

Australian Energy Market Commission

FINAL REPORT

Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

16 May 2013

REVIEW

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About the AEMC

The Council of Australian Governments (COAG), through its then Ministerial Council on Energy (MCE), established the Australian Energy Market Commission (AEMC) in July 2005. In June 2011, COAG established the Standing Council on Energy and Resources (SCER) to replace the MCE. The AEMC has two main functions. We make and amend the national electricity, gas and energy retail rules, and we conduct independent reviews of the energy markets for the SCER.

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Executive Summary

The Australian Energy Market Commission (AEMC or Commission) has completed its review of the arrangements for compensation following an administered price, market price cap or market floor price.

These arrangements are set out in clauses 3.14.6 and 3.15.10 of the National Electricity rules (the rules or NER). They allow participants to claim compensation if they have incurred a loss due to the application of administered pricing.¹

Administered pricing events occur only rarely in the National Electricity Market (NEM). To date, the administered price cap (APC) has been applied five times. Claims for compensation following administered pricing are even less common. Since the start of the market, only one claim for compensation has been made.

Despite the fact that compensation claims are very rare, it is important that the rules are clear regarding how these claims are assessed. This will help deliver fair compensation to claimants who continue to supply energy to consumers during an administered price period. It should also help restrict the payment of compensation to those situations where it this likely to deliver beneficial outcomes for consumers.

The final recommendations in this report are designed to improve the function of the compensation frameworks, in order to promote more efficient market outcomes. The key recommendations we have made are:

- **Purpose of compensation**: We recommend that the clauses describing the purpose of compensation be amended to clarify that the sole purpose is to maintain incentives for participants to supply energy during an administered pricing period.
- Eligibility to claim compensation who should be eligible: We recommend that all market generators, scheduled load and scheduled network service providers should remain eligible to claim compensation. However, a clear case cannot be made for ancillary service providers to remain eligible to claim compensation.
- Eligibility to claim compensation eligibility criteria and market suspension: We have developed new eligibility criteria based on market conditions. Participants will become eligible to claim compensation once the spot price has been actively capped by the administered price cap (or administered floor price) and remain eligible until the end of the trading day. Participants may only claim for any net losses incurred due to operating during the eligibility period. We also recommend that any reference to market suspension be removed from the eligibility criteria.
- The AEMC's assessment process: We have proposed a number of changes to the processes followed by the AEMC in the assessment of compensation claims. Firstly, we recommend that the AEMC should publish advice to inform the market of the commencement of a compensation claim. Secondly, we recommend that the AEMC should have some discretion to extend the time to complete

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¹ In this case, administered pricing refers to the application of the administered price cap, the market price cap, the market floor price or the administered floor price.

assessment of a claim, in certain circumstances. The AEMC should also have discretion to appoint a varying sized expert panel, depending on the complexity of individual compensation claims.

- **Public consultation process**: We recommend that a public consultation process is only likely to add value to the assessment of a compensation claim where the claim is for opportunity costs. No public consultation process is considered feasible for direct cost claims.
- **Recovery of compensation costs**: We have developed an approach which clarifies the process for recovery of the costs of compensation. This process recovers the cost of compensation from market customers in proportion to their total energy consumption during the compensation eligibility period.

In developing these recommendations, we have sought to balance simplicity of approach against the potential for various changes to promote improved efficiency. We consider that a transparent and easily applied approach will help provide greater certainty and more efficient operational and investment decisions in the long run.

A number of stakeholders made submissions to the issues paper and draft report of this review. Several stakeholders also took part in bilateral meetings with AEMC staff on a range of issues relevant to the review. These submissions and meetings have informed the Commission's analysis and the development of our final recommendations.

As required by clause 45 of the National Electricity Law (NEL), the AEMC has provided a copy of this final report to the Standing Council on Energy and Resources (SCER).

The rules will require amendments to allow implementation of the changes we have recommended. A draft specification of the key changes is included in appendix A of this final report.

It is also likely that the compensation guidelines will require amendment. Amendment of the compensation guidelines will include a consultation process.

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1 Background

The AEMC initiated this review into the arrangements for determining and paying compensation following an administered price cap (APC), administered floor price, market price cap or market floor price, under section 45 of the National Electricity Law (NEL).²

1.1 Context of the review

Currently, National Electricity Rules (NER or rules) clause 3.14.6 sets out the framework for participants to claim compensation due to the application of an APC, administered floor price, market price cap or market floor price. The AEMC is required to determine whether compensation is payable and, if so, the amount of compensation to be awarded.

In 2010, Synergen Power Pty Ltd (Synergen) made a claim for compensation for its Snuggery and Port Lincoln units in South Australia (the Synergen claim). Synergen was the first participant to lodge a claim for compensation under clause 3.14.6 provisions.

During the AEMC's assessment of the Synergen claim, a number of issues within clause 3.14.6 were identified. These issues related to:

- the situations in which parties may be eligible to apply for compensation;
- the roles of the AEMC and the three member expert panel;
- the AEMC's power to disclose information subject to a claim of confidentiality; and
- a lack of flexibility in the timing to process the compensation claim.

In its final decision on the Synergen claim published in September 2010, the Commission discussed its intention to undertake a review of the arrangements for determining compensation under clause 3.14.6 of the rules. We also identified that clause 3.15.10 of the rules, which describes the arrangements for the recovery of the cost of compensation, should be reviewed.

1.2 Objectives of this review

The objectives of this review are:

- to align the structure and design of the compensation provisions with the objectives of paying compensation;
- to provide the market with a clear set of indicators as to when compensation is appropriate;
- to develop transparent mechanisms which facilitate the recovery of the costs of compensation on an equitable basis; and
- to remove any ambiguities and improve the general effectiveness, transparency and consistency of the compensation frameworks.
- ² Under section 45 of the NEL, the AEMC may conduct a review into the operation and effectiveness of the rules.

In conducting any review under the NEL, the AEMC is required to have regard to the National Electricity Objective (NEO), which is as follows:

"The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system."

Amendments to the compensation provisions may contribute to the achievement of the NEO in several ways, including by:

- providing incentives on participants to maintain a reliable supply of electricity;
- helping to maintain efficient price signals for investment in electricity facilities and services;
- providing increased regulatory certainty for participants regarding the eligibility for compensation and the general operation of the compensation provisions under clauses 3.14.6 and 3.15.10 of the NER, which is likely to contribute to efficient decisions regarding the operation and use of electricity services; and
- improving the efficiency of the process for assessing compensation claims and recovering compensation costs from market customers.

1.3 Consultation process

The Commission invited submissions from stakeholders following publication of the issues paper and draft report of this review. Four submissions to the issues paper were received from:

- International Power GDF Suez;
- Origin Energy;
- TRUenergy; and
- AGL.

Five submissions to the draft report were received from:

- Energy Australia;
- GDF Suez;
- Origin Energy;
- AGL; and
- the Australian Energy Market Operator (AEMO).

These submissions assisted the Commission in developing the analysis and the recommendations contained in this report.

In accordance with section 45(4) of the NEL, the AEMC has provided a copy of this report to the Standing Council on Resources and Energy (SCER). A draft specification,

which outlines the key issues with the existing rules and our recommendations, is attached as appendix A to this report.

1.4 Structure of this report

The remainder of this report is structured as follows:

- Chapter 2 provides an overview of the current compensation arrangements;
- Chapter 3 sets out our final recommendations regarding the purpose of compensation;
- Chapter 4 sets out our final recommendations regarding the AEMC's assessment processes, including the public consultation process;
- Chapter 5 sets out our final recommendations for the eligibility of scheduled generators to claim compensation;
- Chapter 6 sets out our final recommendations regarding the eligibility of other classes of participant to claim compensation;
- Chapter 7 sets out our final recommendations for the recovery of the costs of compensation; and
- Chapter 8 provides an overview of the likely next stages to follow completion of this review.

1.5 Where to from here

As required by clause 45 of the NEL, the AEMC has provided a copy of this final report to the Standing Council on Energy and Resources (SCER).

The rules will require amendments to allow implementation of the changes we have recommended. A draft specification of the key changes is included in appendix A of this final report.

It is also likely that the compensation guidelines will require amendment. Amendment of the compensation guidelines will include a consultation process.

2 Overview of the current compensation provisions

The compensation provisions are a component of the broader market price cap / cumulative price threshold / administered price period / APC framework. This framework is designed to protect consumers from extended periods of high prices, while maintaining incentives for participants to supply energy and to invest in the provision of energy services.

Below, we step through some of the key aspects of this framework, as well as examining the current compensation provisions in more detail.

2.1 The market price cap / cumulative price threshold / administered price cap / compensation framework

The National Energy Market (NEM) is a gross, energy-only market. The volatility of spot prices for both energy and ancillary services is therefore an important aspect of market design and operation. The ability of prices to move from -\$1,000/MWh up to \$12,900/MWh allows generators and other market participants to earn a reasonable return on assets and recover fixed costs, providing a signal for investment.

However, this volatility also creates risk for parties who participate in the wholesale market. A persistently high spot price can lead to participant financial distress and, in extreme cases, may impact the stability of the wider market.

While the management of risk by individual market participants is an essential and unavoidable aspect of participating in the NEM, the rules contain a number of mechanisms designed to help manage risks to individual market participants and systemic market wide risks.

The design of this area of the NEM has undergone several changes since its creation in 1996. Currently, the rules contain several mechanisms that together make up an overall package for managing the risks posed by periods of sustained high prices:

- a spot market price cap and a market floor price;
- a rolling cumulative price threshold that applies over a seven day period;
- an administered price period, which applies in the region where the cumulative price threshold was reached; and
- a compensation mechanism for eligible parties who have incurred losses due to the application of the APC.

The market price cap is currently set at \$12,900/MWh and the market floor price is -\$1000/MWh.

The cumulative price threshold works by calculating the cumulative sum of the spot prices in a region across a rolling seven day period. If this total exceeds the cumulative price threshold (currently set at \$193,900), an administered price period commences.³

³ The current reliability settings are published by the AEMC and are available at http://www.aemc.gov.au/electricity/guidelines-and-standards.html

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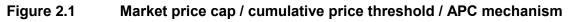
During an administered price period, the spot price in the region is effectively collared between the APC of \$300/MWh and the administered floor price of -\$300/MWh. Although AEMO continues to calculate a dispatch price and dispatch the market based on this price, the spot price cannot exceed the limits of the APC and administered floor price for the entirety of the administered price period.

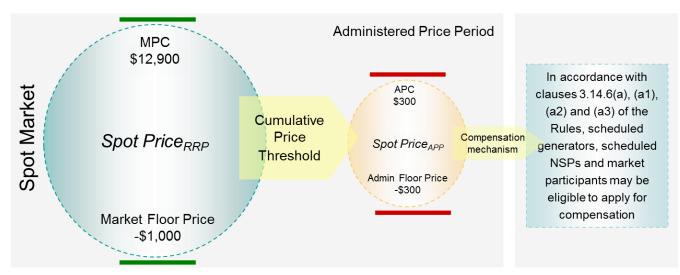
The administered price period continues until such time as the rolling seven day cumulative price drops back below the level of the cumulative price threshold. The administered price period ceases at the end of the trading day in which the price drops below the cumulative price threshold.

The application of the APC during an administered price period may cause some participants to incur a loss. This may occur where the participant's direct or opportunity costs are in excess of \$300/MWh. While there are not many participants with costs in excess of \$300/MWh, the potential for them to incur a loss may create a disincentive to supply energy during an administered price period. It may also act to weaken investment signals that are sent through the normal function of the market. This may have negative consequences for the reliability of supply of energy and energy services.

Accordingly, clause 3.14.6 of the NER allows these participants to claim compensation for direct and opportunity costs. This compensation is administered by the AEMC.

The market price cap / cumulative price threshold / APC / compensation mechanism is illustrated in figure 2.1.





2.2 Participants eligible to apply for compensation

Clauses 3.14.6(a), (a1), (a2) and (a3) of the rules specify the types of market participant that are currently eligible to apply for compensation. These clauses also specify the specific circumstances in which each of these participant types are eligible to claim. The table below summarises the current provisions.

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Relevant NER clause	Claimant type	Specific circumstances	Eligible to apply for compensation:
Clause 3.14.6(a)	Scheduled Generator.	Application of an APC during either an administered price period or market suspension.	If resultant spot price payable is less than the price specified in the dispatch offer for a trading interval.
Clause 3.14.6(a1)	Scheduled Network Service Provider.	Application of an APC, the market price cap, the market floor price or an administered floor price.	If resultant revenue receivable is less than the minimum requirement specified by the network dispatch offer for a trading interval.
Clause 3.14.6(a2)	Market Participant (in respect of a scheduled load).	Application of an administered floor price during either an administered price period or market suspension.	If resultant spot price is greater than the price specified in the dispatch bid for trading interval.
Clause 3.14.6(a3)	Market Participant (in respect of an ancillary service generating unit or ancillary service load).	Application of an APC.	If resultant ancillary service price is less than the price specified in the relevant market ancillary service offer for a dispatch interval.

Table 2.1 Eligible participants

Importantly, the provisions setting out the circumstances in which a market participant may be eligible to apply for compensation operate separately to the process of determining whether that participant will actually receive compensation. That is, being eligible to apply for compensation does not necessarily mean that any compensation will be awarded.

2.3 Process for determining compensation

Clause 3.14.6 of the rules also requires the AEMC to determine whether compensation is payable, and if so, the amount of compensation payable to any eligible participant.

The key areas covered by clause 3.14.6 relate to:

- the circumstances in which certain parties are eligible to apply for compensation;
- the preparation of compensation guidelines by the AEMC to support the operation of clause 3.14.6 which must:⁴

⁴ AEMC 2011, *Compensation Guidelines under clause 3.14.6 of the National Electricity rules*, Amended Guidelines, 17 February 2011, Sydney

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- identify the objectives of paying compensation as those set out under clause 3.14.6(c)(1);
- require that the amount of compensation be based on costs directly incurred by the claimant and the value of any opportunities forgone;
- outline the methodology to be used to calculate the amount of compensation payable; and
- set out the information that AEMO and the claimant are required to provide;
- the roles and responsibilities of the AEMC in determining whether compensation should be paid and the amount of compensation payable, including:
 - a requirement on the AEMC to establish a three member expert panel (the panel) to provide advice to the AEMC on the claim; and
 - the roles and responsibilities of the panel in providing advice to the AEMC.

2.4 Consultation and confidentiality

The process for determining compensation under the current rules arrangements involves a public consultation process. The AEMC must publish the a draft report from the panel, as well as its own draft report, and invite comment from stakeholders on these reports.⁵

In order to facilitate public consultation on a claim, the AEMC must publish all information provided by claimants or people making submissions, subject to any claims of confidentiality in respect of that information.

Chapter four of the compensation guidelines sets out how the Commission will deal with confidential information contained in claims or submissions. In summary, when performing its functions under clause 3.14.6 of the rules, the AEMC is required to take all reasonable measures to protect from unauthorised use or disclosure, information given to it in confidence.

Accordingly, if a claimant or person making a submission provides information to the AEMC and some or all of that information is clearly marked as confidential, the AEMC cannot publish the confidential information. In such a case, the AEMC will publish any non-confidential information contained in the claim or submission and include a note to the effect that confidential information has been omitted from the published information. These confidentiality requirements and the implications for consultation are discussed further in section 4.4.3.

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⁵ NER clause 3.14.6(I)(3).

3 Purpose of compensation

3.1 Issues with the current arrangements

Currently, clause 3.14.6(c)(1)(i) and (ii) of the rules define the purpose of compensation as maintaining the incentives for:

- Scheduled Generators, Scheduled Network Service Providers and other Market Participants to invest in plant that provides services during peak periods; and
- (ii) *Market Participants* to supply *energy* and other services during an *administered price period.*"

A key issue with this purpose as currently included in the rules is that it appears to contradict other aspects of the compensation provisions. This contradiction arises because while clause 3.14.6(c)(1) refers to maintaining incentives to both invest in plant and continue to supply energy, the payment of compensation excludes any recovery of capital costs and therefore cannot itself be held to send investment signals.

Generally, investment is driven by the existence of revenues which are sufficient to allow for the recovery of variable operating costs as well as some portion of the fixed capital cost of investment in new plant. It follows that if the wording of the existing purpose clause was interpreted accordingly, the payment of compensation should allow for at least some recovery of these capital costs.

However, clause 3.14.6(c)(2)(i) and (ii) of the rules explicitly define the costs recoverable through compensation as short run, variable operating costs; that is, direct and opportunity costs only. Importantly, no reference is made to the recovery of capital costs.

We consider that this apparent contradiction between the purpose clause as defined in clause 3.14.6(c)(1) and the type of costs which can be claimed through compensation as defined in clause 3.14.6(2) may create confusion regarding the application of the compensation provisions.

3.2 Stakeholder submissions

Stakeholder submissions identified this as a key issue. In its issues paper submission, AGL identified the apparent conflict between the investment aspect of the purpose clause and the fact that the compensation provisions themselves only allow for the recovery of direct and opportunity costs, rather than capital costs.⁶ AGL reiterated this in its draft report submission, suggesting that retention of any reference to investment signals would create uncertainty for market participants. Generally, AGL was opposed to any recovery of investment costs through the compensation process.⁷

In its issues paper submission, International Power GDF Suez (now GDF Suez) considered that the compensation mechanisms should allow for some recovery of

⁶ AGL, issues paper submission, p.2.

⁷ AGL, draft report submission, pp.1-2.

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capital costs, potentially in the form of a pro-rated annual capital charge.⁸ GDF Suez reiterated this general argument in its submission to the draft report, stating that failure to incorporate a capital cost component in compensation payments could weaken investment signals. GDF Suez also argued that the current setting of the cumulative price threshold does not provide an effective investment signal, rendering it necessary to include a capital cost component in compensation payments.⁹

While AGL and GDF Suez took opposing positions regarding the inclusion of investment signals in the payment of compensation, both parties identified the apparent conflict between the existing purpose clause and the costs which can be recovered through compensation and stated that this may create confusion for market participants.

In its submission to the issues paper, TRUenergy (now Energy Australia) considered that the primary objective of the compensation provisions should be to maintain the incentive to invest in plant that provides services during peak periods.¹⁰ Energy Australia reiterated this position in its submission to the draft report.¹¹

3.3 Recommendations

We consider that the primary purpose of the payment of compensation is the maintenance of incentives on participants to continue to supply energy and other services during an administered price period. By allowing for the recovery of direct and opportunity costs, compensation helps reduce the risk that participants will incur a loss if they continue to supply energy during an administered price period.

However, the payment of compensation is not intended to send investment signals at the margin. Nor is it intended to make any contribution to the recovery of a participant's capital costs. These investment signals are sent through the normal function of the market.

Having considered stakeholder submissions to the draft report, we consider that the rules clauses defining the purpose of compensation should specify that the purpose of compensation is solely to maintain incentives on participants to continue to supply energy and other services during an administered price period.

The rules should therefore be amended to remove any reference to investment signals from clause 3.14.6(c).

3.4 Commission's considerations

Maintaining an incentive to supply energy during an administered price period is central to the purpose of the payment of compensation. An administered price period generally occurs following periods of high market stress where the supply / demand balance may be tight. Encouraging generators to continue to supply energy in such

⁸ International Power - GDF Suez, issues paper submission, p.2.

⁹ GDF Suez, draft report submission, pp.2-3.

¹⁰ TRUenergy, issues paper submission, p.3.

¹¹ Energy Australia, draft report submission, p.1.

market circumstances is particularly important, in order to promote the ongoing reliable supply of electricity to customers.

In the draft report, we explained our view that the purpose of compensation is primarily to maintain incentives on participants to continue to supply energy during an administered price period. We consider that this remains appropriate and recommend that the purpose clause refer explicitly to the maintenance of incentives to supply energy and other services during an administered price period.

In the draft report we also stated that a secondary purpose of compensation was minimisation of the risk that the APC would materially weaken investment signals sent during the normal function of the market. Accordingly, we proposed that the purpose clause should reflect this principle by retaining some reference to the maintenance of investment signals sent through normal function of the market.

While GDF Suez and AGL took opposing views regarding the recovery of capital costs in the payment of compensation, both stakeholders agreed that the wording of the existing clause creates substantial uncertainty for participants. This centres on the fact that while the purpose clause refers to maintenance of investment signals, the payment of compensation only allows for the recovery of short run costs.

AGL and GDF Suez considered that the Commission's proposed approach did not resolve this apparent conflict.

Having considered these submissions, we have decided that inclusion of references to investment signals in the purpose clause may create uncertainty for participants. Accordingly, we consider that removal of these references should provide greater clarity to the market.

Regarding GDF Suez's statement that the compensation mechanisms should include a capital cost component, we consider that investment signals are provided through the price mechanism during normal market function. This includes periods of relatively high prices which typically precede a breach of the cumulative price threshold and the commencement of an administered price period. We note GDF Suez's comment that these high price periods may be unpredictable in nature and of a short duration. However, this risk should form part of normal investment decisions and is appropriately borne by generators. Inclusion of a capital cost component in compensation payments would represent a reallocation of risk from generators to market customers. We therefore remain of the opinion that it is not appropriate for the payment of compensation to include any direct investment signals by explicitly allowing for recovery of capital costs.

GDF Suez also stated that capital cost component should be included by arguing that the current setting of the cumulative price threshold provides ineffective investment signals. Any consideration of the appropriateness of the current setting of the cumulative price threshold is beyond the scope of this review. However, we note that clause 3.9.3A of the rules requires the Reliability Panel to finalise a review of the reliability settings, including the level of the cumulative price threshold, by 30 April 2014. Stakeholders may make submissions regarding the setting of the cumulative price threshold when this process is commenced by the Reliability Panel.

4 AEMC compensation claim assessment process and public consultation

4.1 Issues with the current arrangements

Currently, the AEMC is responsible for the assessment of claims for compensation. Clause 3.14.6 of the rules sets out the AEMC's framework for claim assessment. This includes the process for establishing a panel and the timeframes for completion of its assessment. This clause also sets out the AEMC's public consultation framework when assessing a claim.

Once a formal notice of intent to claim has been received from a compensation claimant, clause 3.14.6 requires the AEMC to establish a three member advisory panel. The AEMC is required to publish the panel's draft report and a draft report setting out the AEMC's initial findings. It must invite submissions on these reports and include consideration of these submissions in its final report. These events must occur within a specific timeframe which is described in clauses 3.14.6(g) to (n) of the NER.

This timeframe is relatively inflexible and may not always be optimal. For example, there is no time allowed at the commencement of the process for gathering necessary information, nor any requirement to notify the market that a compensation claim has been received. There is also no capacity to extend the assessment process if necessary. The current arrangements also mandate a minimum size of the panel and do not allow for the engagement of a smaller sized panel for less complex claims.

In regards to the consultative process, the current arrangements do not consider the varying degree of benefit associated with engaging in a public consultation process for different types of compensation claims.

4.2 Stakeholder submissions

Stakeholder submissions to the draft report generally supported the proposed changes to the claim assessment process.

A number of stakeholder submissions to the issues paper contained comments as to whether the AEMC remained the most appropriate organisation to assess clause 3.14.6 compensation claims, given the limits imposed by our confidentiality obligation.

International Power stated that information provided by a claimant is confidential. The AEMC's confidentiality obligations would therefore not interfere with its ability to assess claims.¹² However, TRUenergy stated that the AEMC's confidentiality obligations may impede effective public consultation and suggested AEMO as an appropriate administrator of compensation claims.¹³ AGL also suggested AEMO as an appropriate organisation to administer claims.¹⁴

Stakeholder submissions to the issues paper commented on the broader questions of the AEMC's assessment processes and timing. International Power and TRUenergy

¹² International power, issues paper submission, p.4

¹³ TRUenergy, issues paper submission, p.5.

¹⁴ AGL, issues paper submission, p.8.

suggested appointing a varying sized expert panel, depending on the size of the claim.¹⁵ International Power, AGL and TRUenergy all considered that the AEMC should be required to notify the market when a compensation claim has been received.¹⁶ AGL suggested that if the claim assessment process could be made more mechanistic, there may be no need for a panel.¹⁷ TRUenergy supported flexibility in the timing of compensation claim assessments, but noted that the priority should be on the rapid resolution of compensation claims. AGL considered that claims should be processed promptly and did not support increased flexibility.¹⁸

4.3 Recommendations

4.3.1 Consultation claim assessment process

We consider that the AEMC remains the appropriate organisation to administer the assessment of compensation claims under clause 3.14.6, for reasons set out in section 4.4.1.

However, we recommend a number of amendments to the timeframe and process for assessment of compensation claims. These amendments are designed to promote a more efficient claim assessment process:

- on receipt of a compensation claim, the AEMC should publish advice on its website advising the market of commencement of the assessment process, containing relevant information about the nature of the claim;
- once the AEMC and the panel have received sufficient information from the claimant to begin formal assessment, the AEMC should publish further advice on its website of the formal commencement of the claim;
- the AEMC should have the option of extending the time period for assessment of individual compensation claims, in specific circumstances; and
- the AEMC should have the option of appointing a varying sized panel, depending on the complexity of individual compensation claims.

4.3.2 Public consultation process

We consider that a mandatory public consultation process is unlikely to add significant value to the assessment of compensation claims. However, there may be benefit in a public consultation process in specific circumstances.

Accordingly, we recommend the introduction of a limited public consultation process:

• For compensation claims which include only direct costs, we consider there is unlikely to be any benefit associated with a public consultation process. Accordingly, following receipt of a compensation claim for direct costs and

¹⁵ International power, issues paper submission, p.5; TRUenergy, issues paper submission, p.5.

¹⁶ International power, issues paper submission, p.5; TRUenergy, issues paper submission, p.5; AGL, issues paper submission, p.9.

¹⁷ AGL, issues paper submission, p.8

¹⁸ TRUenergy, issues paper submission, p.6; AGL, issues paper submission, p.9.

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publication of all relevant advice, the AEMC should proceed directly to publication of the panel's report and a report setting out our findings.

- For compensation claims which include opportunity costs, we consider there are likely to be benefits in publicly consulting on the proposed methodology for assessment of opportunity costs. Following receipt of a compensation claim for opportunity costs and publication of all relevant advice, the AEMC should publish:
 - the proposed methodology for assessment of opportunity costs as provided by the claimant;
 - a draft report from the panel; and
 - an AEMC draft report containing its own draft methodology developed in consultation with the panel.
- Stakeholder comments should be factored into the AEMC's development of the final opportunity cost methodology, which it will publish as part of its final report, along with a final report from the panel.

4.4 Commission's considerations

4.4.1 Appropriate organisation to administer the compensation provisions

As discussed in the draft report, we consider that the AEMC remains the most appropriate organisation to administer the clause 3.14.6 compensation provisions. The AEMC possesses some experience and capacity for discretionary decision making necessary to fulfil this role.

Assessment of compensation claims is likely to require a degree of discretionary decision making. Other compensation provisions in the rules generally include formulae or processes which define how compensation is calculated and awarded.¹⁹ In contrast, clause 3.14.6 compensation claims will be based around assessment of the different cost profiles of individual claimants and the specific market conditions underpinning each claim. These factors will vary between claims and cannot be explicitly quantified in formulae or defined processes.

A degree of discretionary decision making is also necessary given the substantial complexity associated with different compensation claims. This complexity is likely to depend on whether direct costs, opportunity costs, or a mixture of both types of costs are claimed. While the extent of direct cost claims are likely to be reasonably defined, this may not be the case for opportunity costs.²⁰ By their nature, opportunity costs reflect the value of the next best utilisation of the claimant's resources. Calculation of this value is likely to consider many factors or utilise complex analytical processes. The

¹⁹ For example, see clause 3.15.7 of the rules which defines the process for calculation of payments to directed participants.

²⁰ Noting that no opportunity cost claim has to date been received by the AEMC.

claim amount itself may also be a significant amount and therefore contentious, requiring a degree of careful oversight and management.²¹

In addition to these known uncertainties, the progression of new compensation claims has the potential to expose new issues. For example, during the Synergen compensation claim, a number of previously unidentified issues were raised, including interpretation of the rules eligibility criteria and issues relating to confidentiality of information, necessitating this review. Given that only one clause 3.14.6 compensation claim has been progressed since NEM commencement, a risk remains that other unidentified issues may be identified in future claims.

In determining whether the AEMC remains the most appropriate organisation to assess compensation claims, we considered whether responsibility for claim assessment could be transferred to other agencies.

As suggested by TRUenergy and AGL in submissions to the issues paper, an argument could be made for AEMO to be given responsibility for assessment of compensation claims.

The requirement for the assessor of compensation claims to exercise a considerable degree of discretion distinguishes the clause 3.14.6 compensation provisions from those compensation provisions currently administered by AEMO. In these instances, the processes and formulas that AEMO must follow are defined clearly in the rules.

As discussed above, it would be very difficult to develop a predefined, formula based approach to the assessment of claims for compensation under clause 3.14.6. This is particularly the case for opportunity cost claims, where the number of uncertainties associated with these claims is likely to require a degree of discretionary decision making. We therefore consider that it would not be appropriate to task AEMO with administering claims for compensation under clause 3.14.6.

We also considered whether the Australian Energy Regulator (AER) might be a suitable body to administer compensation claims. Given its role as economic regulator, the AER possesses expertise which would likely allow it to conduct effective discretionary assessments of compensation claims.

However, as well as its role as economic regulator, the AER also has a rules compliance function. It is possible this may be perceived as incompatible with the AER's compensation claim assessment role, which requires market participant claimants to submit large volumes of confidential information to the AER. There is some risk that this could reduce market participant confidence in the compensation arrangements and may impact on the ability of the AER to effectively assess any claims received.

Given these factors, we consider that the AEMC remains the most appropriate organisation to administer the clause 3.14.6 compensation provisions. The need for a decision maker with the capacity to exercise a degree of discretion aligns with our existing responsibilities of rule analysis and market development. The AEMC also

²¹ The potential size of opportunity cost claims was identified as a risk by the Commission in the final determination of the *Compensation Arrangements Under Administered Pricing* rule change. The Commission considered that the extent of this risk was commensurate with the maintenance of desirable supply incentives.

¹⁴ Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

possesses experience relevant to assessment of compensation claims, having undertaken the only claim assessment to date in the NEM as well as development of the guidelines and this review. As discussed in section 4.3.3 below, we also consider that the AEMC's confidentiality obligations do not pose a real impediment to our capacity to undertake effective assessment of compensation claims.

4.4.2 Amendments to the compensation claim assessment process

A transparent process for the assessment of compensation is consistent with efficient market design. Accordingly, the existing compensation provisions include a process and timeframe for the completion of the assessment of compensation claims. The current assessment timeframe is outlined in clauses 3.14.6(g) through (q).

While the prescriptive nature of the existing assessment process and timeframe provides the market with a degree of certainty, we consider that there are a number of areas where there is scope for improvement.

Firstly, while strict requirements are placed on the AEMC in terms of when it must publish draft and final reports, there is no requirement for an initial notification to the market that a claim has been received. Given the defined nature of the existing formal assessment process, it is likely that some time will be spent before formal commencement, gathering all necessary information to assess the claim. This could mean the first the market hears of a compensation claim is when the AEMC publishes its draft reports, which may be some time after the original claim was received.

Accordingly, we recommend that following receipt of a claim for compensation, the AEMC should be required to publish advice, on its website, that a claim has been received. This advice will include all relevant details of the claim, including the name of the claimant, the units for which compensation is being claimed and the time period in which compensable costs were incurred. We consider that this information is essential to the progression of the claim and should not be claimed as confidential by the compensation claimant.

Following this, the AEMC and the panel will assess the initial information provided by the claimant and will determine if additional information is required.²²

Once the AEMC and the panel are satisfied that the claimant has provided sufficient information to allow the claim to be assessed, the AEMC will commence formal assessment of the claim. The AEMC will publish further advice on its website of the formal commencement of the assessment process. This advice will include indicative dates for completion of the claim assessment process.

Secondly, the existing compensation assessment process requires the AEMC to establish a three member panel to advise its assessment. The costs of appointing this panel can be substantial; during the Synergen claim, the total cost of the three member panel was a

²² Experience during the Synergen claim indicates that some time may elapse between initial receipt of the claim and commencement of the formal assessment process. This reflects the fact that the AEMC and the panel must gather sufficient information from the claimant in order to undertake an effective assessment, prior to commencement of the formal process. The time taken to complete this process will depend upon how quickly the claimant provides all information requested by the AEMC and the panel, in accordance with the compensation guidelines.

significant fraction of the total amount awarded to Synergen. We consider that less complex claims may not warrant appointment of a full three member panel. Accordingly, we recommend that the AEMC be given discretion to appoint a varying sized panel, depending on the complexity of the claim.

Lastly, it is possible that new or more complex issues may be identified during assessment of a compensation claim, or that the AEMC may face a material change in circumstances. In both cases, we consider that the existing strict timeframes in the rules may impede the AEMC's ability to undertake adequate assessment of compensation claims. Accordingly, we recommend that the AEMC be given the discretion to extend the timeframes for assessment of a compensation claim.

4.4.3 Public consultation process

During assessment of the Synergen compensation claim, it became apparent that certain obligations placed on the AEMC may influence our capacity to undertake public consultation during assessment of a compensation claim. The *Australian Energy Market Commission Establishment Act 2004* (SA) requires the AEMC to protect any information provided in confidence by a compensation claimant. This effectively prevents the AEMC from publishing any information subject to a claim of confidentiality, regardless of whether or not the AEMC agrees whether this information is confidential. This may restrict the ability of the AEMC to undertake the kind of public consultation process currently envisioned in the rules.

However, the extent to which this is actually an issue depends on the relative benefit of public consultation during the compensation process. This benefit will vary depending on what information is subject to consultation. We consider that while there is little benefit associated with public scrutiny of the direct costs incurred by a claimant, public consultation can add significant value in the assessment of opportunity cost claims.

Public consultation for direct cost claims

For most of the AEMC's statutory responsibilities, there are clear benefits associated with the inclusion of a public consultation process. In the case of a rule change proposal, public consultation allows for an enhanced examination of the costs and benefits associated with the rule change. A similar situation holds for market reviews.

For compensation claim assessments, the benefits associated with public consultation are less obvious. This reflects the fact that compensation claim assessments are focussed around the detailed verification of operational data and related costs, rather than a broader assessment of market outcomes.

For example, during the Synergen compensation claim, much of the information provided to the panel described operating and maintenance costs, such as price, volume and delivery dates of fuel as well as labour and maintenance expenditure. The panel assessed this information and where necessary, verified it by seeking additional supporting documentation, such as invoices and receipts.

Third parties are unlikely to be able to add real value in the assessment of these kinds of costs. While the claimant's contracted fuel or labour prices may be considered "too high" or "too low", such third party opinions are subjective and based on incomplete

information. They add no material value to the process of verifying the total costs actually incurred by the claimant and the final compensation amount to be awarded. However, such detailed and specific information describing a firm's variable operational and maintenance costs are central to competitiveness and are likely to be considered commercial in confidence.

There does not appear to be a strong case for public scrutiny of the detailed cost information provided by a compensation claimant. Accordingly, we consider that compensation claims for direct costs only should not be subject to a public consultation process, as the only information provided by the claimant will be related to their specific costs and spot market revenues. This means that when assessing a claim for direct costs, the AEMC would not publish a draft report but would instead proceed directly to the publication of the panel's report and its own report.

While we recommend that the AEMC should not conduct a public consultation process when assessing direct cost claims, it is important that compensation claimants have the opportunity to engage with the Commission throughout the assessment process. Accordingly, we consider the guidelines could be amended to outline the AEMC's processes for engaging with claimants during assessment of a claim.

Our proposed approach allows a time period of sixty days between publication of the notice of formal commencement of assessment and publication of the final report.

A transparent process for the assessment of compensation is consistent with efficient market design. Accordingly, the existing compensation provisions include a process and timeframe for the completion of the assessment of compensation claims. The current assessment timeframe is outlined in clauses 3.14.6(g) to (q).

Public consultation regarding methodologies to determine opportunity costs

When conducting an assessment of a compensation claim for opportunity costs, it will be necessary to develop a methodology for the determination of opportunity costs. Given that opportunity cost claimants are likely to face very different cost structures, the methodological approach to the determination of opportunity costs will necessarily be undertaken on a bespoke basis. Section 10.3.2.2 of the compensation guidelines set out the principles for selecting a valuation methodology to determine opportunity costs. The guidelines place the burden of responsibility for developing this methodology on the claimant.

We consider that there are likely to be benefits associated with undertaking a public consultation process in regards to such opportunity cost methodologies. While this consultation may not include numbers representing the specific costs incurred (if this information is claimed as confidential), it will allow stakeholders to review and comment on the mechanism used to determine these costs. For example, if a methodology were to involve modelling of projected generator costs and market prices, the form of the modelling would be made public and opened for consultation.

In order for this consultation to be effective, it will be necessary for an opportunity cost claimant to provide the AEMC with a proposed methodology.²³ This proposed methodology should be suitable for publication and public consultation. The AEMC will consider this proposed methodology and, in consultation with the panel, develop a draft methodology.

The proponent's proposed methodology, the AEMC's draft methodology, the panel's draft report and the AEMC's draft report will be published and opened for public consultation. However, as required by the AEMC's confidentiality obligations, any information subject to a claim of confidentiality by the claimant will be redacted from these documents.

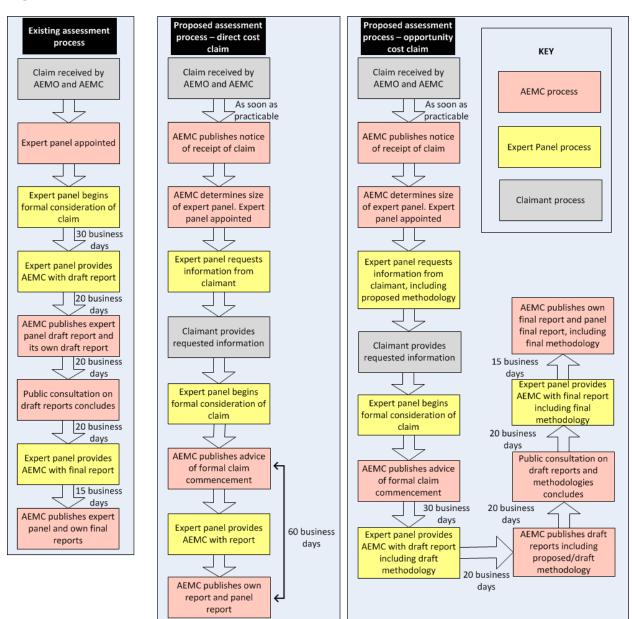
We consider that a time period which broadly reflects the existing arrangements is appropriate for assessment of opportunity cost claims. Our recommended approach therefore allows 105 business days between publication of advice of formal commencement and the publication of the final reports.

An overview of the proposed revisions to the compensation cost assessment process is presented in figure 4.1 below.

²³ The current compensation guidelines require an opportunity cost claimant to provide the information, models and analysis to support their claim. AEMC, *Compensation Guidelines under Clause 3.14.6 of the National Electricity Rules*, Amended Guidelines, Australian Energy Market Commission, 17 February 2011, Sydney, p.17.

¹⁸ Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price





5 Eligibility for scheduled generators to claim compensation

5.1 Issues with the current arrangements

Eligibility criteria describe the market conditions when compensation may be warranted. These criteria, in combination with the purpose clause described above, provide the market with guidance to inform participant operational decisions.

A set of eligibility criteria have been included in the clause 3.14.6 compensation arrangements since the first version of the national electricity code. Since that time, the form of the criteria have not changed significantly. The existing criteria relate to scheduled generators, scheduled network service providers, market participants who have submitted dispatch bids in respect of scheduled loads as well as ancillary service loads and generating units.

The current eligibility criteria are defined as follows:²⁴

- A scheduled generator is eligible to claim compensation "...in respect of *generating units* if, due to the application of an *administered price cap* during either an *administered price period* or *market suspension*, the resultant *spot price* payable in respect of the *dispatched generating units* in any *trading interval* is less than the price specified in their *dispatch offer* for that *trading interval*."
- A scheduled network service provider is eligible to claim compensation "...in respect of a *scheduled network service* if, due to the application of an *administered price cap*, the *market price cap*, the *market floor price* or an *administered floor price*, the resultant revenue receivable in respect of *dispatched network services* in any *trading interval* is less than the minimum requirement specified by its *network dispatch offer* for that *trading interval*."
- A market participant is eligible to claim compensation "...in respect of a *scheduled load* if, due to the application of an *administered floor price* during either an *administered price period* or *market suspension*, the resultant *spot price* in any *trading interval* is greater than the price specified in the *dispatch bid* for that *trading interval*."
- A market participant is eligible to claim compensation in respect of an ancillary service generating unit or an ancillary service load "...if, due to the application of an *administered price cap*, the resultant *ancillary service price* for that *ancillary service generating unit* or *ancillary service load* in any *dispatch interval* is less than the price specified in the relevant *market ancillary service offer.*"

Each of these different types of participant is currently eligible to claim compensation under varying circumstances. For example, eligibility for scheduled load to claim is based around the application of the administered floor price, while scheduled network service providers are eligible to claim due to the application of the APC, market price cap, market floor price or administered floor price. The implications of these different criteria are assessed in chapter six.

²⁴ NER clauses (a), (a1), (a2) and (a3) respectively.

²⁰ Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

It is worth noting that eligibility to claim compensation does not automatically mean that a claimant will be awarded any compensation. That is, under the existing arrangements, the eligibility criteria are separate to the process whereby the actual amount of compensation is determined. The primary purpose of the eligibility criteria is therefore to provide the market with an indication as to when compensation may be appropriate.

The current criteria contain a number of ambiguities which reduce their effectiveness in this role. These ambiguities centre around the fact that the current criteria are based on the difference between spot prices and dispatch offers.

At a more fundamental level, it is also unclear whether eligibility to claim compensation should necessarily apply to all of the different types of market participant who are currently included in the eligibility criteria.

In this chapter, we consider the problems associated with the general structure of the current eligibility criteria. We then examine the structure of eligibility criteria for market generators. In the next chapter, we consider the broader question of whether other classes of market participant should remain eligible to claim compensation.

Use of the term dispatch offer

During assessment of the Synergen compensation claim, it became apparent that the meaning and correct interpretation of the existing eligibility criteria are somewhat ambiguous. This ambiguity relates to the fact that the existing criteria refer to the difference between the spot price and a claimant's dispatch offer. The principle behind these clauses is that if a participant is dispatched at a price which is less than the price it originally offered, it may incur a loss and should be eligible to claim compensation for that loss.²⁵

Synergen argued that they were eligible to claim compensation based on the fact that their "original" dispatch offer had capacity located in price bands greater than the spot price.²⁶ During the period of dispatch, Synergen had rebid this capacity into lower price bands.²⁷ Other stakeholders stated that Synergen should not be eligible to claim compensation for those trading intervals when they had rebid capacity, as they had rebid capacity into price bands which were lower than the spot price.²⁸

In its final decision, the AEMC agreed with Synergen. Specifically, we considered that the correct interpretation of the eligibility criteria referred to the difference between prices included in the original dispatch offer and the spot price, regardless of any rebids

²⁵ Under the current criteria, the situation where market price is less than dispatch offer applies to scheduled generators and ancillary service providers. The current criteria for scheduled network service providers refer to the difference between revenue received and the minimum network dispatch offer, while for scheduled loads the criteria refers to the difference between spot price under an administered floor price and the participant's dispatch bid.

²⁶ Synergen Power, Submission of Particulars of Claim, August 2009.

²⁷ When rebidding capacity, a participant moves its capacity between different price bands. However, these price bands themselves cannot be changed. The rebidding provisions are outlined in NER clause 3.8.22.

²⁸ AGL, submission to Synergen Power compensation claim, pp.4-7

of capacity between these price bands.²⁹ However, we also noted that this was a very broad interpretation of the term dispatch offer. As such, it may not provide much limitation on the capacity of participants to claim for compensation.

Consideration of this issue reveals further ambiguity associated with use of the term dispatch offer. The existing criteria refer to the difference between the price specified in dispatch offers and the spot price. However, as there are ten prices included in every dispatch offer, the "price specified in the dispatch offer" could be interpreted to refer to any of these ten prices.

Accordingly, the current eligibility criteria could be interpreted to mean that any participant who includes a price in their dispatch offer which is higher than the spot price would be eligible to claim compensation. Given that most participants include a price band at the market price cap and market floor price in every dispatch offer, these participants may consider themselves eligible to claim compensation. This perceived eligibility may hold, regardless of whether there is any capacity actually included in the dispatch offer at that price.

Given this issue, we do not consider that the existing criteria provide the market with effective guidance as to which participants should be able to claim compensation, nor the market conditions where compensation may be appropriate.

The existing eligibility criteria also contain no reference to the fact that participants may only claim compensation for direct and opportunity costs. However, whether or not a participant has actually incurred a net loss in opportunity or direct costs is a key factor which determines whether compensation is awarded. We consider that the eligibility criteria should refer explicitly to participants who have incurred net losses in direct or opportunity costs following the application of the APC.

5.2 Stakeholder submissions

Several stakeholders commented on this issue in submissions to the draft report.

Origin agreed with the approach proposed in the draft report, stating that eligibility based on the difference between spot prices and dispatch offers was largely unworkable.³⁰ GDF Suez and EnergyAustralia also supported the Commission's proposed approach to determining eligibility.³¹ AEMO generally agreed with the proposed criteria but raised some issues regarding the recovery of costs incurred outside of the eligibility period. AEMO also suggested that the AEMC consider whether there is benefit in extending eligibility to non-scheduled market generators.³² We consider the issue of non-scheduled generator eligibility in this chapter; recovery of costs incurred outside the eligibility period is addressed in section 7.4.3.

AGL's submission to the draft report generally reiterated the arguments made in its submission to the issues paper. AGL stated that allowing participants to rebid capacity

²⁹ AEMC, Final Decision: Compensation claim from Synergen Power Pty Ltd, Australian Energy Market Commission, 8 September 2010, Sydney, p.11.

³⁰ Origin Energy, draft report submission, p.2.

³¹ EnergyAustralia, draft report submission, p.2.; GDF Suez, draft report submission, p.3.

³² AEMO, draft report submission, pp.3-4.

²² Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

and remain eligible reduced the competitive discipline faced by such participants and would ultimately result in higher costs for consumers. They also stated that allowing plant to rebid and remain eligible disadvantaged more reliable peaking plant and reduced the incentives for such plant to follow load patterns. AGL also suggested that allowing units to rebid and remain eligible would increase the scope of plant that could claim compensation.³³

Various stakeholders also provided comment on this issue in submissions to the issues paper. International Power GDF Suez highlighted that references to "the dispatch price" are generally ineffective, given that the dispatch offer consists of ten separate price bands and that prices themselves are modified by loss factors.³⁴

International Power GDF Suez also highlighted the importance of rebidding of capacity by generators to avoid cycling of units. International Power GDF Suez stated that avoiding cycling of units can reduce total operating costs as well as minimise reliability risks. The design of the eligibility criteria should be structured in a way which reflects these market benefits and should allow participants to rebid capacity and remain eligible to claim.³⁵ TRUenergy stated that the security and reliability benefits associated with rebidding outweighed any negative efficiency impacts.³⁶

5.3 Recommendation

General structure of the eligibility criteria

The Commission considers that the existing eligibility criteria are largely ineffective. The existing focus on the difference between dispatch offers and spot prices fails to provide effective guidance to the market as to when compensation is appropriate.

We recommend that the existing eligibility criteria be replaced with a new approach. As discussed in chapter 3, the primary purpose of compensation is to maintain incentives on participants to supply energy during an administered price period. We therefore consider that the payment of compensation to participants becomes appropriate from the point in time where it is most likely to promote the continued supply of energy during an administered price period.

Our proposed eligibility criteria define a "compensation eligibility period" (the eligibility period). This eligibility period commences at the point in time when the APC first actively caps the price in a region. We consider that it is from this point in time that the application of the APC may cause participants to incur a loss and therefore reduce their incentives to supply energy. The eligibility period continues from the first trading interval in a trading day in which the APC actively caps the spot price in a dispatch interval, until the final dispatch interval of the final trading interval of that trading day.

During an eligibility period, a participant whose total costs exceed total revenue received from the spot market may claim compensation. These costs are limited to direct costs or opportunity costs, as defined in the compensation guidelines. Effectively,

AGL, draft report submission, p.2.; AGL, issues paper submission, pp.3-6

³⁴ International Power, issues paper submission, p.4.

³⁵ International Power, issues paper submission, p.6.

³⁶ TRUenergy, issues paper submission, p.4.

the participant may claim compensation if it has incurred a net loss during an eligibility period, after factoring in total revenue received from the spot market during that eligibility period.

Eligibility of market generators to claim compensation

Both scheduled and non-scheduled market generators should be eligible to claim compensation.

5.4 Commission's considerations

5.4.1 Principles of scheduled generator eligibility

The primary focus of this chapter is on eligibility criteria for scheduled generators. To date, the only claim for compensation was received from a generator and we consider it likely that most future claims will also be from generators.

We consider there is a clear risk that scheduled generators may incur a loss due to the application of the APC. Furthermore, we consider that the market benefits associated with allowing scheduled generators to claim compensation outweigh any inefficiencies or the potential for perverse outcomes. We therefore consider that it is appropriate that scheduled generators, as a class of market participant, should generally remain eligible to claim compensation.

Generators may incur a loss when the APC has actively limited the spot price and the available spot price revenue. Generators will suffer a loss if they are dispatched during this period but incur direct and opportunity costs in excess of the total spot price revenue they received during the eligibility period.

However, the extent to which generators will actually incur such losses is limited by the fact that most generators do not have direct or opportunity costs in excess of the level of the APC. This was a key consideration of the Commission when it determined the level of the APC in 2008.³⁷ In practice, the types of generator most likely to incur a net loss due to the application of the APC are those with very high operating costs (such as a liquid fuelled peaking units), or a generator with clear opportunity costs (such as an energy constrained generator with limited fuel resources).

The likelihood of such generators incurring a loss will also be based on whether or not the generator is dispatched when the APC is capping the spot price. As discussed above, it is at this point in time that the availability of compensation will help maintain incentives on participants to supply energy, in order to provide consumers with a reliable supply of electricity.

Given these considerations, it is appropriate that the eligibility criteria for generators are targeted towards addressing the risk of high cost generators incurring a loss due to the application of the APC. The criteria should also recognise the temporal dimensions of when this risk may arise.

³⁷ AEMC, Determination of Schedule for the Administered Price Cap, 20 May 2008, p.vii.

²⁴ Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

The Commission's recommended eligibility criteria for scheduled generators are therefore based around the following principles:

- During an administered price period, a dispatched generator in a region becomes eligible to claim compensation once the spot price in that region has been capped at the level of the APC. This is the trigger for commencement of the compensation eligibility period.
- The compensation eligibility period continues until the end of the trading day. At this point the "APC trigger" is reset and generators do not become eligible until the APC has again capped the price in the relevant region.
- A dispatched generator is only eligible if it has incurred total direct costs and/or opportunity costs in the eligibility period that exceed its total spot market revenue received during the eligibility period.

5.4.2 Parameters of the eligibility criteria

Commencement of the eligibility period

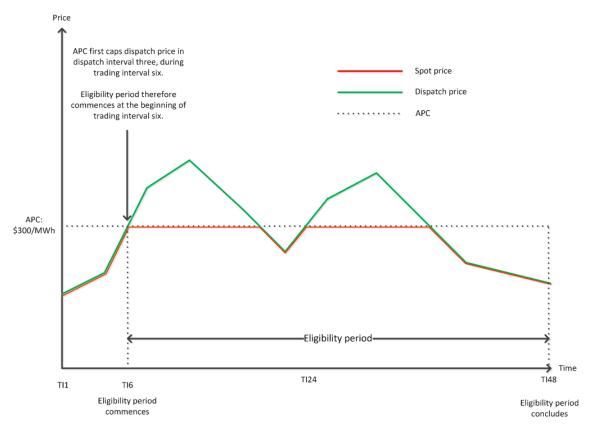
There are a very specific set of market conditions which may result in generators incurring a loss during an administered price period. These conditions define the point in time where the payment of compensation will help maintain the incentive to supply electricity. The Commission considers that an appropriate indication of when these conditions arise is the point in time when the APC first actively caps the spot price to \$300/MWh in a region.³⁸

Specifically, the "APC trigger" for commencement of compensation eligibility occurs when a dispatch interval price is first capped at the level of the APC. Following this, the start of the trading interval in which the dispatch price was capped at the level of the APC becomes the commencement point of the eligibility period.

As shown in the example in figure 5.1, the APC first actively caps the dispatch price in dispatch interval three, during trading interval six. Accordingly, the beginning of trading interval six becomes the commencement of the eligibility period.

³⁸ Note that the dispatch price continues to be set according to generator offers.





Importantly, once the eligibility period has commenced, eligibility continues regardless of whether the spot price drops below the level of the APC. For example, as demonstrated in figure 5.1, once the eligibility period has commenced, generators remain eligible to claim compensation even when the spot price drops below \$300/MWh. The rationale for allowing this outcome is discussed in further detail below.

Definition of costs that can be claimed through compensation

Our recommended eligibility criteria reiterate that compensation can only be claimed for direct and opportunity costs. As discussed above, only a small subset of generators are likely to incur direct and opportunity costs greater than \$300/MWh and therefore face potential disincentives due to the capping of the spot price by the APC.

Explicit inclusion of direct and opportunity costs in the eligibility criteria represents an improvement on the existing arrangements by providing clarity as to what types of costs can be claimed. This will provide the market with more effective guidance as to what type of generators should be eligible to claim compensation.³⁹

³⁹ As discussed above, under the current eligibility criteria any generator is eligible to claim compensation, provided it has included a price band in its dispatch offer which is greater than the spot price in a trading interval. However, the amount that most generators are actually able to claim under the current arrangements is zero, if their direct and opportunity costs do not exceed spot market revenues.

²⁶ Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

Definition of extent of eligibility period and recovery of net losses

Our recommended criteria clearly define the commencement and the conclusion of the eligibility period. As described above, eligibility commences from the beginning of the first trading interval during which the APC actively caps the spot price in a region. It then continues until the conclusion of the trading day, that is, it concludes at the end of the final dispatch interval of the final trading interval of the trading day. At that point in time, the initial eligibility period "trigger" is reset. This means that participants do not become eligible to claim compensation again until such time as the spot price is again actively capped by the APC in that region.

A "trigger" reset function emphasises that availability of compensation should reflect the market conditions which exist on a particular day; eligibility for compensation should not reoccur until it is clear that the underlying market conditions which justify it have reoccurred.

Our recommended criteria also restrict the total claimable amount to the difference between the total direct and/or opportunity costs incurred by the generator during the eligibility period and the total spot market revenue earned during that period.

Rationale for structure of proposed eligibility criteria – cycling and rebidding

A key issue identified in the Synergen claim and which in part led to the commencement of this review is the question of whether peaking generators should remain eligible for compensation if they have rebid capacity into lower price bands.

Providing generators with some ability to rebid capacity and remain eligible may be a positive outcome. While there are some potential costs associated with allowing continued eligibility for generators who have rebid capacity, we consider that these are outweighed by the overall likely market benefits.

The proposed eligibility criteria have been designed with these benefits in mind. The criteria provide generators with some leeway to operate their units in an efficient manner by rebidding capacity. This allows for improved operational efficiency and will also reduce market reliability risks.

The nature of the costs and benefits associated with allowing rebidding are discussed later in this paper. First, however, it is useful to describe how rebidding is used by generators to avoid cycling of units and the consequences or limitations associated with unit cycling.

Rebidding strategies and the dispatch process

Rebidding of capacity from higher to lower price bands is used by peaking generators in part to maximise the likelihood of a consistent and smooth pattern of dispatch and to avoid multiple stop/start operation of peaking units. This stop/start pattern of operation, known as "cycling", can occur as the market dispatch curve passes through then falls back below a generator's minimum offer, resulting in the unit being ordered to switch on and then off by the NEM dispatch engine. Figure 5.2, a stylised version of the merit order under an administered price period, provides an example of rebidding. Once the demand curve/dispatch price has passed the level of the APC in TI 4, the peaking generator, shown in yellow, is dispatched. From this point, the peaking generator seeks to avoid cycling on and off during the next nine trading intervals by rebidding its minimum "must run" capacity into lower price bands.⁴⁰ This example shows capacity rebid to price bands between \$0 and \$40 per/MWh; in reality, generators may offer larger volumes of capacity into price bands below \$0/MWh.⁴¹

This rebidding strategy means that the plant is dispatched consistently, with slight ramping up and down, until the price begins to drop in TI13. At this point the generator is confident that it is unlikely to be called on again, rebids its capacity back into higher price bands (or offers its capacity as unavailable) and is switched off.

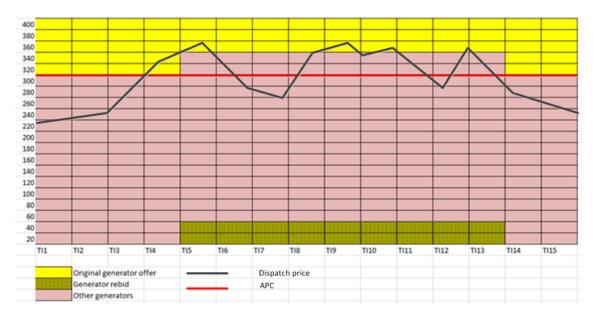


Figure 5.2 Rebidding strategy under an APC

Implications of unit cycling

Allowing generators to rebid and remain eligible for compensation throughout the eligibility period is likely to provide a beneficial outcome. This reflects the fact that cycling of peaking units can have negative consequences for individual generators and can create supply reliability risks for the market as a whole.

Generators generally avoid cycling of units due to plant limitations and the cost implications of this behaviour. In some cases, physical limitations themselves prevent

⁴⁰ Minimum must run capacity reflects the fact that units are physically required to operate at a minimum level of output. The range of these minimum output levels varies with generator model. The volume of capacity rebid also reflects that different operating costs are associated with running at low or medium levels of output.

⁴¹ During the Synergen compensation claim, Synergen did not rebid capacity until it was fully dispatched up to its maximum price band. At this point, it rebid capacity into the minimum price band of -\$1000/MWh to ensure dispatch. For further information regarding the specifics of Synergen's claim See Expert panel Recommendations to the AEMC: Assessment of Synergen's claim for compensation, Expert panel, August 2010.

²⁸ Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

cycling. Generators have advised that peaking units may be subject to lock-out periods, meaning that they cannot be restarted for up to several hours once shut down. In other instances, generating units are required to run for a minimum amount of time once started and cannot shut down until that time has passed.

There are also a number of cost implications associated with cycling, generally related to plant availability. For example, many peaking units require a minimum amount of time to be brought up to synchronicity with the power system and further time to ramp up to full output. This time spent starting and ramping the unit reduces the capability of the unit to access high prices or fulfil contracted positions. Start-up of units also entails the use of fixed volumes of fuel which cannot be utilised to produce energy.

Cycling also has consequences for reliability of supply. Standard unit operating schedules allow for a certain number of starts before the unit must be taken offline for maintenance, which is normally planned for low demand periods. Cycling can therefore bring forward this required maintenance, reducing the generator's ability to access later periods of peak prices and increasing the risk that the unit will not be available during high demand periods. Generators have also advised there is a heightened risk of critical plant failure when starting peaking units. The materiality of this risk depends upon the age of the unit in question, with older units at greater risk.

These supply reliability risks are particularly acute during an administered price period. If the underlying conditions which led to the triggering of the cumulative price threshold and commencement of an administered price period have not yet subsided, there is a strong probability that demand levels will continue to be high during an administered price period. Indeed, during the January/February 2009 administered price period in South Australia, demand levels were around 45% higher than average annual South Australian demand. Plant unavailability due to cycling of units during such a period could have material reliability implications for the market.

Costs and benefits of allowing some rebidding of capacity to occur

Given these factors, there is a strong argument that allowing generators to rebid and remain eligible for compensation will improve the likelihood of peaking capacity being available as needed during an administered price period. As AEMO stated during the assessment of the Synergen compensation claim, rebidding of Synergen's capacity had the effect of "maintaining … generation at sustainable levels so that generators were able to move to full output quickly to assist in meeting system load variations, and minimising risk of premature shutdown."⁴²

However, it is also true that rebidding of capacity into lower price bands may result in some productive inefficiencies. By bidding in a manner which may be non-cost reflective, peaking units may displace other, lower cost generators in the merit order.⁴³ We also note AGL's argument that allowing a rebid generator to remain eligible may be seen to disadvantage other peaking units which it considered to be "more reliable",

⁴² Expert Panel, Expert panel Recommendations to the AEMC: Assessment of Synergen's claim for compensation, Expert panel, August 2010, section 3.2.

⁴³ This assumes that a "cost reflective" bid includes only short run variable and operating costs and does not factor in the opportunity costs of unit cycling.

while reducing the incentives on all generators to adopt a load following operational pattern.⁴⁴

The Commission acknowledges that, in principle, it is desirable that generators should operate their units in a flexible manner in order to follow variations in load. However, information provided to the Commission by various operators of peaking units suggests that this kind of operation is either not physically possible or significantly heightens the risk of plant failure. Such plant failure could have a material impact on supply reliability for consumers, particularly if it occurred during a period of high demand.

Furthermore, while we acknowledge the potential for productive inefficiencies, we consider these to be outweighed by the likely reliability benefits associated with the smooth operation of peaking units during high demand periods.

This is supported by the findings of the expert panel during the Synergen Compensation claim. As the panel argued in their assessment of the claim, "the notification of an administered price period and the imposition of an APC necessarily modify and distort normal function of the market...the rules identify that continued supply of energy during an administered price period [is] a key objective of the compensation provisions, not the normal operation of the competitive market".⁴⁵ Minimising security and reliability risks is therefore an appropriate focus and is in alignment with the NEO.

Another risk of allowing generators to rebid capacity is that once the initial market conditions which justified their continued operation have passed, peaking generators may continue to rebid capacity and remain dispatched for a period longer than that which is required to meet demand. Such an outcome would increase the extent of any productive inefficiencies related to merit order displacement and would result in higher compensation claim amounts.

However, it does not appear that peaking generators have a strong incentive to behave in a way that would result in their units being operated for longer than is strictly necessary. Multiple start/stops and extended operation of units brings forward maintenance schedules, which may impact on the generator's capacity to access high prices and meet its contracted positions.

Furthermore, generators are only eligible to claim direct and opportunity costs through the compensation provisions. Given that there is no opportunity to earn a return on capital or profit, there appears to be little incentive for generators to prolong their output period beyond that which is necessary to the market. A generator's primary incentive during the compensation period is to minimise the stresses placed on their units, rather than to seek any form of monetary return.

Despite the fact that there appears to be a low probability that generators would prolong their dispatch unnecessarily, the eligibility criteria include a limiting factor to address this potential outcome. Given that the eligibility period concludes at the end of

⁴⁴ AGL, draft report submission, p.2.

⁴⁵ AEMC, Expert panel Recommendations to the AEMC: Assessment of Synergen's claim for compensation, Expert panel, August 2010, section 3.2.

³⁰ Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

the trading day, any high cost generator still dispatched at that time will no longer be eligible to claim compensation (until such time as the spot price is again capped by the APC).

Proposed eligibility criteria allow some scope for rebidding

Our recommended eligibility criteria provide generators with greater scope to engage in rebidding behaviour by deliberately removing a number of ambiguities or restrictions in the current criteria.

Firstly, any references to dispatch offers have been removed from the eligibility criteria. By inference, this removes for the criteria any reference to the rebidding of capacity between the price bands of a dispatch offer.

Secondly, our recommended criteria maintain eligibility across all trading intervals in the eligibility period, regardless of whether the price drops below the level of the APC in some of those intervals.⁴⁶ As discussed, a key factor which has informed the structure of the proposed criteria is the physical characteristics and limitations associated with peaking unit operation. In particular, the eligibility criteria recognise the potential market benefits associated with allowing such plant to be operated continuously, under certain market conditions.

Restricting eligibility to only those trading intervals where the spot price is capped by the APC could penalise generators for operating their units in such a manner. A generator who had rebid to promote consistent dispatch (as in figure 5.2 above) would incur losses, while a generator who did not rebid faces the risk of its units cycling as the price fluctuates. Alternatively, a generator may seek to avoid either outcome by rebidding its capacity as unavailable. However, the generator would then face the risk of being directed by AEMO in the event of scarcity of supply, and receiving uncertain revenue under the clause 3.15.7 directions provisions.

Generally speaking, reducing the temporal restrictions on when a generator can claim compensation (subsequent to the APC having actively capped the price) is in line with recognising the benefits of operating peaking units in a smooth, continuous manner when required.

5.4.3 Eligibility criteria for scheduled generators in an export price capped region

The most likely situation in which a scheduled generator will incur a loss is where that generator is located in the same region where the administered price period applies and the APC has actively capped the price. For the purposes of this section, we refer to the region in which the administered price period applies and the APC is actively capping the price as the "home region".

⁴⁶ During the Synergen compensation claim, it was identified that the existing clauses are unclear as to whether compensation is limited to trading intervals where the APC is actively limiting the spot price. The AEMC's final decision awarded compensation for dispatch across all periods, regardless of whether or not the spot price was capped by the APC.

However, generators located in regions where the APC is not directly applied may also incur a loss. This may occur due to the effect of price scaling.

Price scaling is the process whereby the spot price in a region exporting power to the home region (the "exporting region") is capped at a level equal to the APC (adjusted for losses).⁴⁷ For the purposes of this section, we refer to this situation as the application of the "export price cap" in the exporting region.

The export price cap applies only in those trading intervals when there is a flow from the exporting region toward the home region. It only applies where these two regions are linked by a regulated interconnector. This process is described in clause 3.14.2(e) of the rules and is designed to reduce the accrual of negative inter-regional residues in the presence of an APC in the home region.

To the extent that the export price cap reduces spot market revenues in the exporting region, it may also result in participants in that region incurring a loss. We consider that these participants should be eligible to claim compensation, given that the export of power from their region provides customers in the APC capped region with improved reliability of supply.

Similar to the arrangements described above, we recommend that the eligibility period for these scheduled generators should commence from such time as the regional reference price in their region is actively capped by the application of the export price cap.

The eligibility period for these scheduled generators continues until the end of the final dispatch interval in the final trading interval of that trading day.

As with generators who claim compensation within the home region, these generators are only eligible to claim for total net losses incurred during the eligibility period. This means that once the eligibility period has commenced, any losses incurred in trading intervals when the export price cap applies are netted off against revenue earned in all other trading intervals. The generator can only claim compensation if, after this netting off process has been calculated, the generator has incurred a loss.

Any revenue earned or costs incurred by the generator in periods prior to the commencement of the eligibility period are excluded from the calculation of the generator's total losses and total compensable costs.

5.4.4 Eligibility for non-scheduled market generators to claim compensation

In the draft report, the Commission proposed that eligibility to claim compensation be allowed for scheduled generators. In its submission to the draft report, AEMO suggested that the AEMC should consider whether to extend the criteria for eligibility to non-scheduled generators.⁴⁸

Non-scheduled market generators typically have an installed capacity under 30MW. Larger units may be classified as non-scheduled if the unit output is primarily for local

⁴⁷ The inverse situation occurs when an administered floor price applies in the home region. In this instance, spot prices in all regions with an energy flow away from the home region must be equal to or greater than the administered floor price multiplied by the average loss factor.

⁴⁸ AEMO, draft report submission, p.3.

³² Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

use and rarely exceeds 30MW.⁴⁹ Non-scheduled generators do not participate in central -dispatch and do not submit a dispatch offer.⁵⁰ Classification of a non-scheduled generator as a *market* non-scheduled generator means all sent out generation must be sold through the spot market.⁵¹

Currently, there are around 100 non-scheduled market generators in the NEM, with a total registered capacity of around 2250MW.⁵² Of this registered capacity, approximately 960MW consists of non-scheduled wind generation while a further 180MW consists of black or brown coal generation. Normally, generators of this type will have direct costs well under \$300MWh and are unlikely to incur opportunity costs due to the application of the APC.

Of the remaining 1100MW of non-scheduled capacity:

- Approximately 665MW consists of gas and/or liquid fuelled generation. This capacity is made up of a large number of units, with an average registered capacity of around 22MW per station. This capacity consists of larger co-generation and peaking units, as well as a number of smaller backup and emergency supply units. While it is not possible to determine the exact operating costs associated with such a large number of generating units, the fact that many are liquid fuelled suggests there is a reasonable probability some of these units could have direct costs in excess of \$300/MWh. Accordingly, we consider there could be some risk of these units incurring a loss due to application of an APC, if they chose to operate and export power during an administered price period.
- Approximately 300MW consists of small hydro units, with an average registered capacity of around 14MW per station. If these units have reasonably small storage capacity, there is some risk they could be energy constrained. Such units may also seek to use their scarce fuel resources more profitably at a later point in time. Accordingly, we consider there is some risk that these units could incur material opportunity costs due to the application of an APC.
- Approximately 95MW consists of waste or biomass fuelled generation, with an average registered capacity of around 12MW per station. While these units may have reasonably limited fuel stocks (such as for bagasse generators), we consider it is unlikely they would incur either direct or opportunity costs exceeding \$300/MWh from operating during a period when the APC was actively capping prices.

As AEMO noted in its submission to the draft report, non-scheduled market generators are potentially subject to direction by AEMO under rules clause 4.8.9 and can be compensated for being directed under clause 3.15.7. However, as previously identified,

⁴⁹ NER clause 2.2.3.

⁵⁰ The fact that non-scheduled generators do not make a dispatch offer would effectively prevent them from being eligible to claim under the *existing* criteria, which are based on the difference between dispatch offer price and the spot price. However, no such barrier exists under our recommended eligibility criteria, given that they contain no reference to dispatch offers.

⁵¹ NER clause 2.2.4.

⁵² This information sourced from AEMO's "Registration and Exemptions List". Viewed at www.aemo.com.au on 21 March 2013.

the volume of compensation potentially awarded under the clause 3.15.7 provisions is less certain than that awarded under the clause 3.14.6 provisions.

As described above, we consider there is a potential risk of some non-scheduled market generators incurring direct or opportunity costs due to the application of the APC, if they chose to operate and export power during an administered price period. This may create disincentives for these participants to supply energy. Allowing non-scheduled market generators to claim compensation may reduce these disincentives, potentially improving energy supply outcomes during an administered price period.

Accordingly, the Commission considers that extending eligibility to non-scheduled market generators could contribute to improved reliability outcomes for customers. However, it is noted that the extent of this contribution is likely to be marginal, given the small size of these units and that many are likely to be committed for other uses (such as co-generation or onsite backup).

There are also a number of potential implementation issues and interactions with various market developments which must be considered.

There are a large number of non-scheduled market generators in the NEM. If a large portion of these non-scheduled generators chose to export power and incurred a loss during an eligibility period, there is some risk of a correspondingly large number of individual claims. Depending on the number of claims, the regulatory costs associated with assessment could be substantial.

A number of factors are likely to mitigate against this outcome. It appears reasonably unlikely that a large number of high-cost non-scheduled generators would simultaneously choose to export to the market during an eligibility period, unless there was a material risk they would otherwise be directed under clause 3.15.7. Furthermore, the proposed changes to the AEMC's assessment process would likely go some way to reducing the extent and cost of small compensation claim assessments.

Interactions with current market developments also require consideration. For example, there may be interactions between the awarding of compensation to non-scheduled generators and the demand response mechanism as proposed in the AEMC's Power of choice final report.⁵³ The demand response mechanism may allow various parties, including owners or operators of non-scheduled market generators, to offer load reduction services direct to the wholesale market. We note that following a request from the SCER, AEMO has initiated a demand response working group which will be examining how such a mechanism could be implemented. The key recommendations of that working group, as well as any subsequent rule change proposals, will need to be considered in the context of allowing non-scheduled market generators to be eligible to claim compensation.

Lastly, while we consider that increased participation of non-scheduled generators during a high demand period should generally improve supply reliability outcomes, there may be some implications for AEMO's operation of the market. Non-scheduled generation is not subject to dispatch instructions from AEMO; it is not clear whether

AEMC 2012, Power of choice review - giving consumers options in the way they use electricity, Final Report,
 30 November 2012, Sydney.

³⁴ Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

increased volumes of non-scheduled generation switching on during an administered price period might have some implications for AEMO's operation of the power system. While we consider that this impact is likely to be small, it should be considered in light of AEMO's operational procedures during an administered price period.

On balance, the Commission considers that extending eligibility to non-scheduled participants should provide a beneficial outcome for consumers, by helping to improve supply reliability during an administered price period. However, we note that the extent of this benefit is likely to be marginal.

The Commission has decided not to extend eligibility to semi-scheduled generators. As defined the rules, a semi-scheduled generator is a unit with a nameplate rating of 30MW or more, with intermittent output.⁵⁴ As defined in chapter 10 of the rules, intermittent generators are those with an output which is not readily predictable, including but not limited to solar generators, wave turbine generators, wind turbine generators and hydro generators without any material storage capacity.⁵⁵

Such typical semi-scheduled generator types would not readily incur opportunity costs, given that they generally possess fuel resources which cannot be stored or used more profitably at a later point in time. These generators are also unlikely to have direct costs in excess of \$300/MWh.

Given these factors, we consider that there is no real risk that application of the APC during an administered pricing period could result in semi-scheduled market generators incurring a loss.

⁵⁴ NER, clause 2.2.7.

⁵⁵ NER, chapter 10.

6 Eligibility for other classes of market participant

6.1 Issues with the current arrangements

Eligibility for scheduled loads, scheduled network service providers and ancillary service providers

Under the existing arrangements, scheduled loads, scheduled network service providers and ancillary service loads and generators are also eligible to claim compensation.

As we identified in chapter three, the primary purpose of compensation is to maintain the incentive to supply energy and other services during an administered price period. It follows that eligibility for compensation should apply only where there is a clear risk that application of the APC may cause participants to incur a loss, reducing their incentive to supply energy and other services.

We do not consider that allowing all of these participant types to claim compensation necessarily satisfies this condition.

References to application of the market price cap, market price floor and administered floor price for scheduled network service providers

Under existing clause 3.14.6(a1), scheduled network service providers are eligible to claim compensation due to the application of the market price cap or market floor price.

The focus of the compensation arrangements is based around the limitation of spot market revenue in the circumstances of an administered price period. Accordingly, it is not clear why these references to the market price cap and market floor price are included in the eligibility criteria.

References to market suspension

In the issues paper, we identified that clause 3.14.6(a) and 3.14.6(a2) refer to the application of the APC during market suspension as a condition for eligibility to claim compensation.

Given that market suspension does not result in the application of the APC and that the processes for price determination under market suspension are defined in clause 3.14.5, it is not clear why this reference is included in clause 3.14.6.

6.2 Stakeholder submissions

A number of stakeholders commented on the recommendations made in the draft report.

AEMO and GDF Suez stated that market suspension should not be removed from the eligibility criteria. GDF Suez stated that it did not appear that there were other provisions in the rules to deal with compensation under market suspension.⁵⁶

⁵⁶ GDF Suez, draft report submission, p.3.

³⁶ Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

AEMO stated that there was some risk that market prices determined under market suspension (in accordance with NER clause 3.14.3) might not provide adequate compensation to dispatched participants. AEMO also acknowledged that participants can receive compensation if a direction is issued during market suspension. However, AEMO argued that as directions compensation does not include opportunity costs, participants may still be dissuaded from offering their capacity during market suspension. Generally, AEMO suggested clause 3.14.6 compensation would be more effective at encouraging participants to supply energy during an administered price period, as opposed to other compensation processes.⁵⁷

Stakeholders also commented on this area in submission to the issues paper. International Power supported retention of compensation due to market suspension, due to the fact that both market suspension and the cumulative price threshold/APC mechanism separate spot price determination from dispatch.⁵⁸ TRUenergy supported removal of the term market suspension, but noted that if a participant was required to operate to support security during a market suspension then some form of compensation should be payable.⁵⁹

In submissions to the draft report, AEMO and EnergyAustralia both stated that ancillary service providers should remain eligible to claim compensation. While it was acknowledged that ancillary services providers were unlikely to incur a loss due to the application of the APC, AEMO suggested that some providers might in some cases incur opportunity costs in being available to offer ancillary services.⁶⁰

In a submission to the issues paper, International Power highlighted that the ancillary services market price is determined by reference to whether energy market output is reduced to provide the ancillary service. This shapes the way a participant structures its ancillary services offers. International Power suggested that this effect should be considered by the AEMC when designing eligibility criteria.⁶¹

6.3 Recommendations

Eligibility for scheduled loads, scheduled network service providers and ancillary service providers

The Commission's primary consideration in determining whether a particular participant type should be eligible to claim compensation is whether the payment of compensation is necessary to maintain an incentive to supply energy services during an administered price period. Accordingly, compensation should only be payable where the application of the APC (or administered floor price) results in a participant incurring a net loss due to operating and providing energy services during an administered price period.

⁵⁷ AEMO, draft report submission, p.4.

⁵⁸ International Power, issues paper submission, p.3.

⁵⁹ TRUenergy, issues paper submission, p.4.

⁶⁰ AEMO, draft report submission, p.4.; EnergyAustralia, draft report submission, p.1.

⁶¹ International Power, issues paper submission, p.4.

As discussed in chapter 5, we consider that a clear case can be made for scheduled generators to remain eligible to claim compensation.

We also consider that scheduled load and scheduled network service providers should remain eligible to claim compensation, in specific circumstances.

Given these conditions, we do not consider that a clear case can be made for ancillary service providers to remain eligible to claim compensation. In making this recommendation, we have considered the issues raised by stakeholders. We remain of the opinion that the application of the APC in ancillary services markets is unlikely to result in ancillary service providers incurring a loss and facing a disincentive to supply these services. We address the specific issues raised by stakeholders below.

References to application of the market price cap, market floor price and administered floor price in the eligibility criteria for scheduled network service providers

We do not consider that the market floor price, market price cap or administered floor price should be included in the eligibility criteria for scheduled network service providers.

Reference to market suspension

We do not consider that market suspension should act as trigger for eligibility to claim compensation under clause 3.14.6. In making this recommendation we have considered the issues raised by stakeholders. However, our view remains that the clause 3.14.6 compensation provisions are not the appropriate mechanism to address issues related to possible pricing outcomes under conditions of market suspension.

6.4 Commission's considerations

6.4.1 Eligibility of scheduled loads

Currently, clause 3.14.6(a2) allows market participants who have submitted a dispatch bid in respect of a scheduled load to claim compensation. As is the case for scheduled generators, the existing eligibility criteria for these participants refer to the difference between the spot price and the participant's dispatch offer. However, clause 3.14.6(a2) refers to a situation where, due to the application of the administered floor price, the spot price is greater than the spot price specified in the scheduled load's dispatch bid.

We consider that scheduled loads should be eligible to claim compensation. There is some risk that the application of the administered floor price could result in scheduled loads incurring a direct loss. This situation may arise where a scheduled load has made a dispatch bid to increase its consumption, if the price decreases to a sufficiently low level. Generally, this risk may exist for "normally off" scheduled loads.

Box 6.1: Normally on and normally off loads

Normally off scheduled loads submit a dispatch bid which consists of a series of price and quantity bands. These price bands indicate the price at or below which the scheduled load is willing to increase its electricity consumption, and the

volume it is willing to consume at that price.

The inverse situation holds for a normally on scheduled load. These loads submit a dispatch offer which sets the price at or above which the scheduled load is willing to reduce its consumption.

At present, there are two normally off scheduled loads registered in the NEM. There are no normally on scheduled loads registered.

Figure 6.1 demonstrates the theoretical case of how a normally off load may incur a loss due to the application of the administered floor price.

As the spot price decreases, the normally off load increases its consumption. As the spot price drops below zero, the scheduled load begins to be paid increasing amounts to increase it consumption. At point A, the scheduled load would be consuming a volume of electricity equal to point A and being paid \$500/MWh to do so. Alternatively, if the spot price was equal to the administered floor price at point C, the scheduled load would wish to consume a smaller volume of electricity. However, given that underlying dispatch does not change in the presence of the administered floor price, the load will be dispatched to consume electricity at point B but will be paid only \$300/MWh.

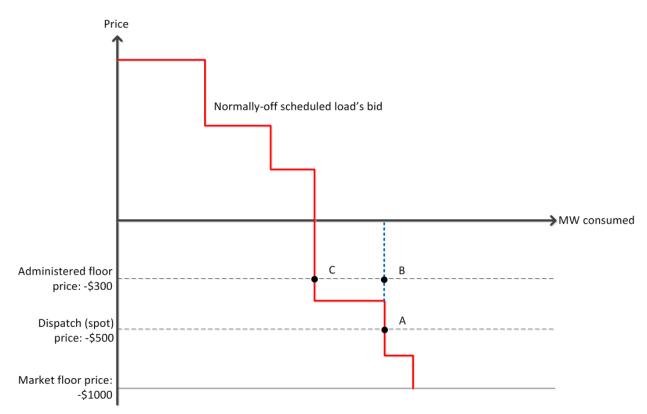


Figure 6.1 Scheduled load under an administered floor price

A normally off load may therefore incur costs due to the application of the administered floor price. These costs would be related to its increased consumption of electricity. Although we consider the likelihood of this situation to be relatively low, allowing these participants to claim compensation may provide some reliability benefit to customers.

We have also considered normally on loads and whether such loads should be eligible to claim compensation due to the application of the APC. A normally on load reduces

its consumption as the spot price rises; the benefit that it receives in doing so is the avoidance of these high prices. When the APC caps the price, these high spot market prices no longer exist. The load no longer receives any benefit by reducing its consumption.

Theoretically, a normally on load that made a dispatch offer to reduce consumption at a high price may be worse off under an APC. As an example, a normally on load may offer to reduce consumption by 10MW once the spot price reaches the level of \$12,000/MWh. Under normal market conditions, this load would benefit through the avoidance of high spot market prices. However, if called on to reduce consumption under an APC (given that the dispatch price is determined separately to the APC and may have reached \$12,000/MWh), the scheduled load is now no longer avoiding high spot prices. In this situation, the load is likely to rebid its capacity as unavailable.

While this situation is theoretically possible, we consider it to be very unlikely. There are currently no normally on scheduled loads in the NEM. Our understanding is that this kind of load reduction normally takes place through private bilateral demand side participation arrangements. Furthermore, it is unlikely that any meaningful measure of cost could be determined to measure the "loss" incurred by such participants, making it extremely difficult to determine a viable compensable amount. Accordingly, we do not consider there to be any reason for these kinds of scheduled loads to be eligible to claim compensation

Our proposed eligibility criteria for scheduled load are basically the inverse form of that applied to scheduled generators. Once the spot price in a region has been actively limited by the administered floor price (prevented from dropping to a lower value than -\$300/MWh), scheduled loads in that region become eligible to claim compensation. This eligibility period continues until the end of the trading day.

As with scheduled generators, scheduled load will only receive compensation for any net loss incurred over the eligibility period.

In chapter five we described the arrangements for scheduled generators in regions where the regional reference price is affected by price scaling and the application of the export price cap. A similar situation may apply to scheduled loads. Clause 3.14.2(e)(4) allows for the price in any region with a flow away from an APC capped region to be equal to or greater than the administered floor price. Accordingly, scheduled loads in regions affected in this way are eligible to claim compensation for any net losses incurred. Similar arrangements as described in chapter five apply, inverted as necessary to comply with the description of the scheduled load eligibility criteria described above.

Lastly, we note the development of the demand response mechanism in the AEMC's Power of choice review.⁶² This proposed mechanism would potentially allow consumers participating in the wholesale market to receive the spot market price for reducing their consumption.

There may be some potential for interaction between the proposed demand response mechanism and the changes to the compensation arrangements described in this

AEMC 2012, Power of choice review - giving consumers options in the way they use electricity, Final Report, 30 November 2012, Sydney, p.58.

⁴⁰ Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

review. We note that AEMO has convened a working group to develop options for demand response to participate in the NEM. It may be necessary for further consideration to be given to the potential interactions of any demand response mechanism developed through this process with the compensation arrangements.

6.4.2 Eligibility of scheduled network service providers and inclusion of references to market floor price/market price cap

Eligibility of scheduled network service providers to claim compensation

Currently, clause 3.14.6(a1) allows scheduled network service providers to claim compensation if, due to the application of the APC, market price cap, market floor price or administered floor price, revenue receivable is less than the minimum requirement specified in the network dispatch offer.⁶³

A scheduled network service provider acts as a merchant carrier of electricity between regions. It submits a network dispatch offer of ten price bands for each direction of inter-regional flow. It is dispatched by AEMO through the central dispatch process.

The dispatch offer submitted by a scheduled network service provider defines the minimum price difference that must exist between the two regions before the scheduled network service provider will transport power from one region to the other. The scheduled network service provider basically earns revenue through "buying" electricity in a lower priced region and "selling" this power in a higher priced region.⁶⁴

NER clause 3.14.2(e) requires the scaling back of spot prices in regions which are exporting power to an APC capped region. However, these provisions apply only to regions connected by regulated interconnectors. Scheduled network service providers are by definition non-regulated interconnectors, so the price scaling provisions do not apply. This means that even if the APC applies in the region into which the scheduled network service provider is exporting power, the price in the region from which the scheduled network service provider is importing power will not be scaled or adjusted to the level of the APC.

This situation could result in a scheduled network service provider incurring a compensable loss due to the application of the APC. For example, if the scheduled network service provider was transporting power from an uncapped region at \$500/MWh toward an APC capped region at \$300/MWh, it would incur a net loss of \$200/MWh.⁶⁵

It follows that there is some risk that application of the APC could cause a scheduled network service provider to incur a loss. This may reduce a scheduled network service provider's incentive to supply energy services during an administered price period, which may have adverse reliability implications for customers in the importing region.

⁶³ The more common term for scheduled network service provider is market network service provider. For the purposes of this review, the two terms are effectively interchangeable. However, as the current rules refer to scheduled network service providers, we have continued with this convention.

⁶⁴ The structure of scheduled network service provider dispatch offers and revenue determination are described in clause 3.8.6A of the NER.

⁶⁵ For simplicity, this example excludes consideration of transmission losses.

Scheduled network service providers should therefore be eligible to claim compensation, in specific circumstances.

Scheduled network service providers make separate dispatch offers for each direction of flow. Similarly, the reliability benefit of maintaining supply through the scheduled network service provider accrues primarily to individuals in the importing region.

Accordingly, we propose that a scheduled network service provider should become eligible to claim compensation at such time as the spot price in the region into which it is exporting power is capped at the APC. It should remain eligible to claim until the end of the eligibility period in that region. It would only be eligible to claim for any net losses incurred throughout the eligibility period, for the direction of flow toward the price capped region.

References to application of the market price cap, market price floor and administered floor price in eligibility of scheduled network service providers

The rules currently also allow scheduled network service providers to claim compensation due to the application of the market price cap, market floor price, APC or administered floor price.

As discussed above, we consider that a scheduled network service provider should be eligible to claim compensation due to the application of the APC in a region into which it is importing power. However, it is not clear why a scheduled network service provider's eligibility should extend to the presence of a market price cap, market floor price or administered floor price.

A scheduled network service provider may incur a reduction in revenue if the price is at the level of the market price cap in two regions, when it is transporting power between those two regions. This may occur due to the application of inter-regional loss factors.⁶⁶ A volume of power "purchased" in the exporting region at the market price cap will be reduced due to these losses in transportation, resulting in the scheduled network service provider "selling" a smaller volume of energy in the importing region at the market price cap.⁶⁷

An inverse situation may result when the market floor price is applied with negative prices in both regions, although in this case, the scheduled network service provider is unlikely to incur a meaningful reduction in revenue.

We do not consider that this situation falls within the appropriate scope of the compensation arrangements. The purpose of compensation is to maintain incentives to supply energy during an administered price period, whereas the situation described

⁶⁶ Note that in this example, the term "loss" is used in terms of its meaning for power system operation, that is the physical MW volumes of energy which are lost (due to thermal resistance etc.) when electricity is transmitted across networks.

⁶⁷ Where prices are capped at the market price cap in both regions, a scheduled network service provider could incur a reduction in revenue equal to the volume of the inter-regional loss, multiplied by the market price cap. For example, the scheduled network service provider "buys" 100MW of power for \$12,900 in region A. A loss factor of 1% means that only 99MW is actually delivered in region B. The scheduled network service providers therefore sells only 99 MW of power for \$12900/MWh in region B, resulting in a net loss of 1MW * \$12,900/MWh = \$12,900MWh.

⁴² Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

above occurs outside of the constraints of an administered price period. If this relatively unlikely situation were to occur, we consider that AEMO's directions powers would be the appropriate mechanism to deal with any resultant reliability or security issues.

The application of an administered floor price may also affect scheduled network service provider revenue, in the situation where the scheduled network service provider is exporting power from a negatively priced region into another region. However, we consider that this outcome is very unlikely in the NEM. We therefore consider that compensation is not warranted in these circumstances.

6.4.3 Eligibility of ancillary service providers

Currently, clause 3.14.6(a3) allows market participants to claim compensation in respect of ancillary service generating units or ancillary service loads. Compensation may be claimed if, due to the application of the APC, the ancillary service price is lower than the price specified in the relevant market ancillary services offer.

In the draft report, we concluded that ancillary service providers should not be eligible to claim compensation. We considered that there is no clear risk that application of the APC could directly result in ancillary service providers incurring a net loss. Furthermore, while price differences may exist between energy and ancillary service markets (where the APC applies only in ancillary service markets), any "loss" incurred due to this price difference is not an appropriate basis for compensation.

We have considered stakeholders comments on this issue, but remain of the opinion that there is no clear case to be made for ancillary service providers to be eligible to claim. Specific issues raised by stakeholders are examined below.

Before discussing our assessment in more detail, it is worth providing a brief overview of the interactions between energy and ancillary services markets:

- Ancillary service providers receive payment for the enablement of capacity. This capacity is effectively held in "reserve" rather than being used in the energy market. For example, a generator offering a fast raise service is paid the ancillary service price for making capacity available to provide this increase in energy output.
- Ancillary service providers also receive payment for energy if they are called on to provide the offered service. In the above example, if the generator is called on to actually provide the fast raise service, it is paid the energy market price for this output.
- The APC can apply in ancillary service markets under two conditions. Firstly, an administered price period triggered by a breach of the cumulative price threshold in the energy market results in the application of the APC in both energy and ancillary service markets. Alternatively, an administered price period triggered by a breach of the cumulative price threshold in any ancillary service market results in the application of the APC in all ancillary service market results. To date, this latter outcome has not occurred in the NEM.
- In dispatching the market, AEMO co-optimises dispatch in both energy and ancillary service markets. AEMO uses the lowest cost combination of energy and

ancillary services necessary to maintain the security of the system. If AEMO must change a generator's output in the energy market in order to provide more ancillary services, the cost of making this change in the energy market is factored into the ancillary service price.

Given these factors, we consider that application of the APC in an ancillary services market cannot itself cause a participant to incur a loss. This is because participants offering ancillary services do not incur compensable costs in doing so. The participant will not actually incur costs until such time as they are actually called on to provide the service. At that time, they will be eligible to claim compensation as a scheduled generator (or potentially as a scheduled load), if they have incurred compensable costs in the provision of energy services.

Below, we step through some examples which illustrate our reasoning.

Application of the administered price period in both energy and ancillary service markets

As identified above, all administered price period events in the NEM to date have been triggered by a breach of the cumulative price threshold in the energy market. This results in the application of the APC in both the energy and ancillary service markets. This is the far more likely type of administered price period event.

To continue with the example of the generator offering a fast raise service, we now assume that the generator is a high cost unit with direct or opportunity costs in excess of \$300/MWh. In this example, the APC applies in both energy and ancillary service markets.

If this generator is enabled to provide a fast raise service, it receives a payment through the ancillary service market for keeping capacity in reserve. The generator does not incur any costs from providing the ancillary service, as it is not actually generating electricity with this capacity. In fact, the generator does not begin to incur any cost until such time as it is called upon to actually provide the raise service and generate electricity in the energy market.

It follows that the application of the APC in the ancillary service markets does not actually result in the participant incurring a loss. While a loss may be incurred if the participant is called on to provide energy, it is eligible to claim compensation as a scheduled generator for the provision of this energy.

Application of the administered price period in ancillary service markets only

A less likely scenario occurs where the APC caps the price in ancillary service markets only. As identified above, this situation has not yet occurred in the history of the NEM.

In this theoretical example, a generator facing high energy spot market prices may face a reduction in revenue if enabled in the APC capped ancillary service markets. This may occur where the generator's output in the energy market is reduced in order to provide reserve capacity in the ancillary service market.

An argument could therefore be made that application of the APC in ancillary service markets only may result in generators incurring a "loss", this loss being the difference

between foregone energy market revenue and the revenue received in the capped ancillary service market. Traditionally defined, this is the opportunity cost to generators of providing ancillary services. We note AEMO's submission to the draft report, which identified that the potential for such opportunity costs could dissuade participants from offering ancillary services.⁶⁸

However, as stated in the draft report, we consider that this definition of opportunity cost is inconsistent with the general approach taken by the Commission in relation to the assessment of compensation claims. Our definition of the type of opportunity costs that may be recovered through compensation, as expressed in the current compensation guidelines, states that compensable opportunity costs should be based on the foreclosure of opportunities to use scarce resources more profitably, at a later point in time.⁶⁹ The situation described above and as identified by AEMO does not in fact preclude the use of scarce resources at a later point in time, but instead refers to the simultaneous price difference between two markets.

More generally, the Commission has deliberately moved away from consideration of the difference between capped and uncapped prices when determining compensable amounts. In the 2008 *Compensation Arrangements under Administered Pricing* rule change, which established the existing compensation provisions, the Commission decided that compensation should be based on direct and opportunity costs rather than on the difference between a generator's dispatch offer price and the spot price.⁷⁰ The Commission considered this would help prevent perverse outcomes and to help control the amount of compensation awarded. Furthermore, it was decided that awarding compensation based on the difference between capped and uncapped prices would at least partially counteract the protection from high prices offered by the administered price period.

While the situation considered in this review refers to a different set of price differentials, we consider that the same principles apply. The compensable amount should include direct and opportunity costs, where opportunity costs are defined as the foregone opportunity to use scarce resources at a later point in time. Given this definition of opportunity cost, it would not be appropriate to consider the immediate difference between the uncapped energy and capped ancillary services price. Awarding compensation based on this calculation would potentially increase the magnitude of compensation awarded and could weaken the protections provided by the application of the APC in ancillary services markets.

We acknowledge that excluding ancillary services from compensation eligibility may create a minor risk of weakened incentives for market participants to provide ancillary services during an administered price period. AEMO's statement regarding the relative undesirability of issuing directions to ensure continued supply of ancillary services has also been considered.⁷¹ However, given the relatively low probability of this scenario

⁶⁸ AEMO, draft report submission, p.4.

⁶⁹ Section 10.3.2 and appendix A of the existing compensation guidelines provides a detailed overview of the Commission's current approach to opportunity costs.

⁷⁰ AEMC 2008, Compensation Arrangements Under Administered Pricing, Rule Determination, 18 December 2008, Sydney.

⁷¹ AEMO, draft report submission, p.4.

occurring and the issues identified above, we consider that AEMO's directions power remains an adequate measure to address any shortfall of supply of ancillary services during an administered price period.

Ancillary service providers offering lower services

Finally, we consider that parties who offer lower services are unlikely to incur a loss due to the application of the APC in ancillary services markets. An ancillary service generator can only offer lower services if it is already dispatched in the energy market and producing electricity. If called upon to provide the lower service, the generator reduces its output in the energy market, resulting in a fuel cost saving and a reduction in spot market revenue.

If a high cost generator is dispatched in the energy market and is incurring a loss, any reduction in its output must therefore result in a reduction in its losses. Accordingly, the application of the APC in the various ancillary service lower markets will not result in these participants incurring a loss. If anything, receipt of ancillary service payments by this generator will help to offset some of the losses incurred by generating in the energy market.

6.4.4 References to market suspension

In the draft report, we recommended that references to market suspension in the existing eligibility criteria should be removed.

Rules clause 3.14.6(a) and (a2) currently refer to certain participant types being eligible to claim compensation "due to the application of an administered price cap during...a market suspension". However, clause 3.14.5, which sets out the process for the determination of spot prices under market suspension, makes no reference to the application of the APC. That is, under the current arrangements, the APC cannot be applied during market suspension. The existing arrangements are therefore unworkable; parties would not actually be able to claim compensation under clause 3.14.6 in the event of market suspension.

We consider that removing these unworkable provisions creates no detriment to the market, and should in fact help clarify the exact circumstances in which compensation is available.

Our proposed amendments to the clause 3.14.6 compensation provisions have been designed to address the specific market conditions surrounding application of the APC. Given the markedly different market conditions likely to surround market suspension, it is not clear whether the proposed compensation mechanisms included in this report would be appropriate in that circumstance.

In its submission to the draft report, AEMO raised a number of potential issues with the processes in clauses 3.14.5 of the rules for determining market prices during market suspension.⁷² For example, AEMO suggested that while prices determined during a

⁷² NER clause 3.14.5 establishes how market prices should be established under market suspension. A cascading process for price determination is allowed for in this clause: initially, AEMO is required to set prices in a suspended region by reference to the loss adjusted spot price in neighbouring regions,

⁴⁶ Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

market suspension would be determined with the intention of providing adequate revenue to participants, it was not possible to assume that this would occur in all instances. AEMO suggested that given these issues, it was necessary to retain some reference to market suspension in the clause 3.14.6 compensation provisions.⁷³

The Commission considers that questions relating to the function of the market suspension pricing provisions are beyond the scope of this review. NER clause 3.14.5 sets out a detailed process for the determination of spot prices during market suspension. A review of the effectiveness of those provisions would most likely raise a number of new and complex issues, which would require a separate and more detailed assessment than can be provided in this review.

If stakeholders consider that there are material issues with the market suspension pricing provisions in clause 3.14.5, they may lodge a rule change proposal to amend these provisions. In assessing such a rule change, the Commission would have adequate opportunity to consider and consult on whether any form of compensation may be appropriate under market suspension and, if so, what form that compensation process might take.

Summary of eligibility criteria

Table 6.1 below provides a summary of the eligibility criteria discussed in this chapter and in chapter 5.

Participant type	Eligible to claim	Eligibility period
Scheduled and non-scheduled market generators	Yes	Commences when the spot price in a region is actively capped by the administered price cap
Scheduled load	Yes	Commences when the spot price in a region is actively limited by the administered price floor
Scheduled network service provider	Yes	Commences when the spot price in a region into which the scheduled network service provider is importing power is actively capped by the administered price cap
Scheduled generator or load in a region subject to price scaling under clause 3.14.2(e)(2) or 3.14.2(e)(4)	Yes	Commences when the price in the participant's region is first actively capped or limited by the price scaling provisions of clause 3.14.2(e)(2) or 3.14.2(e)(4).
Ancillary service providers	No	

Table 6.1 Summary of proposed eligibility criteria

then to setting by reference to the predispatch schedule and finally according to a previously established pricing schedule.

73 AEMO, draft report submission, p.5.

7 Cost recovery

7.1 Issues with the current arrangements

Clause 3.15.10 of the NER describes the current process for the recovery of compensation costs from market customers, following a clause 3.14.6 compensation claim.

The existing process requires AEMO to recover the cost of compensation from market customers who purchased electricity from a region where the spot price was affected by administered pricing.⁷⁴ AEMO determines the amounts payable by market customers according to their individual share of total energy consumption, on a trading interval basis.

There are a number of ambiguities in the rules which describe this cost recovery process. The current rules are also relatively unclear as to the interaction between cost recovery and the price scaling provisions contained in clause 3.14.2(e).

For example, the existing rules are unclear as to the timeframes and process for cost recovery. While AEMO is required to recover the cost of compensation in proportion to market customers' energy consumption, it is not clear how this energy consumption should be calculated.

In particular, the rules refer to the recovery of compensation costs from market customers based on their energy consumption in any region "affected by the imposition of an administered price". The meaning of this is unclear, as the term "administered price" is not itself defined in the rules.

The meaning of the word "affected" is also unclear. It is difficult to determine whether compensation costs should be recovered only from market customers in regions "affected" through the direct application of the APC or the administered floor price, or also from market customers in those regions where the spot price has been "affected" through application of the price scaling provisions in clause 3.14.2(e).

The existing rules also appear to allocate the cost of compensation to market customers based on their energy consumption during individual trading intervals. This highly granular approach to cost allocation may create complexities in the cost recovery process. We consider that any benefits of this approach are outweighed by the regulatory and administrative costs associated with increased complexity.

Box 7.1 summarises the existing cost recovery process.

Box 7.1: Clause 3.15.10 compensation payment processes

NER clause 3.15.10 sets out the process to be followed by AEMO in allocating the costs of compensation to customers.

AEMO is required to determine an amount payable by all market customers who purchased electricity from the spot market in a region in which the regional reference price was affected by the imposition of an administered price or the

⁷⁴ Market customers are defined under clause 2.3.4 of the NER.

⁴⁸ Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

market price cap, or the market floor price in the trading interval or trading intervals in respect of which such compensation has been awarded.

AEMO is required to determine the amounts payable for each relevant trading interval by each of the affected Market Customers under clause 3.15.10(a) as follows:

$$\frac{APC \times E_i}{\sum E_i}$$

Where:

- **APC** is the total amount of any compensation payments awarded by the AEMC to Scheduled Generators, Market Participants which submitted dispatch bids, or Scheduled Network Service Providers in respect of that trading interval in accordance with clause 3.14.6;
- E_i is the sum of all of the Market Customer's adjusted gross energy amounts, determined in accordance with clauses 3.15.4 and 3.15.5, in respect of each trading interval in the billing period and each connection point for which the Market Customer is financially responsible in any region or regions affected by the imposition of an administered price or the market price cap or the market floor price;
- ΣE_i is the sum of all amounts determined as "Ei" in accordance with clause 3.15.10 for all Market Customers in all regions affected by the imposition of an administered price or the market price cap or the market floor price in that trading interval.

A final issue relates to the ability of retailers to pass through the costs of compensation to their end use customers. Currently, the rules do not provide any indication as to how (or whether) retailers can pass through these costs to their end use customers.

7.2 Stakeholder submissions

Several stakeholders commented on the cost recovery methodology that was proposed in the draft report.

AEMO stated that the proposed approach to cost recovery was insufficiently granular, suggesting that costs should be recovered from market customers on the basis of their energy consumption during only those trading intervals where the APC was actively capping spot prices. AEMO stated that recovering the total compensable amount against total consumption across an entire trading interval would weaken any price signals faced by market customers to reduce demand.

AEMO also indicated that the proposed model would require changes to AEMO's systems, with related implementation costs.

AEMO stated that customers in regions where the spot price has been actively capped through the clause 3.14.2(e) price scaling provisions should also bear a portion of the total compensable amount.

AEMO also questioned how costs incurred outside the eligibility period should be treated. Specifically, AEMO questioned whether start up costs incurred outside the eligibility period would be included in the total compensable amount.⁷⁵

In regards to the issue of retailer cost pass through, Origin called on the AEMC to issue a "positive statement" that jurisdictional regulated pricing frameworks should allow for the efficient cost recovery of compensation following an administered pricing event.⁷⁶

Stakeholders also commented on this topic in submissions to the issues paper. International Power noted that the existing arrangements for cost recovery do not accurately reflect the way in which some costs are incurred. International Power called for improved clarity as to how these kinds of costs are allocated.⁷⁷

Origin stated that in the absence of an effective pass through process, the payment of compensation amounts creates an un-hedgeable risk for retailers, which may have an impact on a retailer's viability.⁷⁸

More generally, Origin highlighted that the payment of compensation costs may create substantial financial stress for retailers and argued that this impact on retailers should be considered by the AEMC when determining compensation amounts.

7.3 Recommendation

Cost recovery mechanism

While the Commission notes the various comments from stakeholders on this issue, we consider that the mechanism proposed in the draft report provides an effective process for the recovery of compensation costs. Accordingly, we recommend that the mechanism proposed in the draft report be introduced, subject to some clarifications made in this final report.

Generally, we consider the existing rules processes for the recovery of the costs of compensation are unclear and require amendment. Our recommended approach to cost recovery therefore seeks to clarify and expand upon the existing arrangements. This should provide the market with improved certainty as to how the costs of compensation will be calculated and allocated to market customers.

Under our approach, the AEMC would calculate a total compensable amount for each compensation eligibility period, based on the difference between a participant's total costs incurred and total spot market revenue earned during that eligibility period. Expressed another way, the total compensable amount reflects the net loss incurred by the participant due to operating during the eligibility period.

This total compensable amount would then be recovered from market customers in the region where the APC or administered price floor applied, based on the total energy consumption of each market customer during the eligibility period.

AEMO, draft report submission, pp.3-6.

⁷⁶ Origin, draft report submission, p.2.

⁷⁷ International Power, issues paper submission, p.7.

⁷⁸ Origin, issues paper submission, p.1.

⁵⁰ Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

A key principle informing the development of our proposed cost recovery mechanism is that the cost of compensation should be recovered from customers in a way that reflects their relative share of the benefit associated with the payment of compensation. We consider that the primary benefit that results from the payment of compensation is the maintenance of reliable supply of energy in a region where the APC has actively capped the spot price. Accordingly, the cost of compensation should be borne by customers in the region where the APC actively capped the spot price, given that these customers are the primary recipients of the reliability benefit associated with the payment of compensation.

We also consider that the reliability benefit associated with the payment of compensation is not only shared in a geographical sense, but also across time. Expressed another way, customers in the APC capped region enjoy the benefits of reliable supply throughout the entirety of the eligibility period, not just in those trading intervals where the APC is actively capping the spot price. Accordingly, we consider that the cost of compensation should be allocated to customers based on their total consumption across the eligibility period.

While efficient allocation of costs has been a key focus, we have also sought to balance this against the development of a reasonably simple and transparent cost recovery mechanism. While more accurate and granular cost recovery reduces the likelihood of customer cross subsidisation, it is also likely to entail increasing levels of cost and complexity. We consider there are likely to be benefits associated with a relatively straightforward and transparent approach to cost recovery. This will help reduce the likelihood of uncertainty or disputes regarding cost allocation following a compensation claim.

Retailer pass through

The Commission considers that end use consumers are the ultimate recipients of the reliability benefits associated with the payment of compensation. End use customers should therefore bear the full cost of the payment of compensation.

Retailers should not be constrained from passing the cost of compensation through to customers.

While the Commission notes comments from stakeholders on this issue, we consider that issues relating to retail price regulation are out of scope of this review.

7.4 Commission's considerations

7.4.1 The cost recovery mechanism

Under the existing rules, compensation costs are recovered from market customers in proportion to their energy consumption. We consider that this approach to cost allocation is efficient and should be retained. Accordingly, our proposed cost recovery mechanism recovers the total cost of compensation from market customers in proportion to their total energy consumption during an eligibility period.

When designing our approach to cost recovery, we considered the appropriate level of "granularity" when allocating the total compensable amount against market customers'

energy consumption. Adopting a more granular approach involves allocating costs to market customers based on their specific energy use at specific points in time.

Increased granularity may improve the likelihood that the total compensable amount will be allocated to those parties who received the greatest benefit. This can help to reduce the likelihood of cross subsidisation between customers.

In developing our cost recovery approach, we considered a number of options with increasing levels of granularity of cost allocation. These options included allocating the cost of compensation based on market customers' energy consumption during specific trading interval, or allocation across multiple regions depending on levels of inter-regional flows.

In its draft report submission, AEMO indicated that it favoured a more granular approach to cost recovery. Specifically, AEMO suggested that the total compensable amount should be recovered against market customers' consumption during those trading intervals where the spot price was actively capped by the APC. AEMO stated that this would provide an incentive for market customers to reduce demand during periods where the price has been actively capped.⁷⁹

Price signals can create incentives for participants to reduce or change their consumption patterns. However, in order to do so, these price signals must be clear and must contain credible information in order for participants to make a viable economic decision.

In the scenario described by AEMO, market customers would not face an effective price signal on which to base their demand response decisions. This is because during an administered price period, market customers would not know whether any participant was actually incurring a loss, nor whether they were intending to lodge a claim.

Furthermore, given that the total compensable amount is itself not calculated and finalised until some months after an administered price period has occurred, market customers would have no indication as to the magnitude of the price signal they faced during any trading interval where the APC bound. Given this lack of information, it would not be possible for market customers to make a meaningful economic decision as to whether they should change their operational behaviour.

Additionally, we consider the magnitude of the total compensable amount would likely be insufficient to provide a meaningful price signal, regardless of the relative granularity of cost recovery. During an eligibility period, the two price signals faced by a market customer consist of the APC capped market price and the market customer's share of the total compensable amount. Given that the APC is significantly lower than the market price cap and that the total compensable amount is shared by all market customers in the region, it seems unlikely that the combination of these signals would be sufficient to markedly change a market customer's consumption decisions.

We note that AEMO may face some costs associated with implementation of our proposed changes. Given that any implementation of this review's recommendations will most likely be subject to a rule change process, there will be opportunity for the Commission to work with AEMO to minimise the extent of any implementation costs.

⁷⁹ AEMO, draft report submission, p.5.

⁵² Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

The Commission also notes AEMO's suggestion that it give further consideration to extending the cost recovery process to include market customers in regions affected by the clause 3.14.2(e) price scaling provisions. This issue was considered during development of the draft report, as part of the assessment of the broader questions of granularity of cost recovery.

The Commission considers that the primary beneficiaries of compensation should bear the cost of that compensation. As described above, we consider that the primary benefit associated with the payment of compensation is maintenance of a reliable supply of energy in the presence of the APC. Accordingly, the primary recipients of this benefit are those consumers located in the region in which the APC actively capped the spot price. While it is true that customers located in regions subject to price scaling receive an incidental benefit through a reduction in spot price, we consider that this benefit is secondary to the reliability benefit received by customers in the APC capped region.

While we note AEMO's comments, the Commission remains of the opinion that the total compensable amount should be recovered from market customers in proportion to their total energy consumption during the eligibility period. This cost should be recovered from market participants in the region in which the APC or administered floor price actively capped spot prices.

We consider that this approach strikes an appropriate balance between efficient allocation of costs and minimisation of complexity.

Below, we provide an overview of the process to be followed by the AEMC in determining the total compensable amount for each eligibility period.

We then explain in further detail our process for recovering this total compensable amount from market customers. Initially, we focus on the arrangements for recovery of compensable costs incurred by scheduled generators and loads located in the region where APC applied. We then extend our discussion to cost recovery in other, lower probability scenarios.

Determination of the total compensable amount for each eligibility period

As discussed in chapter five and six, participants are only eligible to claim compensation if they have incurred a net loss due to operating during an eligibility period.

Under our proposed cost recovery mechanism, the AEMC will determine a total compensable amount for each eligibility period. This total compensable amount will be the difference between the total direct and opportunity costs incurred and total spot market revenue received by a participant during each eligibility period. Where this calculation results in a net loss, this will form the basis of the total compensable amount.

Where a participant has operated and incurred losses over multiple eligibility periods, the AEMC will determine a separate total compensable amount for that participant for each eligibility period.

In the situation where there is more than one claimant, the AEMC will determine a separate total compensable amount for each claimant, for each eligibility period.

While some costs will be clearly attributable to specific eligibility periods, this may not be the case for other kinds of costs. Generally, costs should be allocated to those eligibility periods in which they were incurred. However, in some cases, a pro-rated approach to the allocation of costs may be adopted.

Recovery of the compensable cost from market customers

The overarching principle informing the development of our cost recovery approach is that the cost of compensation should be recovered from market customers in proportion to the benefits they received from its payment. As discussed above, the primary benefit of compensation accrues to market customers in the region where the price was actively capped by the APC.

Our proposed cost recovery mechanism therefore requires AEMO to recover the total compensable amount for each eligibility period from market customers, in proportion to their total energy consumption during the respective eligibility period.

The total compensable amount should only be recovered from market customers in the region where the administered price period occurred and the APC (or administered price floor) actively capped (or limited) the spot price.

To provide certainty, we consider that market customers in those regions affected by the price scaling provisions of clause 3.14.2(e)(2) and (e)(4) should not bear any of the costs of compensation.

Methodology for cost recovery

The current rules contain a formula to be used by AEMO in the recovery of compensation costs from market customers.

The proposed formula below is generally similar to that currently included in the rules. However, it refers to total energy consumed over the entirety of an eligibility period rather than an individual trading interval:

$$TCA_n \times \frac{\sum Ei_n}{\sum E_n}$$

Where:⁸⁰

- TCA_n is the total compensable amount for eligibility period *n*;
- ΣEi_n is the sum total of all energy consumed by market customer *i*, located in the APC capped region, during eligibility period *n*;
- ΣE_n is the sum total of all energy consumed by all market customers in the APC capped region, during eligibility period *n*.

⁸⁰ For expediency, we refer here only to application of the APC. However, the same arrangements apply following application of the administered price floor.

⁵⁴ Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

Below, we step through an example of how this cost recovery approach may be applied in practice.

Box 7.2: Cost recovery

In this example, we consider a region where a single compensable participant (in this case, a scheduled generator) incurred a net loss due to operating during an eligibility period.

In this example, the eligibility period commences in trading interval eight, when the APC first caps the spot price in the region. The eligibility period continues until the end of trading day, in trading interval 48.

The AEMC takes the total costs incurred by the participant during the eligibility period and subtracts these from the total spot market revenue earned during the eligibility period.

For this example, we assume that this process results in the participant incurring a net loss. We assume that this loss was equal to \$50,000. This is the value of the total compensable amount.

Once this total amount has been determined by the AEMC, AEMO is responsible for recovery from market customers.

To do so, AEMO calculates the total amount of energy consumed by all market customers in the region during the eligibility period. This is represented by the cross-hatched area underneath the curve between trading intervals eight and 48. AEMO also determines the portion of this energy consumed by each market customer.

AEMO allocates the total compensable amount to market customers on a pro-rated basis, according to their share of the total energy consumption during the eligibility period.

For this example, we assume that total regional energy consumption during the eligibility period was 10,000MWh.

We also assume that there were three market customers in the region, whose total energy consumption during the eligibility period was 5,000MWh, 3,000MWh and 2,000MWh respectively.

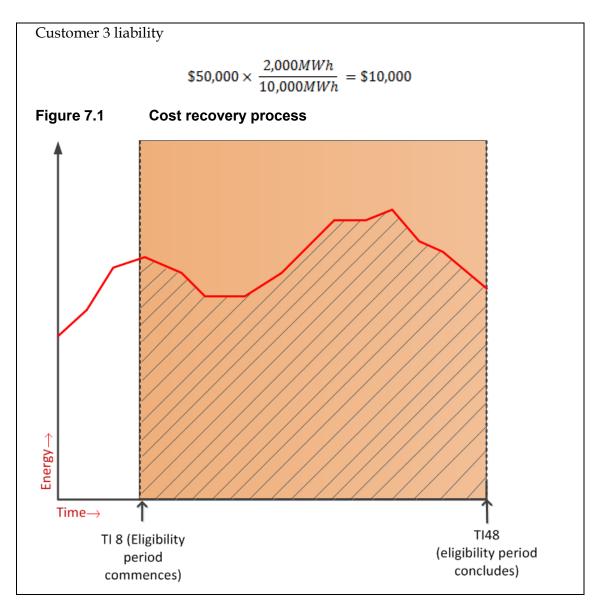
Given the formula provided above, AEMO allocates the total compensable amount of \$50,000 for this eligibility period to each market customer as follows:

Customer 1 liability

$$\$50,000 \times \frac{5,000MWh}{10,000MWh} = \$25,000$$

Customer 2 liability

$$50,000 \times \frac{3,000MWh}{10,000MWh} = 15,000$$



7.4.2 Lower probability scenarios – other participant types, multiple claimants, multiple APC capped regions

We consider that the most likely scenario where compensation will be claimed is where a single scheduled generator, located in an APC capped region, incurs a loss.

However, other potential scenarios exist where compensation may be awarded. We consider these below.

Cost recovery for scheduled generators in regions subject to the price scaling provisions

As discussed in section 5.4.3, participants in regions outside of the APC capped region may be eligible to claim compensation. This may occur where application of the clause 3.14.2(e) price scaling provisions results in these participants incurring a net loss.

In these circumstances, we consider that the primary beneficiaries of the payment of compensation are those market customers located in the region where the APC directly applied and actively capped prices. Customers in the APC capped region should

therefore bear the full cost of any compensation awarded to participants under this scenario.

The eligibility period for compensable participants under this scenario commences when the spot price in the exporting region is first capped under the price scaling provisions. It concludes at the end of the trading day.

The total compensable amount for such participants should be determined in the same way as above. That is, the AEMC should consider the total spot market revenue received and total costs incurred by the participant throughout the relevant eligibility period. Compensation can be claimed for any net loss incurred.

The process for recovery should also follow the processes outlined above. The total compensable amount for each eligibility period should be recovered from market customers in the APC capped region (the importing region), in proportion to their total energy consumption during the relevant eligibility period. In this case, the relevant eligibility period commences when the spot price in the exporting region is first capped through application of the price scaling provisions and concludes at the end of the trading day.

Cost recovery for scheduled load

As discussed in section 6.4.1, scheduled loads may be eligible to claim compensation if they have incurred a net loss due to the application of the administered floor price.

As with scheduled generators, we consider that the primary beneficiaries of the payment of compensation in this situation are those customers in the region in which the administered floor price directly applied and actively limited prices. Customers in that region should therefore bear the full cost of any compensation awarded to scheduled load.

In section 6.4.1, we also described the situation of a scheduled load located in a region where the price scaling provisions applied. A scheduled load who has incurred a loss in this situation may be eligible to claim compensation. We consider that the cost of any compensation awarded in this situation should be recovered from market customers in the region in which the administered price floor directly applied and actively limited the price.

Cost recovery for scheduled network service providers

As discussed in section 6.4.2, scheduled network service providers may be eligible to claim compensation if they have incurred a net loss due to the application of the APC.

In this scenario, we consider that the primary beneficiaries of the payment of compensation are those customers in the region into which the scheduled network service provider is importing power. That is, the loss incurred by the scheduled network service provider is due to the application of the APC in the importing region.

Customers in the importing region should therefore bear the full cost of any compensation claimed by an scheduled network service provider under this scenario.

Under our proposed approach the eligibility period for scheduled network service providers would commence from the trading interval when the spot price in the region into which the scheduled network service provider is importing power is first capped at the APC. It concludes at the end of trading day.

The AEMC would determine the total compensable amount based on the difference between total costs incurred and revenue earned during the eligibility period. This total compensable amount would then be recovered from market customers in the APC capped region (the importing region) in proportion to their total energy consumption during the eligibility period.

Cost recovery for multiple claimants or multiple regions

It is possible that there may be multiple claimants in a single region, within one eligibility period. The arrangements described above would continue to hold in this case, with two separate total compensable amounts calculated (one for each claimant). The sum of the two compensable amounts would then be recovered from market customers in the APC capped region in proportion to their energy consumption during the eligibility period.

It is also possible that an administered price period may apply in two regions simultaneously, and that the APC may actively cap prices in both regions at the same time. This would result in the triggering of a separate eligibility periods in each region.

The general principle for cost allocation in this case is that market customers in the same region as the compensable participant should bear the full costs of any compensation awarded to that participant.

This scenario may be extended to the situation where there are multiple claimants across multiple APC capped regions. In such a scenario, the total compensable cost for each claimant would be recovered from market customers in the same region as that claimant.

7.4.3 Costs incurred outside of the eligibility period

In its submission to the draft report, AEMO stated that there was some ambiguity as to whether costs incurred outside of the eligibility period may be recovered.⁸¹

As we discussed in section 7.4.1, the basis of the total compensable amount is the difference between the total costs incurred and spot market revenue earned by a participant during the eligibility period. Costs incurred and revenue earned outside of the eligibility period cannot be considered by the AEMC when determining the total compensable amount.

Generally, it is expected that most compensable costs should fall within the eligibility period. However, it is worth considering other expenses, such as startup costs, which may be incurred outside of the eligibility period.

Startup costs include the operation and maintenance costs incurred when a peaking unit is started. Currently, the compensation guidelines allow for the recovery of "fuel

⁸¹ AEMO, draft report submission, p.3.

⁵⁸ Review of Compensation Arrangements following an Administered Price, Market Price Cap or Market Floor Price

costs incurred if the generator is started up to support ... demand during an [administered price period]".⁸² Startup costs were included as part of the compensation amount awarded to Synergen Power. These costs reflected the effect on maintenance schedules, labour costs and general costs incurred by Synergen when starting its two units unit. Importantly, Synergen were not awarded compensation for startup costs incurred prior to the commencement of the administered price period.⁸³

All costs incurred within the eligibility period can be considered for inclusion in the total compensable amount, including startup costs. However, the Commission considers that any costs incurred outside of the eligibility period, including startup costs, should be excluded.⁸⁴ This is in keeping with the general approach so far adopted in assessing compensation claims. It also reflects the fact that participants who have commenced operation of a unit prior to the commencement of an eligibility period have done so to access high spot prices. In this case, these participants have most likely already earned revenue sufficient to cover all operational costs, including startup costs.

We note there is a minor risk this approach could result in participants making inefficient operational decisions. For example, a generator may postpone starting a peaking unit until the eligibility period commences, in order to ensure that its startup costs can be recovered. However, we consider that this outcome is very unlikely. Given that high spot prices will normally precede commencement of the administered price period and application of the APC, it is likely generators would have already sought to maximise their dispatch to access these prices and would therefore already be operating at commencement of an eligibility period.

7.4.4 Structure of costs awarded

In the 2008 *Compensation under administered pricing* final rule determination, the Commission established what kinds of costs can be recovered through the compensation provisions. These were defined as a participant's short run marginal costs, incorporating direct and opportunity costs.

The compensation guidelines provide further information regarding the form of these direct and opportunity costs. Following implementation of the rule changes recommended in this report, it is likely that some amendments to the guidelines will be required.

Any amendments to the compensation guidelines will take place via a consultation procedure administered by the AEMC. This is a separate process to this review and we will not be making any decisions regarding the final form of the guidelines at this stage.

⁸² AEMC, *Compensation guidelines under clause 3.14.6 of the national electricity rules*, Amended guidelines, AEMC, 17 February 2011, Sydney, p.13.

⁸³ Expert Panel, Expert Panel recommendations to the Australian Energy Market Commission: Assessment of Synergen's claim for compensation persuant to clause 3.14.6 of the National Electricity Rules, Expert Panel, 18 August 2010, Sydney, section 5.4.1.2.

⁸⁴ For the avoidance of doubt, the AEMC would consider opportunity costs to be costs incurred within the eligibility period, where they reflect usage of a scarce resource during the eligibility period which precluded use of that resource at a later point in time.

However, there are several key issues which we consider are likely to be included in any future consultation regarding the guidelines. Below, we step through some of these issues, noting that others may be identified by the Commission when undertaking any consultation procedure.

Allocation of costs across multiple eligibility periods

A compensable participant may make a claim for losses incurred from operating over multiple eligibility periods. As we described above, the AEMC will determine a separate total compensable amount for each eligibility period.

We consider that costs should be allocated to those eligibility periods in which they were incurred. For most kinds of costs this should be a relatively straight forward process. For example, it should be possible to allocate fuel or labour costs to the operation of a unit during a specific eligibility period.

However, it may be difficult to determine exactly when other costs were incurred. For example, costs associated with maintenance may be attributed to operation across multiple eligibility periods. Opportunity costs may also be relatively difficult to attribute to specific periods of operation.

Where costs cannot be clearly allocated to a particular eligibility period, the AEMC may seek to develop a pro-rated approach. This would allow for a proportional allocation of costs across multiple periods.

Structure of claims

Given the structure of the cost recovery process, we consider that the guidelines may need to include some information as to how claimants should provide cost data to the AEMC. For example, it is likely that fuel costs would need to be provided to the AEMC on the basis of the eligibility period in which they were incurred.

The guidelines may also need to provide information regarding the appropriate definition of what physical units should form the basis of a compensation claim.

7.4.5 Retailer pass through

The primary purpose of compensation is the maintenance of a reliable supply of energy and other services during an administered price period. The ultimate beneficiaries of the maintenance of this reliable supply are end use customers. It follows that these end use customers should ultimately bear the full cost of compensation.

Under our proposed arrangements, the cost of compensation is allocated to market customers. Generally, this refers to retailers. We consider that retailers should not be prevented from passing these costs through to their end use customers.

At present, it appears that existing arrangements could permit pass through of these costs. In the case of end use customers on regulated contracts, the jurisdictional regulated retail price determination process could provide an avenue for passing

through compensation costs, through the inclusion of specific pass through provisions. 85

For customers on market contracts, the process of contract negotiation should provide both parties with adequate opportunity to include clauses which facilitate efficient pass through.

In its draft report submission, Origin stated that the existing regulated retail tariff determinations may not allow for the pass through of compensation costs. Origin acknowledged that section 34 of the NEL effectively excludes matters relating to retail pricing from the rules. However, Origin called on the AEMC to make a "positive statement" that regulated pricing frameworks should allow for the efficient recovery of compensation costs.⁸⁶

Matters relating to retail pricing and retail price regulation are not within the scope of this review.

⁸⁵ We note that currently, no jurisdictional retail price regulation arrangements make an explicit allowance for the pass through of compensation costs. However, we consider that there is nothing preventing such pass through mechanisms being included in the development of regulated retail price determinations.

⁸⁶ Origin, draft report submission, p.2.

8 Next steps

A rule change process will be necessary in order to implement the changes recommended in this review.

We have attached a draft specification to this final report, which sets out the key aspects of the proposed rule changes.

This draft specification may be incorporated as part of a rule change request.

Depending on the content of any formal rule change request made to the AEMC, it is likely that the following processes will be necessary:

- Amendment of rules clause 3.14.6, incorporating changes to the compensation claim assessment framework, public consultation processes, purpose clauses, eligibility criteria framework and cost recovery process.
- Amendment of clause 3.15.10, incorporating changes to AEMO's processes for recovery of the cost of compensation.
- Following any changes to the rules, the compensation guidelines may also require amendment via the rules consultation procedures. As well as accommodating any changes proposed in any subsequent rule change, the guidelines consultation process may consider further issues, such as the appropriate form and parameters of opportunity cost definition.

Abbreviations

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
APC	administered price cap
AER	Australian Energy Regulator
NEL	National Electricity Law
NEM	National Energy Market
NEO	National Electricity Objective
NER or the Rules	National Electricity Rules
SCER	Standing Council on Resources and Energy

A Draft specifications

As discussed in the final report, the changes proposed by the Commission to the compensation frameworks will require amendment to the rules.

We have prepared a set of draft specifications which set out the key changes to the rules that we have recommended.

A brief description of the key elements of the proposed rule is provided below.

Clarification of rule clauses defining the purpose of compensation

Rules clause 3.14.6(c)(1) currently contains a description of the purpose of compensation.

It is proposed that this clause be amended to remove any reference to maintenance of investment signals.

Eligibility to claim compensation

Rules clause 3.14.6(a), (a1), (a2) and (a3) currently set out the criteria which determine the eligibility of various parties to claim compensation, following the application of the APC, administered floor price, market price cap and market floor price.

It is proposed that these existing mechanisms be removed. In place of this mechanism, it is proposed that the following criteria are introduced. These criteria establish the market conditions when each of the following market participant types should be eligible to claim compensation:

Scheduled and non-scheduled market generators:

- 1. Scheduled and non-scheduled market generators located in a region where the APC has actively capped the spot price become eligible to claim compensation from the beginning of the first trading interval in which the APC actively capped the spot price in a dispatch interval.
- 2. Scheduled and non-scheduled market generators located in regions where the spot price has been capped through the application of clause 3.14.2(e)(2) become eligible to claim compensation at the beginning of the first trading interval in which the application of clause 3.14.2(e)(2) actively capped the spot price in a dispatch interval.
- 3. In paragraph 1 and 2 above, eligibility for scheduled and non-scheduled market generators to claim continues until the end of that trading day, concluding at the end of the final dispatch interval of the final trading interval of the trading day. This period is defined as the eligibility period for market generators.
- 4. In paragraph 1 and 2 above, scheduled and non-scheduled market generators are eligible to claim compensation only where their total costs incurred during their respective eligibility period exceed the total revenue they received from the spot market during the eligibility period. These costs are limited to direct and opportunity costs, as defined in the AEMC's compensation guidelines.

Scheduled load

- 5. Scheduled loads located in a region where the administered floor price has actively limited the spot price become eligible to claim compensation from the beginning of the first trading interval during which the administered floor price actively limited the spot price in a dispatch interval.
- 6. Scheduled loads located in regions where the spot price has been actively limited through the application of rule clause 3.14.2(e)(4) become eligible to claim compensation at the beginning of the first trading interval during which the application of the clause 3.14.2(e)(4) provisions actively limited the spot price in a dispatch interval.
- 7. In paragraphs 5 and 6 above, eligibility for scheduled loads to claim continues until the end of that trading day, concluding at the end of the final dispatch interval of the final trading interval of the trading day. This period is defined as the eligibility period for scheduled load.
- 8. In paragraphs 5 and 6 above, scheduled loads are eligible to claim compensation only where their total costs incurred during the eligibility period exceed the total revenue they received from the spot market during the eligibility period. These costs are limited to direct and opportunity costs, as defined in the AEMC's compensation guidelines.

Scheduled network service providers:

- 9. Scheduled network service providers become eligible to claim compensation from the beginning of the first trading interval during which the APC actively capped the spot price in a region into which the scheduled network service provider is importing power.
- 10. Eligibility for scheduled network service providers to claim continues until the end of that trading day, concluding at the end of the final dispatch interval of the final trading interval of the trading day. This period is defined as the eligibility period for scheduled network service providers.
- 11. Scheduled network service providers are eligible to claim compensation only where their total costs incurred during the eligibility period exceed the total revenue they received from the spot market during the eligibility period.
- 12. Scheduled network service providers are only eligible to claim for direct and opportunity costs incurred due to transporting power towards the APC capped region. Any costs incurred or revenues earned due to transporting power away from the APC capped region are not to be considered in determining the total compensable amount for a scheduled network service provider.

Ancillary service providers:

13. It is proposed that existing rules clause 3.14.6(a3), which allows ancillary service providers to claim compensation, be removed.

Market suspension:

14. It is proposed that all references to market suspension be removed from the compensation eligibility criteria.

AEMC's processes for assessing compensation claims

Rules clauses 3.14.6(d) to (p) currently describe the processes and timing to be followed by the AEMC when assessing compensation claims.

It is proposed that the following changes be made to the AEMC's assessment process.

- 15. Upon receipt of a compensation claim, the AEMC must publish a notice on its website advising of receipt of the claim and providing relevant information as to the nature of the claim.
- 16. When the AEMC is satisfied that it has received adequate information to commence formal assessment of the compensation claim, it must publish a second notice on its website advising of the formal commencement of assessment of the compensation claim.
- 17. In assessing a compensation claim, the AEMC will have discretion to appoint a varying sized expert panel, depending upon the complexity of the claim.
- 18. During the assessment of a compensation claim, the AEMC will have discretion to extend the timeframe for assessment, under certain defined conditions.
- 19. For compensation claims which include only direct costs, the AEMC will not engage in a public consultation process but will proceed directly to publication of the expert panel's report and the AEMC's report.
- 20. For compensation claims which include opportunity costs, the AEMC will publish a copy of the claimant's proposed methodology for assessing opportunity costs, its own proposed methodology, a draft report from the expert panel and its own draft report. Stakeholders will be invited to provide comment. The AEMC will publish a final report and a final report from the expert panel.
- 21. The exact timing of the claim assessment process for direct cost claims and opportunity cost claims will be defined in the rules. A proposed timeframe for completion of direct cost and opportunity cost claims is included below.

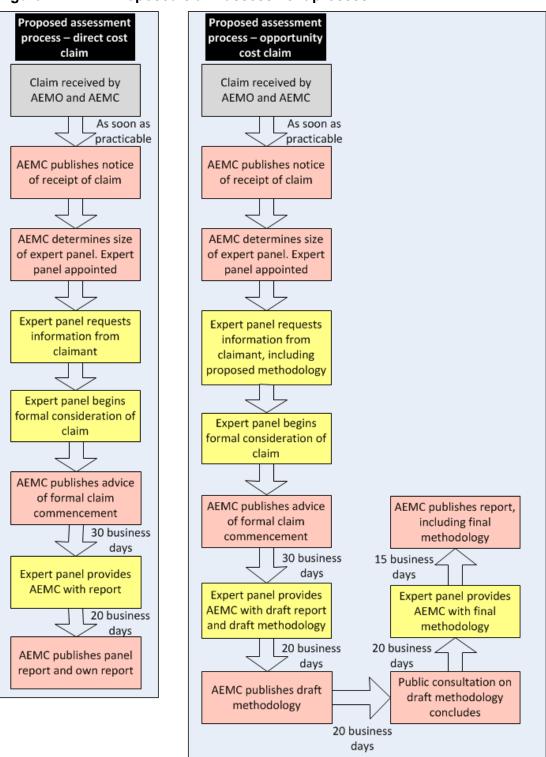


Figure A.1 Proposed claim assessment process

Recovery of compensation costs

Rules clause 3.15.10 currently sets out the processes for the recovery of the cost of compensation from market customers.

It is proposed that the following amendments are made to this process:

22. When assessing the amount of compensation to be awarded to a compensation claimant, the AEMC will determine a total compensable amount for each claimant, for each eligibility period. This amount will reflect the difference

between the costs incurred and revenues earned by the claimant during the eligibility period. Costs or revenues incurred outside of the eligibility period cannot be included in the total compensable amount.

- 23. For market generators and scheduled loads, AEMO will recover the total compensable amount for each eligibility period from market customers located in the region in which the APC actively capped the spot market price.
- 24. For scheduled network service providers, AEMO will recover the total compensable amount for each eligibility period from market customers located in the region into which the which the scheduled network service provider was importing power and where the APC actively capped the spot market price.
- 25. The total compensable amount will be recovered from market customers by reference to their total energy consumption during the eligibility period.