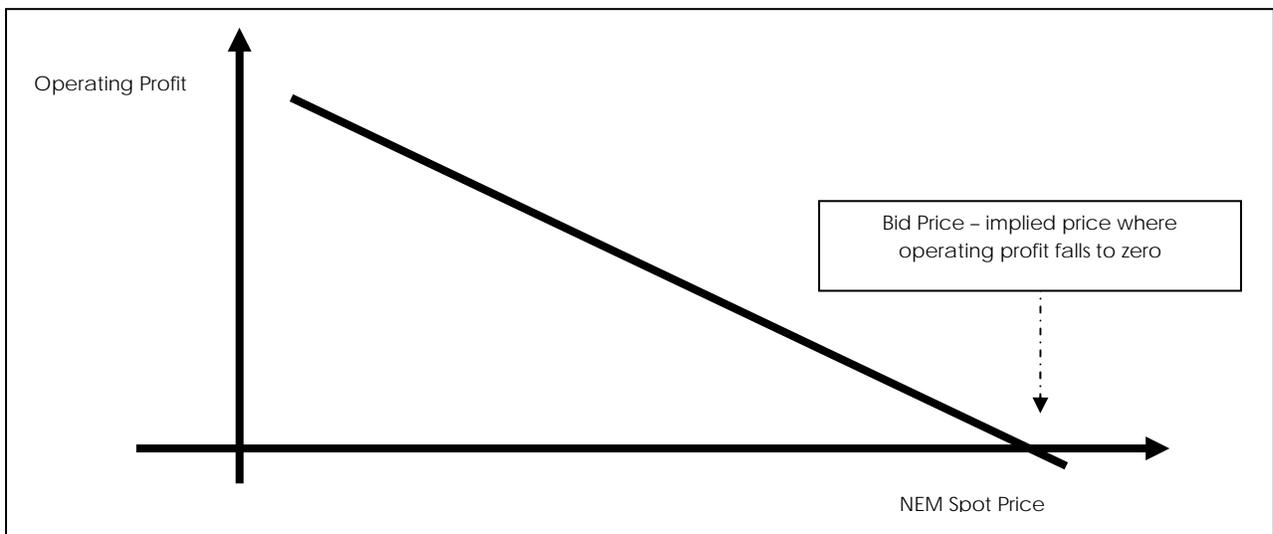
Efficient voluntary demand side responses may play an important role in efficiently balancing demand and supply during periods where there is a major supply shortfall in a region or regions subject to administered price period and market suspension.

The application of the methodology to determining opportunity cost in the draft guidelines appears to have been drafted with generation plant in mind and does not explicitly address the demand side response by scheduled loads.

Efficient demand side responses require certainty as to the basis for remuneration. Also it may be less likely that the demand side will be offered in excess of the administered price if the process of seeking compensation is perceived as costly and complex.

The presumption in the market about scheduled loads is that they would be prepared to purchase electricity up to the price of their bid. However, if a scheduled load is dispatched and the price is capped to less than their bid price, should they be entitled to compensation in that they have foregone production and earned a profit when they could have purchased electricity at the APP?

The following simplified figures illustrate how a scheduled load may incur an opportunity operating loss. The first plot shows how operating profit falls as the cost of electricity rises and that it will be economic for a scheduled load to consume electricity in order to run its production facility until the electricity price reaches a breakeven point. In principle the breakeven point would be the bid price for the scheduled load. The second figure shows how the scheduled load would miss an opportunity



On one level it could be argued that if APPs are rare then the loss of profit due to lost production is conceptually equivalent to the loss of a contribution to fixed costs for generators. And secondly if compensation were to be paid, the wider body of customers (including any other demand of a scheduled load) will be required to fund the compensation.

On the other hand a scheduled load will not have produced when the market price was below its bid and unless compensation is payable there will be a strong incentive to rebid availability to be scheduled to zero once an APP has been declared, or not to offer to be a scheduled load.

The amount labeled operating profit in the figures above would be the entire revenue to the scheduled load and therefore provide for recovery of fixed costs. However, as noted earlier, inflexible generators are to be compensated for direct costs incurred in excess of the spot price only. The discussion in the draft guidelines does not address the issue of contribution to fixed costs for generators or scheduled loads and hence further policy consideration may be required.

We also note that any claim for compensation by scheduled loads will presumably need to account for any savings in cost of production from any claim. This information may be very difficult to verify and highly confidential.

Finally we note an inherent limitation of the compensation provisions in that compensation is only payable in respect of scheduled generation or loads or network services. Unscheduled demand side (and unscheduled generation) is ineligible. As a result off-market demand response contracted to retailers cannot be compensated. This will act as a disincentive for such arrangements.

Reconciling differences in treatment of fixed and variable costs for flexible and non-flexible plants

In the previous sections we have identified a risk that payment for direct costs, where these are identifiable, will compensate plants for direct costs, but payment of opportunity cost for non flexible plant may unintentionally include compensation for capital costs. This would create discrimination between different plants and loads on the basis of technology.

The panel recommends that further consideration be given to this matter and notes that there is unlikely to be a simple solution: as different plants have different combinations of fixed and variable costs and different utilizations and thus recover more or less of fixed costs from the spot market when price is capped by the APC. The further consideration should take into account the following:

- If compensation is discounted to account for a contribution to fixed costs flexible plants may be able to recover any reduction in compensation for fixed costs by setting higher prices at a later time. The contribution could be based on a utilization adjusted standardized capex allowance based on deprival value or a simple book value approach. However, such an adjustment may also be a “zero sum game” over the longer term if later offers are adjusted up to account for the foregone revenue. The

additional complexity and risk of perverse operational outcomes noted in earlier in discussion of previously lost opportunities, should be avoided. As a result it may be more pragmatic to not make any adjustment;

- Investment in the most marginal generation and scheduled loads that are critical to reliability can be dependant on high prices for revenue adequacy and conversely should receive full compensation;
- Whether, parties claiming compensation for opportunity costs should be required to warrant that they did in fact incur a net loss during an APP and were not, for example, in receipt of a contract payment such as an option fee on a cap contract and therefore would not have retained any amounts over the contract strike price. This would recognise the contribution of option fees to meeting fixed costs. However, it would cap the incentive for flexible resources to offer capacity to the market during an APP to no more than the APC; and
- Good regulatory practice suggests there should be no discrimination on the basis of technology and that compensation based on opportunity cost should be discounted for the contribution to recovery of fixed costs to align with the level of compensation to non-flexible plants.

i. OTHER ADJUSTMENTS (SECTION 9.5)

Consideration should be given to allowing recovery of the claimant's reasonable costs of preparing and managing an application. If an APC is imposed then it is arguable that it is not reasonable in terms of the objectives of the Rule for the applicant to absorb a material amount of its own costs. That is, it is not the applicants "fault" that they need to claim compensation, and therefore not be out of pocket for the costs of making a claim.

If this suggestion is accepted the guidelines could include the following provisions

- Claimant's may include the reasonable costs of preparing and managing an application
- Preparation costs are only recoverable if a claimant's application is accepted by the AEMC. The AEMC should have discretion to award part costs in the situation where a feature of a claim that was clearly responsible for a material part of the costs is denied
- The guidelines could cap the preparation costs and or, a proportion (say 20%) of the costs should be met by applicant (a co payment mechanism to encourage efficient management of the claim). These guidelines could be waived in exceptional circumstances.

ANNEX 1

PANEL MEMBER PROFILES AND STATEMENT ON CONFLICTS OF INTEREST

Greg Thorpe

Greg Thorpe is a director of Oakley Greenwood Pty Ltd. He has over 30 years experience in the utility energy sector. His previous positions have included as a Vice President with CRA international, Associate Director with the National Electricity Code Administrator, Manager Codes and Rules for the Victorian Power Exchange and a number of management and engineering positions with the State Electricity Commission of Victoria. He has played major roles in the development and operation of technical, governance and engineering aspects of electricity and also gas sectors in Australia and provided advice to regulators and market authorities internationally.

Statement on Conflicts of Interest

In the normal course of his consulting business Mr Thorpe has been engaged by current and potential generators, retailers, network businesses and market and government authorities in the National Electricity Market. He is currently engaged by a number of companies in the generation sector on projects related to future developments, strategy and network access and rule change matters unrelated to compensation.

Geoff Swier

Geoff Swier is a director of Farrier Swier Consulting and a non executive director of Trustpower (NZ) Ltd. He is an expert in energy and water industry policy development, regulation, and reform project management with over 25 years experience working in Australia, New Zealand and Asia. He played a leading role in developing and implementing Victoria's electricity and gas industry reforms between 1993 and 1999. He was a member of the Australian Energy Regulator (2005-2008).

Statement on Conflicts of Interest

Mr Swier provides consulting advice to participants in the National Electricity Market from time to time as well as governments and regulators. He is a director of Trustpower which operates a wind farm in South Australia, and is developing other wind projects. Sally Farrier is a fellow director of Farrier Swier and is a director of Hydro Tasmania. Currently he is providing advice to the Electricity Retailers Association of Australia on an unrelated matter.

Jim Truesdale

Jim Truesdale is a director of Concept Consulting Group, a Wellington based company. He has approximately 30 years of energy sector experience, including substantial involvement in the design of the wholesale electricity market and restructuring of the electricity sector in NZ. Prior to establishing Concept in 1999, he held a range of engineering, operational and senior executive roles with experience including thermal power station operation and maintenance, management of NZ's hydro-thermal generation system and responsibility for trading risk management at ECNZ and, during its establishment, Genesis Power.

Statement on Conflicts of Interest

Mr Truesdale and/ or other Concept personnel provide advice to energy sector regulators, policy makers and participants including from time to time Australian clients. In relation to the NEM, Concept is currently providing gas modeling support to VENCORP.