Loy Yang Marketing Management Company Pty. Ltd.

AGL Hydro Pty. Ltd.

International Power (Hazelwood, Synergen, Pelican Point and Loy Yang B)

TRUenergy Pty. Ltd.

Flinders Power

Hydro Tasmania

13 April 2007

Dr John Tamblyn
Chairman
AEMC
Level 16, 1 Margaret St,
SYDNEY NSW 2000

By email: submissions@aemc.gov.au

Dear Dr Tamblyn

Draft Rule Determination – Abolition of the Snowy Region

Please find attached a submission from the above listed group of NEM generators, known as the "Southern Generators".

This draft decision, if implemented, will have significant short and long term market impacts. The Southern Generators welcome the opportunity to respond and have done so in a manner consistent with the importance of the issues under consideration.

Despite the fact that the Southern generators could be characterised as a special interest group and it would therefore be in our collective interest in responding to this draft decision to pursue a particular outcome we believe we have taken a balanced and constructive approach in order to assist the Commission in delivering an outcome

consistent with the economic efficiency objective in the long term. We are firmly of the view it is not in our long term interests or those of the market to do otherwise.

Collectively as a group of participants we have a wide range of experience in both operating in the NEM, from its inception and being involved in all the changes to the NEM through the regulatory processes. In addition to bringing this experience to bear in a synergistic manner and to assist in delivering a balanced submission we have sought economic modelling advice from ROAM Consulting to support our submission.

We make this submission in the hope that it will be constructive in informing and assisting the Commissions decision making process.

The Commission is recommending a regional boundary change in the NEM which on the Commissions view is consistent with the NEM long term objective. We do not agree with the draft determination.

In our view there can not be any certainty that any decision made now will be consistent with the NEM objective as the process appears to limit the alternatives that can be considered and excludes or pre-empts any consideration of alternative mechanisms for managing congestion. Nevertheless, within the constraints of the current process, we do not believe that all relevant considerations have been taken into account in order to fairly and thoroughly assess the merits of the proposal, including the operation of current arrangements.

Our submission demonstrates that it is not necessary to make a decision on a change to the Snowy regional boundary now as the inefficiencies that initially raised participants' concerns have now been largely addressed by some simple changes to the settlement systems via the Southern Generators' Rule change. The practicality of a region boundary change in the timeframe proposed must also be seriously questioned given the market trading impacts, and implementation issues raised in NEMMCO's latest advice.

We also demonstrate that the abolition of the Snowy region is not the best regional change alternative of those currently under consideration.

We believe that it is important to the future of the NEM that any regional boundary decision is taken after consideration of all the relevant facts and in accordance with the appropriate regional boundary change processes. This will provide the greatest certainty that the market objective will be met.

If you have any questions regarding this submission please contact Roger Oakley on (03) 96122211.

Yours faithfully,

Roger Oakley
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(on behalf of the participants listed)

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Draft Rule Determination
Abolition of Snowy Region

Submission from the
Southern Generators Group

Loy Yang Marketing Management Co
AGL
TRUenergy
International Power
Flinders Power
Hydro Tasmania

April 13 2007

1. Introduction

1.1. Background

The group of generators listed on the title page of this submission (the "Southern Generators") who represent the bulk of generation capacity south of the Snowy Regions are pleased to comment on the AEMC's draft rule determination on the Draft National Electricity Amendment (Abolition of Snowy Region) 2007.

The Southern Generators have already played a significant role in developing mechanisms to manage the impact of Snowy congestion on the NEM, through the development and proposition of the "Southern Generators Rule" for managing negative residues on the Snowy-Victoria interconnectors. We are concerned to ensure that the benefits enjoyed by market participants under these existing mechanisms are not lost as a result of prematurely seeking a "long-term" replacement for these "interim" (but nevertheless effective) arrangements.

1.2. Snowy Hydro Proposal is not about the Long term

The AEMC, in the draft determination (DD), characterises its review of the Snowy Hydro Proposal as a search for an optimal *long-term* solution to the problems associated with congestion in the Snowy region. Thus:

> "While the Commission found the interim arrangements in the Snowy region to be effective, it considered that adopting them as a longer term solution would be suboptimal."
>
> "The region boundary Rule change proposals submitted by Snowy Hydro and Macquarie Generation…represent potentially feasible long-term solutions…" (Page vi)

In framing the review in these terms to the AEMC has excluded viable alternative solutions simply because they not are considered by the AEMC to have satisfactory "long-term" credentials. This approach is unlikely to achieve an optimal outcome. This position is explained in section 2.

1.3. Consideration of the Current Arrangements

In particular, we believe that the AEMC is obliged to explicitly consider the Current Arrangements as an alternative to region change for the medium-term (which does not mean excluding region change for the long-term) and, specifically, as the most likely "counterfactual" scenario should the Snowy Hydro Proposal – or other region change proposal – not be implemented. This is discussed further in section 3, below.

At the AEMC Forum[1], the AEMC indicated that it felt that it was legally prevented from considering the Current Arrangements as an alternative to region change, since the Current Arrangements are implemented through a derogation, whereas region change would be implemented through changes to Chapter 3 of the Rules. We do not understand the basis for this legal position. Nevertheless, to address this putative legal constraint, the Southern Generators have submitted a rule change proposal to move the derogated arrangements into Chapter 3.

[1] Consultation Forum 22nd February, Rule Change – Abolition of Snowy region, Transcript of Proceedings P9

We are convinced that, if the AEMC had compared, on their merits, the alternatives of the Snowy Region Abolition and the Current Arrangements, using the eight "decision criteria" listed in the DD, it would have found that the Current Arrangements better promoted the NEM Objective and would therefore have rejected the Snowy Hydro Proposal. This is explained in section 4.

1.4. Regulatory Good Practice

In the DD, the AEMC also makes various arguments that – irrespective of its economic merits – implementation of region change *now* is consistent with good regulatory practice in that it is consistent with the long-term development of the NEM and with MCE policy. We disagree and, on the contrary, consider that it is *bad* regulatory practice to change regions using the normal NEL rule change process and that it is also *inconsistent* with MCE policy. This is discussed further in section 5.

1.5. The Snowy Region Abolition is not the best Region Change Option

Notwithstanding our view that region change is unnecessary and inappropriate at this time, we think that on the evidence presented in the DD – supplemented by our own analysis – the best region change option[2] is not the Snowy Region Abolition but the Split Region[3] option as proposed by Macquarie generation but modified as proposed by Hydro Tasmania with the node in the southern region at Murray not Dederang for the reasons outlined by Hydro Tasmania in their submission. This is explained in section 6, below.

Thus, should - despite our best arguments - the AEMC position remain that region change is required urgently to address Snowy congestion, the Snowy Hydro Proposal can *still* not be supported as it would prevent an alternative, superior rule change proposal being adopted: ie the t the Split Region option with the node in the southern region at Murray.

To be clear, the Southern Generators do not support the Split Region, since we feel that *any* region change is unnecessary and inappropriate at this stage. Nevertheless, if the AEMC determines that region change is necessary, it is obliged to support the region change which best achieves the NEM Objective. This is not the Snowy Region Abolition.

[2] of those considered. There may be other ones not considered

[3] see the Terminology section, below, for the meaning we attribute to these and other capitalised terms in this submission

1.6. Terminology

In this submission, we use various terms, which have the meaning given below.

Current Arrangements	the arrangements currently in place for managing congestion in the Snowy region, including the existing regional configuration, the Snowy Trial arrangements and the SGR arrangements.
Settlement Residue Auction Instrument (SRA)	the non-firm inter-regional hedges purchased through the settlement residue auction.
NEM Objective	the national electricity market objective set out in section 7 of the NEL.
Snowy Region Abolition	the region configuration that would be implemented by the Snowy Hydro Proposal in which the current Snowy region is abolished and a new regional boundary between Victoria and NSW is placed at the Murray-Tumut constraint boundary.
Snowy Hydro Proposal	the Rule change proposal submitted by Snowy Hydro which involves the abolition of the Snowy region and the ending of the Snowy Trial and Southern Generators' Rule (SGR) arrangements.
Snowy Trial	the arrangements specified in clauses (f) to (p) of Part 8 (Network Constraint Formulation) of Chapter 8A of the originally certified NEM Rules, in which a CSP/CSC arrangement is applied to Tumut nodes in relation to constraints between Murray and Tumut.
Southern Generators' Rule (SGR)	the arrangements introduced under the rule change: *National Electricity Amendment (Management of negative settlement residues in the Snowy Region) Rule 2006,* under which negative residues occurring on Snowy-Victoria interconnectors as a result of the network configuration (ie a loop) are cross-funded by residues on the Snowy-NSW interconnectors.
Split Region	the region configuration considered in the DD and proposed as a rule change by Macquarie Generation on 21st February 2007. It would implement a new region boundary at the Murray-Tumut constraint boundary and would have the Regional Reference Node (RRN) for the new region around Murray located at Dederang.

2. Congestion Management in the Medium and Long Term

2.1. Overview

We agree with the AEMC that there are problems associated with Snowy congestion, and that, while the interim arrangements are effective, a longer term solution is required. However, we part company with the AEMC on its position that this longer term solution needs to be identified *now* and implemented *urgently*. On the contrary, we believe that:

- the longer term solution to Snowy congestion will be identified as part of, or pursuant to, the development of a new congestion management regime applying across the NEM as a whole;
- that this new regime will be developed through the Congestion Management Review and the consideration of the MCE's rule change proposal on Reform of Regions[4];
- that depending upon the timescales of these reviews – and on the notice period required for region change established by them – this longer-term solution should be implemented within the next two to three years; and
- that the decision that must be made *now* is whether to implement Snowy region change in advance of this longer term solution or to continue – and extend – the current, interim arrangements

In short, the review of the Snowy Hydro Proposal should be about the optimal *interim* arrangements for managing Snowy congestion, prior to the implementation of a new NEM congestion management regime.

2.2. The AEMC's explanation

We do not think that the AEMC has satisfactorily explained its decision to frame this review in terms of long-term solutions to Snowy congestion. As far as we can see, the AEMC's argument is:

- Snowy Hydro has put forward a rule change proposal for region change;
- region change is only suitable as a long-term solution to congestion;
- therefore, this review is about long-term solutions to congestion;
- therefore, solutions which do not have satisfactory "long-term" credentials (such as the Current Arrangements) should not be considered as potential alternatives

[4] In its June 2006 Statement of Approach to the Congestion Management Program, the AEMC noted: "The Commission considers that the integrated "Congestion Management Regime" includes all the elements currently under consideration, such as identifying congestion, managing congestion and setting out appropriate processes for assessing and determining a region boundary change. The "Congestion Management Regime" should be in place for the longer-term, incorporating mechanisms necessary to address network congestion in the short-to-medium term." (P1 of the Statement)

This argument is not the one used by Snowy Hydro in its rule change proposal[5], which noted:

> Snowy Hydro notes the recent rule change request from the MCE published on AEMC's website (Reform of Regional Boundaries). The time frame for addressing regional boundary changes under the MCE requested rule change proposal is such that meaningful region boundary reform cannot occur before 2010…Without the implementation of the Snowy Hydro Proposal, the MCE request will enshrine very serious and disruptive continuing market inefficiencies that will seriously disadvantage market customers until at least 2010. (Page 1 of the letter)

To summarise our understanding of this argument;

- Snowy Hydro recognises and accepts that the MCE has articulated a framework for developing long-term solutions to congestion;
- these are likely to take several years to develop and implement;
- the Current Arrangements for managing Snowy congestion are unsatisfactory and create material inefficiencies;
- this means that new arrangements (ie the Snowy Region Abolition) for managing Snowy congestion must be put in place as soon as possible; and
- the Snowy Region Abolition is not inconsistent with the MCE's approach to developing long-term solutions to congestion

Thus, as Snowy Hydro has framed the proposal, it stands or falls on the comparison of the Snowy Region Abolition and the Current Arrangements. If the Snowy Region Abolition does *not* improve upon the Current Arrangements, there is no rationale or justification for the rule change proposal.

Of course, Snowy Hydro now supports the AEMC's revised framing of this review: we would expect it to make whatever tactical adjustments are necessary to its public position to maximise the likelihood of its proposal being implemented.

Nevertheless, the fact remains that the AEMC has not examined the main argument made by the proponent for its rule change, but instead created and then examined alternative arguments. We think that this is poor regulatory practice.

[5] Letter from Snowy Hydro to John Tamblyn, 11th November 2005

2.3. The AEMC's Approach

The approach taken by the AEMC to assessing the proposal belies its statements that this is all about long-term solutions, because the approach appears tailored to examine the medium-term benefit of the Snowy Region Abolition. In particular:

- the decision criteria used by the AEMC in the DD are essentially the same as those used to consider interim solutions, such as the SGR and the Murray re-orientation proposal;
- in particular, there is an emphasis on short-term static efficiency changes (dispatch efficiency and allocative efficiency) and little consideration of longer-term dynamic efficiency changes (in particular, impacts on generation and transmission investment);
- the modelling that has been undertaken only considers the interim period (2008 to 2010) and also has a focus on static efficiency changes.

Thus, the quantitative and conceptual analysis presented in the DD has focused on short-term benefits, potentially at the expense of the long-term robustness of NEM design. For example, the AEMC argues that *intentional* mis-pricing of Murray generation may be appropriate as this has the effect of countervailing the local market power of Murray.[6] This surely represents a short-term fix to mitigate transient market power, not a considered view of longer-term efficiency.

Another aspect of this is that the AEMC has virtually ignored consideration of transmission loss factors. Inaccurate loss factors resulting from the chosen regional configuration[7]are likely to lead to market inefficiencies over the longer term, even if these efficiencies may be masked by larger swings in static efficiencies over the short term.

Indeed, the modelling approach is pre-occupied with short-term considerations of strategic bidding and its impact on dispatch efficiency. At the AEMC forum, Frontier Economics noted that a large part of the efficiency improvements seen under the Snowy Region Abolition, compared to BAU, related to a handful of bidding "equilibria" for a single demand point[8]. Such equilibria are highly dependent on conditions such as demand, generation availability, transmission constraints, generation contracting levels and even generation ownership structure. So while we accept that these may well occur in the short-term, it is very hard to predict the extent to which they will recur in the longer-term[9]. This may be why the original NEM designers developed criteria which may have longer term relevance.

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[6] Draft determination, pages 33-34

[7] In the NEM design, inter-regional losses are modelled dynamically, whereas intra-regional losses are modelled as static approximations based on the expected average of the dynamic loss factor. For a tidal network such as around Snowy, under Snowy abolition the static loss factors will be poor approximations to the dynamic losses. This issue was an important factor in creating a Snowy region at NEM commencement

[8]Page 18 of the Transcript of Proceedings

[9] We are not criticising the Frontier modelling here. Indeed, we think it represents an excellent attempt at estimating the short-term impacts of region change.

2.4. Timing of this Review

We would not want our position, described above, to be misunderstood or misconstrued as arguing that it is *inappropriate*, in the light of the longer-term congestion management initiatives, for the AEMC to be reviewing the Snowy Hydro Proposal for more immediate solutions to Snowy congestion. Indeed, we recognise both that AEMC is legally obliged to review the proposal and that some participants do indeed believe that this matter needs to be addressed with some urgency.[10]

For this reason, we wholeheartedly support an examination of the perceived deficiencies of the Current Arrangements and the possible merits of alternative solutions. But we reiterate, the AEMC has not undertaken – and has not attempted to undertake – such an examination. In this respect, the AEMC has failed to respond to the legitimate (if, in our view, misconceived or superseded) concerns of these stakeholders.

2.5. Summary

In summary, the Snowy Hydro Proposal is not about long-term solutions and, even if it were, the approach adopted by the AEMC would be inappropriate. By framing it this way, the AEMC has unnecessarily excluded consideration of the Current Arrangements. By contrast, the Snowy Hydro Proposal was *predicated* on the perceived inefficiency of the Current Arrangements. For these reasons, we think that it is essential that these arrangements are examined.

[10] although we note that submissions date from a time, before the SGR implementation, when part of this urgency related to the problems of negative residues on the Snowy-Victoria interconnector which have since been fixed

3. The Counterfactual

3.1. Overview

In order to make a determination on a rule change proposal, we believe that it is necessary for the AEMC to define a "counterfactual scenario" and compare this scenario to the "factual" implications of the rule change. The counterfactual scenario should represent the most likely path of market development in the event that the rule change proposal is rejected.

The DD does not define or examine such a scenario. We therefore do not believe that the AEMC can be satisfied that the Snowy Hydro Proposal contributes to the achievement of the market objective.

3.2. Obligation to Consider the Counterfactual Scenario

Clause 88(1) of the NEL states that:

> "The AEMC may only make a Rule if it is satisfied that the Rule will or is likely to contribute to the achievement of the national electricity market objective."

The essential word here is "contribute". In deciding whether to support a rule change proposal, the *contribution* that the rule makes to the achievement of the NEM objective must be considered – in the broadest sense – and a determination made as to whether this contribution is likely to be "positive".

The only way to estimate and analyse the contribution that a rule makes is to envisage how the NEM is likely to operate with, and then without, the proposed rule. The "without" scenario is commonly referred to as the "counterfactual" and, for consistency, we will refer to the "with" scenario as the "factual".

The AEMC may also consider the contribution of alternative rule changes. Since the NEL is not specific in this respect, this is a matter where the AEMC may exercise discretion. However, the AEMC does *not* have discretion[11] about considering the counterfactual, since without a counterfactual it is not possible to assess the contribution of the rule change.

Furthermore the AEMC, although using its expertise and judgement in developing the counterfactual scenario, does not have discretion in the choice of what that counterfactual represents: ie the future operation and development of the market if the rule change proposal is rejected.

[11] This is an economic view, not a legal opinion. Indeed, we understand that there is case law which suggests that a regulator may not be *legally* obliged to consider the counterfactual. However, since the NEM Objective is expressed in economic terms we think it is reasonable to interpret this clause of the NEL using an economic perspective. If the AEMC intends to depart from this economically-accepted approach, we think that it needs to explain and justify its reasons for doing so.

In the face of uncertainty, it is necessary to develop what is considered to be the most likely counterfactual scenario or, potentially, develop a number of alternative counterfactual scenarios and assign likelihood weightings to these.

3.3. Developing a Realistic Counterfactual

In the DD, the AEMC compares the factual scenario of the Snowy Region Abolition with an alternative "base case" scenario which it refers to as Business as Usual (BAU). We are not clear whether the AEMC intended that BAU is a likely counterfactual scenario (as we have defined this term above) or whether it is just an alternative scenario like, for example, the Split Region[12].

Irrespective of the AEMC's intentions, we believe that BAU is not a likely counterfactual; indeed, it is extremely *unlikely*. The most likely counterfactual is the continuation of the Current Arrangements, through extension of the relevant derogations, until the longer-term congestion management regime is put in place.

We base this view on three facts:

- firstly, the AEMC (or ACCC) has previously determined – in supporting the relevant derogations – that the Snowy Trial and SGR arrangements help to achieve the NEM Objective (or to provide net public benefit);
- secondly, the AEMC has already made a draft determination to extend these derogations to 2008;
- thirdly, the MCE expressly envisaged that the Snowy Trial arrangements would continue until the longer-term congestion management arrangements were implemented

The historical support for the Snowy Trial and SGR arrangements suggests that, given the choice of extending them or letting them lapse, it is likely that the AEMC would choose extension. Furthermore, we have undertaken modelling – discussed further in section 4 – which confirms that these arrangements continue to contribute to achieving the NEM Objective.

[12] as it was at the time of the DD. Now, of course, it is a rule change proposal.

In its draft determination on the Snowy Trial extension[13] the AEMC stated:

> "The Commission notes that the Part 8 derogation was originally intended to be an interim measure to manage the issues in the Snowy region. However, the Commission believes that there [are] benefits to further extending the Part 8 derogation to enable sufficient time to consider, consult on, and publish decisions in relation to a number of related matters. These matters include the proposals to amend the Snowy region boundary, the Review to implement a new boundary change process and assessment criteria, and the Congestion Management Review.
>
> Extension of the Part 8 derogation will enable market participants time to consider any identified longer-term options and their implications in a more certain regulatory environment than one in which the Part 8 derogation expires." (Page 1)

We infer from this that the AEMC envisaged that, in the situation where Snowy region change proposals were not supported, the derogation would need to remain in place until the other congestion management initiatives noted were complete.

Might the AEMC change its view on derogation extension if and when the Snowy region changes proposals are rejected? It is hard to see why it would. It has already proposed a date of July 2008 as a contingency against such an event. Furthermore, the draft determination (on the Snowy Trial/SGR extension) provides a rationale and justification for further extending the derogations beyond 2008, up and until the point where the longer-term congestion management regime is implemented.

In the terms of reference to the Congestion Management Review[14], the MCE noted:

> "the Snowy Trial is due to conclude in June 2007, and subject to the development of replacement arrangements that are found to benefit the market, there is an expectation that the new arrangements will be implemented by this date" (Page 5)

Obviously, the MCE underestimated the time needed by the AEMC to undertake the review. Nevertheless, there is a strong implication that the Snowy Trial plays a role in giving the AEMC a window of opportunity to develop and implement a longer-term congestion management regime. Extension of the Snowy Trial to cover delays to this review would be consistent with this position and would most likely be supported by the MCE, as well as most market participants[15].

Beyond the interim period (ie once a long-term congestion management regime was in place), arrangements in the factual and counterfactual scenarios would most likely be quite similar, since both would adopt the same or similar long-term solutions to congestion management.

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[13] Draft determination by the AEMC on the date of expiry of the Part 8 of Chapter 8A of the National Electricity Rules – Network Constraint Formulation: 14 December 2006

[14] Terms of Reference for Australian Energy Market Commission – Congestion Management Review

[15] Remembering that we are in the hypothetical counterfactual situation where early region change has been rejected. In this situation, even those participants who are currently supporting early region change are likely to support the derogation extension as a (to them) second-best alternative.

Conversely, for *BAU* to eventuate, the Snowy Trial and SGR derogations would need to expire at the end of 2007[16]. If there was a risk of these derogations expiring, the Southern Generators would propose an extension, since we know from past experience the problems that arise in BAU-type arrangements. Thus, for BAU to occur, AEMC would have to reject a proposed extension. Since we are confident that these derogations contribute to achieving the NEM Objective, and would generally be supported by market participants in this context, we do not see how such rejection could possibly occur. At best, it is a highly unlikely scenario.

Thus, on any reasonable view, BAU is not the most *likely* counterfactual scenario. Indeed, in it is highly *unlikely* to eventuate. On the other hand, continuation of the Current Arrangements is the most likely counterfactual scenario and should therefore have been considered by the AEMC in its review of the Snowy Hydro Proposal.

3.4. Permanency

In the DD, the AEMC has not explained its choice of counterfactual in relation to what is likely to happen in the counterfactual scenario, but rather in terms of a spurious concept of "permanency".

> "The Commission considered [the BAU] scenario to be the most relevant "counterfactual" to the Snowy Hydro Proposal because:
>
> - the Snowy Hydro Proposal is for a permanent change in the location of regional boundaries in the Snowy region; and
> - the modified Tumut CSP/CSC Trial (including the Southern Generators' amendment) is a trial and was not intended to be a permanent solution to congestion management in the Snowy region"

This concept of "permanency" appears – as far as we can see - to be a creation of the AEMC rather than a requirement or consequence of the NEL rule change process. The AEMC has not explained the legal or economic relevance of the concept to the achievement of the NEM Objective or, more generally, to the AEMC's obligations under the NEL. In particular, we do not understand why the "permanency" attributed to the rule change means that the counterfactual must also be of a "permanent" nature.

In any case, the attribute of "permanence" in relation to rules is not clear cut. A derogation may appear to have a definite end-date, but this end-date can be extended indefinitely. Conversely, a rule change may appear permanent, but it can in fact be changed, removed or superseded by future rule changes at any time. This is particularly the case in relation to rules specifying regions, since it is a fundamental feature of both the original NEM design and the future design envisaged by the MCE that regions will change from time to time.

Thus, "permanency" is an irrelevancy; its role in the DD appears simply to arbitrarily exclude an option (the Current Arrangements) which has, at least to date, proved effective at managing Snowy congestion. In any case, "permanency" does not absolve the AEMC of the obligation to develop and evaluate a realistic counterfactual scenario.

[16] The modeling of the various scenarios runs from 2008 to 2010, so we infer that the scenarios, including BAU, are considered to commence at the start of 2008.

3.5. Summary

If the AEMC were to reject the Snowy Hydro Proposal, it is likely that the Current Arrangements would continue over the medium-term (ie until the longer-term congestion management regime was implemented) through extension of the relevant existing derogations. The Current Arrangements are therefore a realistic and likely counterfactual scenario against which an assessment can be made of the real contribution of the Snowy Hydro Proposal to the NEM Objective.

On the other hand, the prospect that – if the Snowy Hydro Proposal were rejected – the Snowy Trial and SGR arrangements would be allowed to lapse with nothing to replace them must be considered highly unlikely. In this respect, the BAU is not a realistic counterfactual scenario and, as such, its only role is as a "straw man" which makes the Snowy Region Abolition look good by comparison.

4. Snowy Region Abolition versus Counterfactual

4.1. Overview

In the previous section, we argued that, in evaluating the contribution of the Snowy Hydro Proposal to the NEM Objective, a counterfactual that represents the future operation and development of the market if the rule change proposal is rejected should been considered and that the appropriate counterfactual is the Current Arrangements, not the "BAU" scenario used in the DD. In this section, we will show that, had the AEMC done this, it would have found that the contribution is "negative": ie that the counterfactual better achieves the NEM Objective than the "factual" of the Snowy Hydro Proposal.

Of course, we do not expect the AEMC to rely on our analysis in making a determination. The point of this section is simply to demonstrate that, if the AEMC ignores the counterfactual in its final determination, it will not just be following a poor process, it is also likely to come to a wrong determination.

We have structured our analysis around the eight "decision criteria" used by the AEMC in its DD[17], which we would agree are sensible. These criteria are:

- the likely effect of the proposal on the economic efficiency of dispatch, indicating likely impacts of the Draft Rule on productive or technical efficiency;
- the likely pricing outcomes (and participant responses), indicating potential future impacts of the Draft Rule on allocative efficiency;
- the likely effect of the Draft Rule on inter-regional trading and risk management, indicating potential impacts on the competitiveness of the market and so on future allocative and dynamic efficiency;
- the likely effect of the Draft Rule on power system security, supply reliability, and technical factors;
- the consistency of the Draft Rule with principles of good regulatory practice;
- the likely long-term implications of the Draft Rule including the promotion of efficient investment and dynamic efficiency and its consistency with public policy; and
- the likely timing of the Draft Rule and any issues associated with implementation of the proposal.

These are discussed individually below.

4.2. Dispatch efficiency

Because the AEMC's modelling in the DD has not considered the Current Arrangements, the Southern Generators Group has commissioned its own modelling analysis, from Roam consulting. Details of this modelling are provided as an appendix

[17] Page 8 of the Draft Determination

to this submission - “Analysis of the AEMC Draft Rule Determination to Abolish Snowy Region – Appendix A Modelling”. It is suffice to say here that Roam’s objective was to follow as closely as practicable Frontier’s modelling methodology. In short, we were seeking to *complete*, not *correct*, the modelling analysis.

The modelling results are summarised in the tables below

Scenario	Roam Ref	Dispatch Costs ($m/year)	
		Total	Compared to Current Arrangements
Business as Usual (Clamping)	BAU	2098.8	+2.1
Snowy Abolition	SHP	2096.7	0
Current Arrangements	BAU -CSP	2096.7	0
Snowy Region Abolition with Clamping	SHP-CLAMP	2096.5	-0.2
Split Region	SRD	2096.5	-0.2

Table 1A: Summary of Results from Roam Modelling before Strategic Optimisation

The above table shows the ranking of the alternatives in decreasing annual dispatch costs for non strategic Snowy Hydro bidding, ie the 82nd Roam case study. For this case it would be expected that dispatch costs would decrease as the scenarios more accurately price the constraints, ie represent locational prices in the region , ie the dispatch costs for the Split Region < Current Arrangements < Snowy Abolition < Business as Usual with clamping. The modelling results are generally in this order however because the local marginal prices are established by the constraint equations, the relative accuracy of the formulation of these constraint equations is likely to introduce errors which distort this ranking.

In the following table it can be seen that the ranking of the scenarios changes due to the different impact of strategic bidding by Snowy Hydro.

Scenario	Roam Ref	Dispatch Costs ($m/year)	
		Total	Compared to Current Arrangements
Split Region	SRD	2095.8	+2.1
Snowy Region Abolition with Clamping	SHP-CLAMP	2094.8	+1.1
Snowy Abolition	SHP	2094.7	+1.0
Business as Usual (Clamping)	BAU	2094.0	+0.3
Current Arrangements	BAU -CSP	2093.7	0

Table 1B: Summary of Results from Roam Modelling after Strategic Optimisation

The significance of the results for this section of our submission is that the Current Arrangements in both tables above lead to annual dispatch costs lower than the BAU scenario: ie around $2.1m without strategic bidding and $0.3m with strategic bidding. This represents the beneficial effect of the Snowy Trial and SGR arrangements. So based on a proper counterfactual, rather than a fictitious one, we have found that the Snowy Region Abolition would worsen dispatch efficiency rather than slightly improve it.

The difference in annual dispatch costs between BAU and the Snowy Region Abolition is estimated by Roam to be $0.8m which is lower than the results obtained by Frontier. The reasons for this are discussed in the Roam report on page 22 and are considered to be due to Roam's modelling of dynamic constraints and the alternate constraint equations in the cases resulting in differences in the VIC – SA inter-regional transfer limits on a half hourly basis.

On the other hand, Roam has estimated that for the strategic optimisation case dispatch costs in the Split Region are slightly higher than the Snowy Region Abolition, whereas Frontier estimated that they would be slightly lower.

Another reason why the Roam modelling did not replicate the Frontier results is because Roam did not replicate the lower production costs related to point 29. This point created most of the benefits for the Snowy Region Abolition and the Split Region option in winter in the Frontier modelling. The lowest NEM production costs in the Roam modelling occurred with the Current Arrangements generally in the summer periods at times of high demand. The Current Arrangements minimise the most significant cause for inefficiency in the Snowy Region Abolition scenarios which occurred in the Roam modelling with high summer demand. The roam report concluded;

"*ROAM's conclusion therefore is that demand point 29 is not a significant period of interest, as suggested by Frontier, and that the strategic activity during summer is of greater interest. It is during these periods when higher NEM-wide loads persist and greater opportunities exist for Snowy Hydro to exert market power to cause binding constraints on the inter- and intra-regional connectors."*

It would appear that the difference between the Frontier and Roam results is primarily due to the different approach to simulating the 81 alternative strategic bidding scenarios.

The Roam modelling shows that strategic bidding by Snowy Hydro can significantly impact the relativities of the various scenarios compared to the pre optimisation results. In all cases strategic bidding increases NEM efficiency, this is because of the additional 300 GWh (approx) of output from Snowy Hydro priced at $1/MWH.

In addition it should be noted that in the modelling approach used by both Frontier and Roam the increase in dispatch efficiency associated with the use of dynamic inter-regional loss factors compared with the use of static loss factors is unlikely to be observable in the modelling results[18]. This means the efficiency gains of the Split Region option are likely to be understated. The efficiency gains in establishing dynamic

[18] Roam report page 24

regional loss factor equations[19] for the constraints defining the Snowy region was one of the reasons for the establishment of the Snowy region.

In summary, the Current Arrangements lead to lower dispatch costs than the Business as Usual case and the Snowy Region Abolition is likely to lead to slightly higher dispatch costs and the risk of clamping over the interim period, at least until a longer term congestion management regime is implemented.

At the AEMC forum, Roger Whitby of Snowy Hydro made some rather alarmist (in our view) remarks about the impact of the current arrangements on dispatch, pricing and negative residues, based on events that took place in the NEM on 12th January 2007.[20] These events were also described in a submission from Snowy Hydro on the AEMC's draft determination on the Snowy Trial extension. It was argued that these unusual outcomes would not have occurred under the Snowy Region Abolition and that this demonstrated the urgency of implementing their rule change, in order to prevent similar events being repeated next summer.

We have responded in detail to Snowy Hydro's arguments in a separate letter to the AEMC. However, it suffices to say here that the outcomes were a result of a constraint at South Morang substation, which is near Melbourne and a long way from the Snowy region. Although the period of this constraint coincided with constraints on Murray-Tumut, outcomes of the type described by Snowy Hydro would have occurred even if Murray-Tumut and other constraints in the Snowy Region were not binding. For this reason, we believe that these outcomes have no bearing on the review of Snowy region boundaries or *vice versa*.

Furthermore we understand that two new transformers to be installed by SPAusnet to meet forecast supply reliability standards for Victorian consumers will relieve this constraint. The first transformer (1000MVA 500/220 KV) is being installed in the Rowville terminal station later this year and the second at Moorabool terminal station in late 2008.

Nevertheless, we think it would be helpful for NEMMCO to review and report on the events of 12th January, both to confirm that it does not have relevance to the Snowy region congestion management.

[19] The scope for Integrating the Energy Market and Network services Volume II analysis October 2000

[20] Pages 26-28 of the transcript

4.3. Pricing Outcomes

Roam modelling calculated the average price outcomes for the NSW and Victorian regions shown in table 2, below.

Scenario	Average Price ($/MWh)	
	NSW	Victoria
Business as Usual	29.13	28.18
Split Region	20.32	29.61
Snowy Region Abolition	21.54	30.80
Current Arrangements	20.37	28.55

Table 2: Summary of Results from Roam Modelling

The results show prices to be fairly similar in Victoria in all the scenarios – with region change scenarios showing slightly higher prices than those with the current regions. In NSW, prices are estimated to be much higher in the BAU scenario, with prices similar in the other three, although slightly higher in the Snowy Region Abolition.

These results seem to imply that – leaving aside the fictitious BAU scenario – the changes proposed do not have significant implications for allocative efficiency. More modelling would be required to estimate the impact (if any) of these price changes on dynamic efficiency.

4.4. Inter-regional Trading

Roam has not been asked to model inter-regional trading risk for the Current Arrangements in a manner comparable to the modelling carried out by Frontier for the other scenarios[21]. However, we are confident that risks under Current Arrangements would be lower than BAU, for the following reasons:

- The Snowy Trial arrangements have the effect of firming up the residues on the Snowy-NSW interconnectors compared to the BAU situation with the Snowy Trial; and
- The SGR arrangements mean that NEMMCO does not need to clamp the Victoria-Snowy interconnector, therefore firming up residues on this interconnector

Whether the Current Arrangements are also superior to the Snowy Region Abolition from an inter-regional trading perspective remains to be seen. However the Roam modelling indicates that there is the risk that NEMMCO may need to intervene to address negative residues with the Snowy Region Abolition thus reducing the interconnector firmness.

We believe that the Frontier analysis needs to be extended to cover the Current Arrangements, prior to a final determination.

[21] As reported in section 5.3.3 of the Draft Determination

4.5. Power system security

There are no known system security risks associated with congestion in the Snowy region with the Current Arrangements. Although the AEMC envisages no new security risks associated with region change, any region change – indeed any major change to current dispatch arrangements - creates *some* risk, whether arising from unforeseen behavioural outcomes, implementation errors or simply manual operator errors due to unfamiliar market operations[22]. These risks – however low – are avoided entirely in the Current Arrangements.

4.6. Good Regulatory Practice

We have general concerns about whether region change through the NEL rule change mechanism accords with good regulatory practice. These are discussed in section 5. However, two specific issues are noted here.

Firstly - the congestion issues in the region have already been addressed.

Good regulatory practice would suggest that changes that have doubtful merit and which are intended to address issues that are satisfactorily addressed in Current Arrangements should be rejected.

This is particularly the case if the AEMC is to have a whole new "box of tools" arising out of the region reform rule change and congestion management review.

In fact, at the AEMC forum, Commissioner Liza Carver made the comment that:

> "as a lawyer I can't help myself but make the obvious observation that the current status quo is not something that we can legally implement in any event in the absence of a rule change proposal before us, or in the absence of the completion of our congestion management review and the consideration of our report in that respect by the MCE." (Page 9 of the transcript)

Which could be paraphrased as: "although the issue has been addressed, we are legally obliged to fix it anyway". If this legal concern is genuine, it is extraordinary that the AEMC has managed – through its choice of process - to restrict the options available to address the issues. This certainly does not look like good regulatory practice.

Secondly - good regulatory practice also suggests that a regulator be consistent in its behaviour.

The Snowy Hydro Proposal was submitted to the AEMC on 11th November 2005. That it was not considered to warrant urgent action can be seen by the fact that the AEMC took 14 months to come to a draft determination. Yet now the AEMC believes that the region change should be implemented before next summer[23] and that taking some more time to consider the proposal in the light of the Congestion Management review – or even to give market participants more notice of implementation - is not appropriate.

[22] We recall how in the initial commissioning of Basslink there was a polarity error in the systems implementation which created extreme price outcomes in Tasmania and could well have compromised system security.

[23] Apparently on the basis of stakeholder submissions made 12 months ago

4.7. Long Term Implications

The most notable thing about retaining the Current Arrangements is that it does not *have* any long term implications. It does not pre-empt or prejudge any future decisions about the long-term solutions to Snowy congestion. It simply recognises that the AEMC is not yet in a position to make such a long-term decision and allows such a decision to be postponed until the issue becomes clearer.

On the other hand, it is entirely possible that - once the longer-term congestion management initiatives are complete – it is discovered that the Snowy Region Abolition does not, in fact, feature in the optimal congestion management arrangements. In this case, a sub-optimal longer-term outcome may either be locked in or may even need to be reversed, causing further market disruption.

4.8. Implementation and Timing

The implementation costs of the Current Arrangements are, of course, sunk and so can be regarded as zero for the purposes of comparison with alternative solutions. On the other hand, the costs of implementing region change are assumed to be substantial: at the AEMC forum, Charlie Macaulay of NEMMCO noted that it could cost "many, many millions of dollars"[24].

We think that the AEMC has been remiss in not attempting to quantify the implementation costs of the Snowy Region Abolition in its draft determination. In the context of (at best) relatively low levels of efficiency gains, the implementation costs are likely to be an important factor – perhaps a critical factor – in the determination.[25] By not undertaking this analysis in the draft determination, the AEMC has denied stakeholders opportunity to comment on it. In any case, it is essential that such analysis is undertaken before the final determination.

Even if region change is necessary *eventually* – and there remains some doubt about this – postponing these costs until this time would be beneficial. Alternatively, as noted earlier, it is not impossible that – in the light of the completed congestion management reviews – it is found that the Snowy Region Abolition is in fact an inappropriate region configuration and that either a further region change is required or no region change was required in the first place. In this case, the implementation costs of region change *now* would have been wasted.

Timing is also a concern. It has always been envisaged – in the current rules and in the MCE proposal – that a notice period of at least one year would be provided to allow participants to adjust their contract positions and so that the SRA process (which sells hedging instruments 12 months out) could continue unaffected over the transition. The AEMC proposal – in providing just 6 months' notice – will cause substantial additional and unnecessary disruption to contract markets.

Furthermore, given the quarterly frequency of the SRAs, we are surprised that the AEMC has chosen an implementation date that is mid-quarter. Although it argues[26] that

[24] Page 23 of the transcript of proceedings

[25] Note that this is the case even if the BAU is considered to be the counterfactual, since the BAU also has no implementation costs.

[26] Pages 83-84 of the Draft Determination

the region change needs to be implemented before next summer, it has not justified this. We do not understand – given the general lack of urgency shown on this rule change before now – why the AEMC now needs to implement it with such haste.

To determine the optimal timing for the region change implementation, the AEMC needs to evaluate the costs and benefits of alternative implementation dates. Again, we are disappointed that this has not been done in the draft determination and consider it essential that it is done before the final determination.

In the event that the Current Arrangements are extended, a timing issue arises as to the point at which these interim arrangements are superseded by the longer term congestion management regime. At the forum, Commissioner Liza Carver noted:

> "The congestion management review is a report to the MCE. It will not lead immediately to anything other than, I hope, the edification of the MCE. The process that the MCE may then follow and what rule proposals it may then put to us is a matter for the MCE, and I would not like to predict or pre-empt what they'll do or how long they'll take to do it. So you need to consider [if proposing to extend the current arrangements] the uncertainty around where that congestion management review may ultimately conclude." (P50 of the Transcript)

Or, to paraphrase, "don't propose to extend the Current Arrangements unless you are prepared to live with them for an uncertain – and possibly protracted – period." But this statement is predicated on an assumption that the Current Arrangements are inefficient or undesirable. We reject that assumption and note again that the AEMC has failed to explain why it (implicitly) supports it.

4.9. Summary

The AEMC has not considered the economic merits of the Current Arrangements compared to region change alternatives and it has also questioned the legal and regulatory practicability of the Current Arrangements.

Our modelling suggests that the Current Arrangements compare favourably against region change on economic criteria, and there is no question that the implementation cost of the Current Arrangements (ie zero) is substantially less than that of region change. Furthermore, the AEMC's proposed haste in implementing the region change creates additional practical difficulties and risks.

From a good practice point of view, the AEMC's approach and behaviour on this rule change proposal is creating significant uncertainty for participants both in terms of process, timing and basis for evaluation. After sitting on the proposal for a year, it now argues that not only must it be supported and implemented urgently, but that it is legally constrained from just allowing the Current Arrangements to continue for the time being.

In summary, a full and fair comparison of the Snowy Region Abolition with the Current Arrangements would likely find that the latter better achieves the NEM Objective. Therefore we can see no reason why the AEMC should support the Snowy Hydro Proposal.

5. Good Regulatory Practice

5.1. Overview

We agree with the AEMC that "good regulatory practice" is an important consideration in the making of a rule change. Indeed, it is particularly so in this case, where both the qualitative and quantitative assessments are ambivalent or ambiguous about both the materiality and direction of efficiency improvements resulting from the Snowy Region Abolition.

In the DD, the AEMC articulates regulatory good practice as encompassing:

- minimisation of operational intervention in the NEM
- promotion of changes that are likely to be robust over the longer term; and
- promotion of transparency of the operation of the NEM

We agree with all of these aspects. However, we also think that "consistency with public policy settings" is a key element. It is not only a requirement under the NEL (to the extent that the MCE has articulated policy). It also helps to promote the robustness and transparency of decision-making that the AEMC is aspiring to. We therefore also consider public policy in this section.[27]

5.2. Public Policy

The MCE has made its policy relating to region change and congestion management fairly clear, through a number of rule change proposals and the terms of reference of the CM review. In particular, in the "Reform of Regional Boundaries" rule change request[28] , it noted that its policy was:

- "that the regional structure for the wholesale market should be stable, based on current boundaries and with robust economic criteria to support incremental change as required;
- that no material efficiency benefits would be gained from a nodal pricing approach at this stage of market development
- that it supports giving advanced notice of a boundary change to allow registered participants the opportunity to adjust their contract trading positions and minimise their commercial risk; and
- that it notes the relationship between regional boundary review/change processes and the regulatory test, congestion management and the Last Resort Planning Power" (Page 1)

This rule change request also noted:

> "as an interim measure to provide market certainty, NEM ministers placed a moratorium on making boundary changes in the NEM until a revised boundary change process and criteria was developed" (Page 1)

[27] Whereas the AEMC treats it as a separate criterion

[28] Rule change request on Reform of Regional Boundaries, from the MCE

The Snowy Hydro Proposal runs counter to this policy in several ways:

- since there is, as yet, no revised boundary change process, the policy implies that the moratorium should continue;
- in the DD, the AEMC has not properly considered the rule change in the context of the congestion management review: in particular, in relation to alternative CM mechanisms such as those in the Snowy Trial
- insufficient notice is being given: less than six months' notice (between final determination and implementation) is proposed, whereas the MCE proposal was 3 years;
- the economic criteria used are not robust, in the sense that the quantitative and qualitative analysis carried out using these criteria is ambivalent, incomplete or pointing in the wrong direction.
- the change proposed is not incremental, in that it consists of three separate changes: the addition of one new region boundary and the removal of two others. The policy would imply that each of these three separate incremental components should be considered separately against the economic criteria

The MCE rule change proposal also requires that:

> "It is important that the AEMC, in conducting any boundary review, explore all boundary change options and variations to determine the configuration which best delivers the market objective" (Page 5)

The AEMC has only considered one alternative option (the Split Region). In contrast, Darryl Biggar – a consultant to the AEMC on this review - considered that there were eight different options that were worth serious consideration[29]. The AEMC has not properly explained why all – or at least some - of these other alternatives have not been considered.

The MCE rule change proposal also requires that:

> "The AEMC would also have regard to…the extent to which the benefits could better be achieved by alternative mechanisms provided for in the Rules" (Page 7)

The AEMC does not appear to have done this. In particular, the AEMC has not had regard to the extent to which the benefits could be better achieved by the mechanisms currently in place: the Snowy Trial and the SGR.

[29] Snowy Region Boundary Change Proposals: Analytical Assessment of the Options, Darryl Biggar, 1 December 2006, Pages 15-16

In summary, we consider that the DD is quite *inconsistent* with MCE policy. We note, however, that the AEMC has come to a different view and we would like to address that position specifically. At the AEMC forum, Commissioner Liza Carver noted:

> "MCE has put a rule proposal to us in respect of boundary change. That gives a reasonably clear policy direction that boundary change is to be considered in a staged context. One looks to whether constraints are material, whether there are opportunities for investment to address those constraints. If investment has not come into play, constraints are enduring, then you look to interventions, and it is in that staged context that one finally gets to a boundary change, which is not dissimilar to history we are now living with regard to the Snowy region." (page 50 of the Transcript)

We do not dispute that the Murray-Tumut constraint is material and may be enduring. Neither do we dispute that, under MCE policy, this is likely to mean that a region boundary at Murray-Tumut should be considered at some point. Our concern is that the appropriate process for doing this is not being followed. The AEMC has used an *ad hoc* process based on the NEL rule change process. We advocate using a properly designed region change process, implemented pursuant to the MCE's rule change proposal. It is clear that only the latter process is consistent with MCE policy.

Furthermore, Commissioner Liza Carver's explanation only considers the Murray-Tumut constraint. If, as she argues, MCE policy indicates that this should become a region boundary, this would imply the implementation of the Split Region, not the Snowy Region Abolition[30].

5.3. Policy is in the Eye of the Beholder

It might be argued that interpretation of MCE policy is a matter for the MCE collectively and for NEM jurisdictions individually. On this argument any submissions from *jurisdictions* about policy inconsistency should be taken seriously, however such submissions from other stakeholders – such as ourselves - are not relevant, since those stakeholders are not in a position to know what the MCE intended its policy to be.

We think such an argument would be flawed. We believe that the new concept and role of "MCE policy" was introduced into the new governance arrangements both to provide market participants greater certainty about the longer-term direction of NEM development and to reduce the need and temptation for jurisdictions to intervene in the NEM at an operational, or "sub-policy" level. These objectives are both consistent with regulatory good practice.

In this context, MCE policy must have meaning and substance beyond the views of the individual jurisdictions and all stakeholder interpretations are equally valid. It is not appropriate that MCE might promulgate a particular policy but then be allowed to turn a blind eye when this policy is flouted, particularly where individual jurisdictions may face a conflict of interest in identifying the policy breach[31].

[30] The treatment of the existing Snowy boundaries is considered further in section 6.7.
[31] We note that three jurisdictions are equity holders in Snowy Hydro who can be expected to benefit from implementation of the rule change

In summary, we agree with the AEMC that the Snowy Hydro Proposal is arguably consistent with MCE policy in one respect, but point out that it is inconsistent with MCE policy in at least five other respects. In supporting the Snowy Hydro Proposal, the AEMC appears to be ignoring or misrepresenting MCE policy.

5.4. Operational Intervention

We agree with the AEMC's objective of minimising operational intervention in the NEM, but feel that the AEMC has considered this objective too narrowly in the DD. In particular, it has considered only NEMMCO's role and not the AEMC's role.

In our view, the draft rule represents an "operational intervention" by the AEMC: as it

- applies only to specific connection points in the NEM rather than to the NEM as a whole. Outside of derogations, this is the first rule we can think of that has not applied generally to the whole NEM;
- specifies a specific implementation date: again, this is the first time we can recall this happening in the NEM[32]

To date, the NEM design has been that regions are defined through *operational* processes, in a similar manner to, say, loss factors and constraint equations. The exact nature of these operational processes and who should undertake them is the subject of the MCE rule change proposal, but what has – until now – not been questioned is that they are operational rather than legislative[33] in nature.

This is not simply a semantic point. The rule change process defined by the NEL is ill-designed to manage changes of an operational nature and we are now seeing three problems arising as a result of the AEMC using it to play that role.

Firstly, there are logistical and legal difficulties in ensuring that all practical alternatives are properly considered. It appears that certain options (eg extending Current Arrangements) simply cannot be considered unless a formal rule change proposal is submitted, other options (eg the Split Region) can be considered if they are raised in submissions, and a third class of options (eg BAU) are able to be manufactured by the AEMC.

Consequently, we are starting to see multiple region change proposals being made by stakeholders who fear that their preferred option will not be properly considered unless it carries the status of a formal rule change. In turn, the AEMC is finding difficulties with co-ordinating these various proposals within the formal consultation framework required by the NEL. This is far from the process envisaged by the MCE, wherein "all boundary change options and variations" were to be explored.[34]

Secondly, the NEM Objective offers only very broad and, in many ways, nebulous guidance to choosing the best region change option. For this reason, the AEMC has put

[32] We recall various review dates and a number of deadlines being set by the ACCC for NECA in its review of transmission pricing, but most of these deadlines were sensibly ignored

[33] By which we mean – for want of a better term - pertaining to the National Electricity Rules themselves, rather than operation pursuant to those rules.

[34] MCE Rule change request on Reform of Regional Boundaries, Page 5

forward various *ad hoc* economic and regulatory criteria which it is now finding very difficult and resource intensive to evaluate the options against. In contrast, a well-designed region change process would provide more robust and helpful criteria, such as those currently specified in the rules[35].

Thirdly, the lack of certainty about timelines in the change process creates a great deal of risk and uncertainty for participants. As previously noted, the Snowy Hydro Proposal was proposed in November 2005. The AEMC took 14 months to make a draft determination and is now unexpectedly proposing a rushed implementation within 10 months from draft determination. In fact, this timeline is very tight and any delays in the regulatory or operational implementation would almost certainly see the implementation pushed back into autumn 2008[36].

As a result, uncertainty will have been hanging over the process for almost 3 years, and through much of this time, participants have been unable to trade inter-regionally – and in particular, purchase SRA instruments – with any confidence. This uncertainty could, should and would be addressed through a proper region change process, and *is* addressed under the current process, by specifying timelines for region change proposition, evaluation, decision and implementation that allow SRA trading, at least, to proceed without interruption.

Another concern is that a "hard wired" implementation date – with limited implementation time - could create security risks, if NEMMCO has to "cut corners" to achieve the date[37]. Alternatively, if the implementation date is to be pushed back (through *another* rule change proposal), this creates further uncertainty for participants.

5.5. Long-term Robustness

The AEMC argues[38] that this objective is best promoted by ensuring that the new region boundaries should be expected to remain in place over the long-term: on this basis Murray-Tumut is considered "robust" but Tumut-NSW (for example) is not "robust".

This is missing the point about regulatory stability. By their nature, such rules are not robust because region boundaries may change from time to time and so the rules may have to change. This is the sense in which region definitions are operational rather than legislative. Of course, from a practical perspective, nobody wants to see frequent region changes. This is a matter that an appropriate region change process should take into account. However, this issue relates to operational, rather than regulatory, stability.

[35] We are not saying that these are the *right* criteria, but they are the right *sort of* criteria in the sense that it is practicable to evaluate region change options against them.
[36] In fact, NEMMCO has recently written to the AEMC indicating the earliest practical date for implementation is July 2008: letter from NEMMCO to AEMC, 5th March 2007
[37] NEMMCO has already noted that the region change implementation may mean that "NEMMCO's ability to implement additional 2007 initiatives without additional costs may be restricted." Page 6 of a letter from Brian Spalding to John Tamblyn, 25th August 2006
[38] Page 64 of the Draft Determination

The AEMC has made this conceptual leap from regulatory stability to operational stability by requiring that region definitions are “hard wired” into the rules, rather than decided through an operational process pursuant to the rules, as MCE policy dictates. This has led the AEMC into a logical fallacy that:

A. regions should be defined in rules;
B. rules should have long-term robustness; and therefore
C. only region boundaries which have guaranteed long-term robustness should be implemented

One might equally postulate that constraint equations should be defined in rules. Hence the corresponding logic would be:

A. constraint equations should be defined in rules;
B. rules should have long-term robustness; therefore
C. only constraints which have guaranteed long-term robustness should be used;

where the logical fallacy – and its absurd conclusion – is revealed. In fact, the argument should logically be the *other* way around:

A. long-term robustness of region boundaries (or constraints) cannot be guaranteed;
B. rules should have long-term robustness; therefore
C. region boundaries (or constraint equations) should not be specified in rules

This is not to say that robustness of region boundaries is not a relevant criterion for region change. Just to say that it is not a consequence of regulatory good practice.

5.6. Transparency

Again, the DD focuses on a very narrow, operational aspect of transparency. On the other hand, regulatory transparency requires that decisions are consistent with long-term policy and can be explained in relation to economic and regulatory criteria. As we have noted, the Snowy Hydro Proposal is not consistent with policy and is not explained in relation to the economic and regulatory criteria used.

5.7. Summary

Support for the Snowy Hydro Proposal – or any other immediate region change proposal – represents bad regulatory practice. It is inconsistent with MCE policy, creates substantial legal and logistical problems, represents an *ad hoc* intervention into NEM operation and creates unnecessary regulatory uncertainty and risk.

Good regulatory practice would be to follow the MCE policy that region change is undertaken pursuant to an agreed and appropriately-designed region change process.

6. The Split Region is superior to the Snowy Region Abolition as a long-term Solution

6.1. Overview

In the DD, the AEMC also analysed likely market outcomes under an alternative a "Split Region" scenario, which is neither the factual or counterfactual scenario. In this respect it was not clear what the role of the Split Region scenario was and, in particularly, what the AEMC would do if it had concluded that the Split Region makes a bigger contribution to the NEM Objective than the Snowy Region Abolition.

However, this issue has been overtaken by events, as the Split Region scenario has now been formally submitted to the AEMC as a rule change proposal by Macquarie Generation.

We believe – based on the modelling results presented in the DD and on our own conceptual analysis - that the Split Region rule change proposal achieves the NEM Objective better than the Snowy Hydro Proposal. For this reason alone, the Snowy Hydro Proposal should be rejected. Any future determination in relation to the Split Region rule change proposal, however, will depend upon the definition of the counterfactual and how market outcomes under the Split Region proposal compare with those of the counterfactual.

Again, to compare the Snowy Region Abolition and the Split Region proposals, we use the AEMC's eight decision criteria.

6.2. Dispatch Efficiency

The Frontier modelling in the DD shows the Split Region proposal gives rise to slightly lower generating costs than the Snowy Region Abolition. The Roam modelling also shows that without strategic optimisation the Split Region would give the lowest dispatch costs, (see table 1a in section 4.2).

As noted previously strategic bidding reduces the dispatch costs in all scenarios, however the reduction the Split Region case is relatively small. As a result the Split Region gives rise to somewhat higher dispatch costs after strategic bidding than the Snowy Region Abolition (see table 1b in section 4.2). The quantitative analysis appears to suggest that the relative impacts of the Split Region and the Snowy Region Abolition on dispatch efficiency are largely determined by Snowy Strategic behaviour and the extent to which this is accurately represented by the modelling.

The conceptual analysis in the DD is ambivalent about which option is likely to perform better. The Split Region gives better price-dispatch consistency, so reducing the frequency and impact of strategic bidding when a generator is constrained-on or constrained-off. On the other hand, it is argued, that in the Split Region option there may be increased use of strategic bidding to maintain "headroom" to prevent inter-regional constraints binding.

We are sceptical about the potential impact of such "headroom". Presumably, the strategic generators have an incentive to minimise the amount of headroom - to sail as close to the wind as possible – whilst ensuring the headroom does not drop to zero. So,

for example, if the headroom were managed to within 1MW – or even 10MW – the impact on dispatch efficiency would be minimal.

Overall, therefore, the quantitative analysis (after strategic bidding) appears ambivalent to the relative dispatch efficiency impacts of the Split Region and the Snowy Region Abolition.

6.3. Pricing Outcomes

The modelling in the DD shows that the Split Region option leads to substantially lower prices in NSW than the Snowy Region Abolition, and to similar prices in Victoria. The Roam modelling similarly shows prices reductions in NSW and Victoria, although more moderate. If, as the AEMC asserts, lower prices are consistent with improved allocative efficiency, then there seems little question that the Split Region is superior: the price differences in both the modelling exercises are consistent and seems to be too large – at least in NSW - to be in the "noise level".

This is an interesting outcome, because there is a common perception that larger regions necessarily leads to more intense generator competition and so lower prices. For example, the AEMC asserts in the DD that including Tumut in the NSW region allows it to compete with other NSW generators on a "level playing field"[39], but this is factually incorrect. Where an intra-regional constraints binds, generators which contribute less to that constraint[40] will be dispatched in preference to generators that contribute more, even if all generators bid at -$1000/MWh: for example, in any constraint north of Canberra, "western ring" generators will be dispatched in preference to Tumut. Of course, Tumut may still be dispatched, but this will be at the expense of inter-regional generation (eg in Victoria), not other NSW generation: the "playing field" has been "tilted", but against Victorian generators, not NSW generators.

6.4. Inter-regional Trading and Risk Management

If we take the results of the Frontier modelling at face value, it is apparent[41] that:

- inter-regional risks for the Snowy Region Abolition and the Split Region are both substantially lower than for BAU; and
- inter-regional risk for the Split Region is substantially lower than for the Snowy Region Abolition.

However, in its accompanying commentary, the AEMC seems far more willing to accept the former finding than the latter. Thus:

> "These results were due to the general pro-competitive effects of both of the boundary change options, which, as noted in previous sections, tended to lead to lower and less volatile wholesale prices and insubstantial incidences of transmission constraints causing counter-price flows (outside of Directlink). These effects help reduce interregional trading risk." (Page 60)

But:

[39] Page 34 of the Draft Determination
[40] ie have lower coefficients in the relevant constraint equation
[41] This is seen clearly in figure 5.15 on Page 60 of the Draft Determination

> "The results indicated that the Split Region Option could enable lower risk interregional hedging for NSW into Victoria and Victoria into NSW, compared to the Snowy Hydro Proposal. However, this assumes that the optimal quantity and mix of IRSR units are available to the hedging generator at an actuarially fair cost and ignores transaction costs and execution risk. In reality, participants find it difficult to make these predictions accurately and procure the number of IRSR units they wish." (Page 60)

The AEMC goes on to say:

> "While the modelling results showed some additional reduction in risk from the Split Region Option scenario compared to the Snowy Hydro Proposal, the Commission recognises that this may not be borne out in reality. In practice, trading across a larger number of regional boundaries (as required in the Split Region Option) may be more difficult than trading across a smaller number of boundaries, other things being equal." (Page 61)

We would take issue with the description: "*some* additional reduction in risk". In fact, the graph shows a 30% reduction in risk trading from Victoria to NSW and a 60% reduction in risk trading from NSW to Victoria[42]. These levels of risk reduction are quite remarkable.

However, the AEMC appears to dismiss or discount these findings on the basis of some putative inaccuracies introduced by the approach or scope of its modelling. At best, this suggests that the AEMC's modelling is inadequate to support a determination; at worst, it suggests that the AEMC is "turning a blind eye" to modelling results which do not favour its preferred option.

Let us examine in turn, then, the various points that the AEMC makes – or implies - in rejecting the findings of its modelling on the merits of the Split Region:

- that, in practice, market participants will not be able to obtain the quantity of SRA units that they require at an actuarially fair cost;
- that transactions costs for purchasing SRA units will be higher in the Split Region than in the Snowy Region Abolition, as a result of the increased number of regions;
- that execution risks will be higher in the Split Region than in the Snowy Region Abolition due to the higher number of different SRA types that a participant must purchase (ie the higher number of interconnectors between Melbourne and Sydney);
- that a participant will find it harder to estimate fair value in the Split Region than in the Snowy Region Abolition: ie there is increased pricing complexity;
- that in the Split Region there will be reduced liquidity in markets that trade SRAs or other inter-regional hedges

[42] The figures quoted are estimated based on taking approximate readings of the results directly from figure 5.15 of the Draft Determination

In relation to the first point, we note that, to date, SRA instruments have generally been auctioned at or below the outturn value of the IRSRs they relate to. If there were difficulties obtaining SRA instruments, one would expect the clearing price to be higher.

The next two points were addressed in the Southern Generators' presentation (given by Roger Oakley) at the AEMC forum[43]. The linked bidding facility in the SRA process means that only a single bid is required to purchase a "strip" of SRAs from Melbourne to Sydney, irrespective of whether there are one, two, three of fifty interconnectors between these two locations. There is no execution risk, since the bidder will either receive the full strip or nothing at all, depending upon their bid price. There will be no clearing outcomes where a bidder is seeking a strip of SRAs, but then only obtains a part of this strip. In the DD, the AEMC, whilst obviously unaware of this linked-bidding facility, acknowledged that such a facility may "reduce the difficulty of trading across regional boundaries"[44]

Addressing the fourth point, the fair value of a strip of firm SRA units will depend upon the expected price difference between Melbourne and Sydney and, again, this is the case whether there is one, two, three of fifty interconnectors. The fair value also depends upon the expected firmness of the IRSRs. Modelling firmness will be complex under all scenarios, since it will require the modelling of all the same physical constraints between Melbourne and Sydney and the impact of these constraints on bidding behaviour and interconnector flows. Having more interconnectors does not make this more complex. However, as the Southern Generators' presentation demonstrated, more interconnectors will mean an increased level of firmness *overall*, since the individual SRAs relate more closely to the physical constraints that may bind. Thus, firmness becomes a somewhat less critical ingredient of fair value and so any modelling inaccuracies will have less significance.

On the final point, there is no reason why more interconnectors should reduce liquidity. All derivatives trading currently (with two interconnectors) takes place at the Melbourne and Sydney nodes anyway and this is unlikely to change whether there are one, two or three interconnectors. The "liquidity" of the SRA does not change either, since all units must still be sold in the auction.

In relation to the transaction costs and liquidity concerns, the DD refers to a recent report by Firecone[45] that concluded that an increase in the number of regions can increase the transaction costs of inter-regional trading. We would point out that this report was submitted to the Congestion Management review[46] – not the review of the Snowy Hydro Proposal – and that this conclusion was made in the context of the possibly large increase in the number of regions which might result from that review, not in the context of the Split Region– which only introduces one new region.

The main concern about transaction costs is in relation to the impact of region change on demand-side pricing. For example, if the NSW customer base were segregated into several pricing regions, we agree that this would impact dramatically on the transaction

[43] Page 36 of the Transcript of Proceedings
[44] Footnote on Page 62 of the Draft Determination
[45] Page 56 of the Draft Determination
[46] and we would question why AEMC feels it necessary or appropriate to selectively extract material submitted to other reviews

costs of NSW retailers. However, the Split Region (unlike, say, the earlier Macquarie Generation proposal) has minimal impact on demand-side pricing, given the absence of significant load in these locations.

On the other hand, the main existing concern about inter-regional trading is not transaction costs but the lack of firmness of the IRSR/SRA, which gives rise to substantial, unhedgeable inter-regional price risks even for those traders nominally hedged by an SRA. Other things being equal, trading across more regions increases this non-firmness risk: eg trading between Victoria and Queensland would be more risky than between Victoria and NSW, because the non-firmness of the NSW-Queensland SRA further exacerbates the trading risks incurred between Victoria and NSW. So, in this context, we agree that trading across three interconnectors is more risky than trading across two[47].

But, this does not mean that increasing the number of interconnectors between NSW and Victoria increases the risks of trading between these two regions. In fact, the opposite is true:

- non-firmness risks associated with physical non-firmness of the transmission system will be the same as before, since it is the same transmission system; but
- non-firmness risks associated with intra-regional constraints will diminish, since, now that there are more regional boundaries, there are fewer or less material intra-regional constraints[48]

In summary, we believe that the AEMC's concerns about the impact of the Split Region on transaction costs are misplaced and arise from:

- a lack of familiarity with the SRA process,
- a confusion between the impact of transaction costs and the impact of SRA non-firmness, and;
- an erroneous inference that, because increased price-segmentation on the demand-side could adversely effect transaction costs and forward market liquidity, the Split Region (which does not affect the demand-side) would have similar adverse effects.

Therefore, since this proposal increases inter-regional hedge firmness and because of the linked bidding facility, increased reliance can be made on the modelling results, which lend greater support to the Split Region.

6.5. Power System Security

The DD concludes that none of the options should impact on Power system security. We would agree with this, except to the extent that there is some risk associated with

[47] Indeed at the AEMC forum, Danny Price of Frontier Economics drew almost exactly this analogy: Page 22 of the Transcript of Proceedings

[48] This was explained in Roger Oakley's presentation to the AEMC Forum: see slides 63 to 65 of the forum presentations and Pages 34-35 of the Transcript of Proceedings

implementation. However, this would not differ materially between the Snowy Region Abolition and the Split Region.

6.6. Good Regulatory Practice

General considerations of this criterion are covered under a separate section. However, one point that is specific to the Split Region is the "long-term robustness" of region boundaries.

In the DD, the AEMC argues that:

> "the outer boundaries in the Split Region Option or the BAU base case scenario are likely to change in the future as pinch points of congestion change. For example, in the Split Region Option, the precise location of the boundary between the Tumut region and the NSW region may need to change to reflect the most pressing points of congestion."

This consideration would imply that there should be no regional boundaries where the "pinch point" may move in the future. Such a criterion would certainly mean that the Victoria-SA region boundary should be removed and might also mean removal of the Queensland-NSW boundary – leaving just the Murray-Tumut and Basslink constraint boundaries. We do not think that this is the intention of MCE policy, nor does it represent good regulatory practice.

In any case, we would not agree that the existing "outer" boundaries are not robust. In particular, the Murray-Victoria constraint appears to us to be both material and enduring. Current materiality is demonstrated by the modelling results (by comparing the Split Region to the Snowy Region Abolition). It is also demonstrated through simple arithmetic: the maximum capacity of this constraint (southwards) is around 1900MW, whilst the potential flow south of Murray is 2850MW (1500MW from Murray and 1350MW through Murray-Tumut).

Its endurance is suggested by the fact that in 2003 VENCorp performed – and failed – a regulatory test relating to augmentation of its capacity by 140MW.[49]

Although the AEMC has (rightly) considered in detail the materiality and endurance of Murray-Tumut before proposing a new boundary there, it has not similarly examined the Murray-Victoria (or Tumut-NSW) constraint before proposing to *remove* an existing boundary there. As a matter of good regulatory practice, this analysis should be undertaken before the final determination.

6.7. Long-term Implications

The comparison of the Snowy Region Abolition and the Split Region alternatives raises an important policy issue that has not received much attention to date: the process for removing (as opposed to adding or changing) region boundaries. While the MCE "Reform of Regional Boundaries" rule change proposal sets out in some detail the process through which an emerging new constraint to trigger a region boundary review, it is silent about the implications of a historically-material inter-regional constraint becoming less material[50].

[49] A similar result was obtained in the 2006 ANTS: see table 8.1 of the 2006 Statement of Opportunities

[50] Not that we think that the "outer" Snowy constraints are immaterial, but this seems to be the position of the AEMC.

In this context, one can view the region change alternatives as:

- in the Split Region, to add one new regional boundary (Murray-Tumut) to the status quo; and
- in the Snowy Region Abolition, to adopt this same new Murray-Tumut boundary and then remove two regional boundaries (Tumut-NSW and Murray-Vic) from the Split Region.

From the point of view of dispatch and pricing efficiency, boundary removal should never be justified since:

- if constraints at a boundary are material, then boundary removal may degrade efficiency; and
- if constraints at a boundary are immaterial, boundary removal will have no effect on efficiency[51].

So, boundary removal can only worsen dispatch/pricing efficiency, it can never improve it. Similar arguments apply in relation to trading risks and transaction costs:

- if the constraints are immaterial, there is no inter-regional price risk to hedge and so no associated transaction costs; and
- if the constraints are material, then price risk is better managed inter-regionally (through SRAs) than intra-regionally (where constraints simply degrade the firmness of the adjacent interconnector and so create unmanageable risks).

In short, at least a trader has the choice of whether to hedge an inter-regional constraint (and incur some transaction costs) or not to hedge the constraint (and be exposed to the constraint risk). A trader does not have this choice in relation to intra-regional constraint risks. So, in conclusion, removing a region boundary can only increase trading risks/costs, it cannot reduce them.

Now, if a policy were adopted that region boundaries are only added and never removed, there will necessarily be a monotonic increase in the number of regions over time. If this raises - in some stakeholder minds – the spectre of “nodal pricing”, we believe that such concern is unnecessary. One new region does not make nodal pricing. New region boundaries in the future – if the MCE policy is followed – are likely to be infrequent, and only adopted if they contribute to the NEM Objective.

A related argument goes: “why are the Southern Generators supporting nodal pricing in the Snowy Region when they would certainly not support more pricing nodes where it affects their businesses: for example in the Latrobe Valley?”.

But, by supporting the Split Region over the Snowy Region Abolition, we are not supporting the introduction of *new* region boundaries (analogous to a new Valley-Melbourne boundary), since the new Murray-Tumut boundary appears in both options.

[51] except in relation to the effect on loss factors

We are simply arguing for the retention of *existing* region boundaries. Indeed, it is Snowy Hydro and the AEMC which are pressing for the new region boundary at Murray-Tumut, not us. As previously articulated, we are ambivalent about the need for this new boundary and think that it is best examined in the context of the MCE's longer term proposals.

6.8. Timing and Implementation

Because the Split Region only involves adding a regional boundary, its implementation should be somewhat simpler than the Snowy Region Abolition.

Firstly, in relation to constraints, in the Split Region option NEMMCO will only need to re-orient constraints within the (current) Snowy region: ie the Murray-Tumut constraint set. Constraints in the existing NSW and Victoria regions will not change, except that:

- references to the "NSW-Snowy" interconnector will change to the "NSW-Tumut" interconnector; and
- references to the "Vic-Snowy" interconnector will change to the "Vic-Murray" interconnector

For the Snowy Region Abolition, on the other hand, all hybrid (option 4) constraints involving a Snowy interconnector will have to be changed.

Secondly, treatment of existing SRA holdings is much simpler under the Split Region:

- holders of Vic-Snowy SRAs can have these replaced "one-for-one" with Vic-Murray SRAs; and
- holders of Snowy-NSW SRAs can have these replaced "one-for-one" with "stapled" Murray-Tumut and Tumut-NSW SRAs.

Even with a mid-quarter (November 4th) implementation date for region change, this means that SRA auctions can continue as normal and so traders can continue to obtain coverage for Q4 2007.[52]

Under the Snowy Region Abolition, there is no simple replacement arrangement, since there is no equivalent of a Vic-Snowy or Snowy-NSW SRA in the new regime. This means that Q4 2007 SRAs are void and traders cannot obtain hedges for this quarter[53] Thus, the Snowy Region Abolition involves major disruption to inter-regional trading for a period up to a year, in order to obtain putative enhancements to inter-regional trading for, at most, two later years (ie 2009-10).

[52] although there may need to be some ad hoc adjustments to settlements to implement this
[53] We note that a recent meeting of the settlement residue committee decided to postpone auctioning Snowy interconnector SRAs for Q4 07, Q1 08 and Q2 08 until September 2007.

The Split Region proposal involves "re-orientating" constraints to the Dederang node which, whilst avoiding the possibility of negative residues arising between Victoria and Murray due to loop flow effects, also creates some mis-pricing at Murray. This is reminiscent of the debate had at the time of the SGR proposal, where the AEMC found that, in fact, the SGR approach was preferable to re-orientation[54].

It may be the case that a similar approach (ie having the regional reference node at Murray and the SGR to manage negative residues) could be adopted in relation to the Split Region. In the event that the AEMC supports the Split Region rule change, we recommend that this alternative approach is also considered.

6.9. Materiality of the Outer Snowy Constraints

It is worth noting that the only difference between the Split Region and the Snowy Region Abolition implementations is in their treatment and pricing of constraints north and south of the (current) Snowy region: they both have the same boundary at Murray-Tumut. At the AEMC Forum, Commissioner Liza Carver remarked that:

> "I think it's fair to say that the modelling of the Snowy proposal indicated that the incidence of those constraints binding north and south of Snowy was not material" (Page 37 of the Transcript)

Presumably, that is not to say that the impact of those constraints on market outcomes is not material. If that were the case, modelling results from the Split Region and the Snowy Region Abolition scenarios would be almost identical, and clearly, they are not. A lesson we can draw from this is that the measurement – whether through modelling or empirically – of how often constraints bind may not be a reliable indicator of the materiality of their impact on dispatch efficiency[55].

[54] We accept that this was in the context of NEMMCO intervention, which does not arise here. However, it was also in the context that re-orientation would be infrequent and temporary, whereas here it would be permanent.

[55] To draw an analogy, suppose that the road and traffic authority (RTA) decided to implement a new speed limit on a section of road and placed a speed camera at this point. If the RTA subsequently discovered that the vast majority of traffic was travelling slightly below the speed limit, would it be right to conclude that the new limit was having little effect on driving behaviour?

6.10. Summary

The modelling in the DD suggests that the Split Region[56] is likely to deliver greater benefits than the Snowy Region Abolition. This does not surprise us. We cannot see why there would *ever* be benefits from removing region boundaries[57]. At best, if there are no material constraints at a region boundary, removing the boundary will have no material effect; at worst, if the constraints are material, removing the region boundary will be deleterious to dispatch, pricing and trading outcomes.

In order to support its preferred option, the DD then resorts to qualitative arguments about the impact of more regions on trading risks and transaction costs. We have put forward conceptual reasons why these concerns are mistaken. The AEMC admits that its modelling is inadequate to quantify or substantiate its concerns.

In summary, the Split Region is likely to make a greater contribution to the NEM Objective than the Snowy Region Abolition. Since the two proposals are mutually exclusive, this means that the Snowy Region Abolition cannot be supported.

[57] Having said that, we acknowledge that the Roam modeling after strategic optimization does suggest slightly higher dispatch efficiency in Snowy abolition compared to the Split Region, however the reasons for this are discussed in section 4.2

7. Conclusions

1. The process undertaken by AEMC in coming to its draft determination on the Snowy Hydro Proposal and the arguments used to support that determination are deficient and inappropriate in a number of respects, listed below.
2. Snowy Hydro proposed the Snowy Region Abolition rule change in order to address perceived inefficiencies in the Current Arrangements in managing Snowy congestion. In the DD, the AEMC has similarly argued that the Snowy Region Abolition should be implemented urgently in order to address stakeholder concerns about these deficiencies
3. However, the AEMC has decided not to examine – at all – the Current Arrangements and therefore cannot determine – and has not determined - whether stakeholder concerns are justified.
4. Instead, it has framed the review of the rule change proposal as a consideration of long-term solutions to Snowy congestion, despite the fact that the MCE has already articulated a separate process for identifying such solutions.
5. In this context, the AEMC has presented a number of apparent legal and regulatory obstacles to considering the Current Arrangements and has, instead, justified the Snowy Region Abolition by comparison with a “straw man” alternative (the BAU) which commands no support and which is neither practicable (in that the rule changes needed to implement it would never be proposed or supported) nor efficient.
6. By comparing the Snowy Region Abolition to BAU and finding it to be superior, the AEMC argues that the Snowy Region Abolition contributes to the achievement of the NEM Objective. But in order to measure such a contribution, the AEMC would need to examine a realistic counterfactual: ie what would be expected to eventuate if the Snowy Hydro Proposal were rejected. This counterfactual is most likely to be extension of the Current Arrangements – until a long-term congestion management regime is implemented – and would certainly not be BAU.
7. the Snowy Region Abolition is inconsistent with MCE policy in that it breaches the moratorium on region change and it effects region change through the NEL rule change process rather than a special region change process.
8. The process followed by the AEMC is also inconsistent with MCE policy, in that it did not consider all possible region change alternatives, nor did it consider congestion management alternatives such as the Current Arrangements.

9. The AEMC's quantitative comparison of the Snowy Region Abolition with the Split Region alternative indicates that the latter is likely to be superior and better contribute to achieving the NEM objective.

10. The AEMC has discounted these quantitative findings on the basis of conceptual concerns about the Split Region which stem from a lack of familiarity with existing trading arrangements and a misplaced analogy between the Split Region and nodal pricing. As a result of these conceptual errors, the AEMC has wrongly concluded that the Snowy Region Abolition is preferable to the Split Region.

11. In the light of these process concerns, we think that the draft determination is invalid in that the AEMC –having failed to take into account all relevant considerations - cannot be satisfied that rule change proposal contributes to the achievement of the NEM objective. The AEMC's process needs to be revised accordingly before a final determination is made.

12. As market practitioners, we believe that the Current Arrangements operate satisfactorily and that there is no need for region change before the longer-term congestion management initiatives are complete. However, if region change is to happen in the short-term, we think that the Split Region is preferable to the Snowy Region Abolition.

13. However, ultimately it is a matter for the AEMC to determine whether it is appropriate that the Current Arrangements should continue and we look forward to the AEMC's final determination on this matter once our process concerns have been addressed.