

AUSTRALIAN CRC FOR RENEWABLE ENERGY LTD

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ACRE Energy Policy Group (AEPG)

Response to the COAG Energy Market Review Draft Report: Towards a Truly National and Efficient Energy Market

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Overview

The context for this strategic energy market review was set by COAG's agreed national energy policy objectives:

- Encouraging efficient provision of reliable, competitively-priced energy services to Australians, underpinning wealth and job creation and improved quality of life, taking into account the needs of regional, rural and remote areas;
- Encouraging responsible development of Australia's energy resources, technology and expertise, their efficient use by industries and households and their exploitation in export markets; and
- Mitigating local and global environmental impacts, notably greenhouse impacts, of energy production, transformation, supply and use.

These objectives are a valuable contribution to Australia's energy debate, in particular through their focus on energy services, and in their recognition of the need to consistently and coherently target economic, environmental and social sustainability for the energy sector.

The Draft COAG Energy Market Review Report in general deals well with issues of market structure and makes a number of significant recommendations aimed at achieving more consistent market operation and advancing the debate on internalising the cost of carbon.

However, an energy market is a means to an end, not an end in itself. The "ends" in this case are the agreed COAG national policy objectives above and the report is weaker with respect to the policy framework in which energy markets operate and, in particular, facilitating a transition to improved sustainability. Of the nine chapters in the report, six deal with market structure and three with policy issues.

Without an underlying policy framework, the report's recommendations result in inconsistent treatment of different sectors of the energy market, while many of the recommendations are under State Government jurisdiction, with uncertain and possibly inconsistent outcomes should some but not others be implemented. For

example, there is an appearance, yet again, of stop-start renewable energy policy, which is likely to destabilise this emerging sector of the new energy market. Also, the report fails to adequately address the important topic of end-use efficiency.

Thus, in our view, the report's recommendations have not placed enough emphasis on building a policy framework around the market to support the technical and organisational innovation that will be required in the transition of our energy sector towards greater sustainability.

This submission will deal separately with three aspects of the draft report:

- energy in the Australian context
- the sustainability of the stationary energy sector and
- the energy market structure.

Energy in the Australian context

The draft report's *Introduction and context* identifies many of the key issues facing the Australian energy sector and outcomes of energy market reforms to date. In our view, however, it fails to adequately consider some key issues.

Fuel supply availability and security:

The draft report identifies Australia's considerable coal and moderate gas reserves as indicating that Australia has no stationary energy fuel supply availability or security challenge. Australia's dwindling oil reserves are considered outside the scope of this 'stationary energy' review (p. 39). It should be noted that the Issues Paper for this review did not state that transport was not to be considered. Given that we spend more on energy for transport than on electricity and gas (ESAA, 2002) and that estimates of Australia's demonstrated economic crude oil resource are less than ten years present consumption (ABS, 2001) there is a urgent need for transport to be addressed.

Furthermore, while oil currently makes only a minor contribution to energy supply in the stationary energy sector, major disruptions in oil supply in the medium to longer term could transfer from the transport sector to the stationary energy sector through, for example, greater use of natural gas fuelled and electric vehicles.

Australia's comparative advantage from low-cost energy resources:

The report gives particular attention to the importance of low energy costs to Australia's economic growth. While it notes the high value of electricity price reductions to some select industries, the reality is that these industries represent only a relatively small part of overall Australian economic activity. For example, the Aluminium smelting industry consumes almost 15% of Australia's electricity generation yet contributes 0.15% of Australian GDP (AGO, 2002) while receiving electricity price subsidies estimated at A\$210 million to more that \$250 million a year (Australia Institute, 2002). For the vast majority of businesses in Australia, non

transport energy costs represent a very minor input cost – typically less than 3% (Pears, 2002). Electricity prices are far less important for these businesses than receiving secure, reliable energy services, and the other far more significant input costs for their business.

Emerging technologies:

The draft report correctly identifies the importance of a range of emerging energy technologies that may offer potentially significant value and diversity to the energy sector. Given the high environmental impacts of present energy technologies, it is particularly important that markets not entrench the incumbent technologies.

This is not, however, the same as requiring effective energy markets to be technology neutral. Firstly, that requires market pricing to factor in the different social and environmental as well as strict economic values of different technologies. Secondly, emerging technologies will often require targeted support in the early stage of their implementation, given that the incumbent technologies have the advantages of scale, and often historical subsidies.

Projections of future electricity and gas use:

It is important to acknowledge the projected rates of growth for electricity and gas use in Australia over the next two decades. It is also necessary, however, to put projections such as those of ABARE in context. Their methodology generally assumes no significant change in energy policies and measures, major technology developments or other possible ‘surprises’ over the period. This is unlikely to be a sensible assumption in the medium to longer term. For example, wide international concern on climate change only emerged around a decade ago, yet is clearly beginning to shape energy sector development. There is no doubt that significant investment in the energy sector is required, however it may not be driven as much by ever increasing demand as other imperatives.

Australian energy market reforms to date:

The draft report quotes independent analysis of the significant efficiency improvements and consequent economic benefits arising from reforms to date. Note that these estimates have been questioned by other analysis including (SAIIR, 2002). The draft report also notes, however, that there have been social and environmental costs - for example, regional job losses and increasing disadvantage (p. 145) and increasing Greenhouse Gas emissions (p, 134).

Given the focus of the draft report on market ‘efficiency’ it is important to clarify what scope the term is being given. A wider view of economic efficiency can incorporate social and environmental sustainability, but this requires explicit actions to value externalities. In the absence of such actions, economic efficiency alone is an insufficient objective.

Another key concern is the type of efficiency that is measured. Supply-side productive efficiency, from reducing the cost of energy from available technologies, appears to

have made clear progress with the market reforms over the last decade. There would seem to have been less progress in allocative efficiency - the choice of energy source best suited to particular energy services and the most appropriate balance between supply and demand side options. This outcome is acknowledged in the draft report and has largely arisen from the supply-side orientation of reforms to date, as well as the imbalance between gas and electricity markets within Australia.

Arguably the most important contribution to economic efficiency over the medium to longer term is actually that of dynamic efficiency; the processes of technological and organisational innovation responding to longer-term market developments. This is extremely relevant to the electricity industry, where many of its key technologies require high capital investment and have very long asset lives. Unfortunately, excessive focus on productive efficiency improvements can mask far more important declines in dynamic efficiency for the longer term.

Greenhouse issues

The need to address climate change is emerging as one of the major drivers in energy sector reform world-wide. Given this, Australia's present Greenhouse gas emissions levels and present trajectory are alarming, and require immediate, concerted attention.

The key finding of the Panel in this area is that "Particular measures being used to abate Greenhouse gas emissions from the stationary energy sector are imposing major and unnecessary costs on the Australian community and economy" (p. 137). This finding is not really supported in the report's 'context' discussion. The main finding identified there is actually that measures to date have been largely ineffective in reducing Australia's greenhouse gas emissions (p. 133).

Findings

With regard to the Panel's particular findings, we have the following comments:

Measures are poorly targeted:

The challenge of climate protection is large and complex. Very significant reductions in emissions will be required; a point acknowledged by the Federal Environment Minister, Dr Kemp who has stated "Over this century the world is going to have to reduce its global greenhouse gas emissions by some 50 to 60 per cent." (The Age, 2002).

There are many different sources of greenhouse gas emissions, and the time-scale for action is long. Many of the proposed options for reducing emissions have very different characteristics; in particular those targeting increased low-emission energy sources, reduced energy demand and carbon sequestration within ecosystems.

The goal of determining the best mix of 'least cost' measures to achieve our climate protection objectives has to be seen in the context of concerted long-term action. Large-scale innovation and change in the energy sector will be required, rather than merely seeking the cheapest available 'options' now.

Measures are uncoordinated and compete with each other

The draft report makes valid points on the pitfalls of having uncoordinated greenhouse related schemes, such as the double counting allowed between MRET and the NSW Benchmarks scheme.

The widespread and diverse range of GHG emitting activities associated with virtually all of our society's undertakings and the many possible policy 'agents', and stakeholders who will likely be required to act, all pose considerable difficulties for determining a single universal policy.¹ A range of measures are almost certain to be required, even with a broad measure such as emissions trading in place - a point acknowledged in the AGO submission to the Panel on such schemes (2002).

Current measures have created uncertainty:

It might actually be more accurate to say that it is the present lack of sufficient measures to reduce greenhouse gas emissions that has created uncertainty in the market. It is also unclear why the Panel believes that participants are over-estimating future greenhouse costs - "Certainty on greenhouse policy is therefore needed to ensure market participants are not factoring in unnecessary risk premiums" (p. 139)

It is quite possible that participants are actually under-estimating future impacts of greenhouse action – witness the recent construction of three coal power stations in Queensland. The real advantages of energy efficiency (which has no carbon risk) and smaller-scale distributed generation, with its potential for higher conversion efficiency, are real advantages that should be recognised within the energy market.

Proposed Solutions

The benefits of a climate change strategy extend well beyond emission reductions. For example, as the draft report indicates "regional Australia stands to benefit from a greater uptake of renewable energy technologies". Amongst many other factors, regional communities can be reinvigorated in very broad ways by fostering and rewarding a culture of appropriate and sustained innovation. Moreover, this need not be at "an immediate economic cost to the community" as erroneously claimed in the draft report (p 137). Consider the many 'no regrets' energy efficiency options identified by the IPCC (2001) that offer both strict economic and greenhouse benefits. Closer to home, a recent report states that mandatory 4 or 5 star energy ratings for new houses in Victoria "would have many positive economic benefits for the State of Victoria in a range of areas including Gross State Product (GSP), employment and economic welfare" (Allens Consulting, 2002).

As the report also indicates (p 134), the implementation of competitive market arrangements in electricity has exacerbated climate change emissions, corroborating the importance of providing a coherent policy framework around the energy markets that promotes dynamic efficiency.

¹ See, for example, *Dealing With Climate Change – Policies and Measures in IEA Member Countries* released by the IEA. The latest volume details more than 200 new policies and measures undertaken in the year 2000 amongst IEA member countries to address energy-related emissions.

The Role of Renewable Energy

One of the glaring omissions of the draft report is the lack of a section dealing with the role of renewable energy in improving the sustainability of the stationary energy sector, particularly when there are useful sections dealing with demand side participation and the wider penetration of gas. This is inconsistent with the COAG policy objective to “encourage the development and application of less carbon-intensive energy sources and technologies” (p 155). While natural gas is certainly less carbon-intensive than coal, Australia is also well endowed with renewable energy resources that would add diversity to the electricity sector (p 39) as well as have regional value (p 26). These properties arise because renewable energy resources are usually distributed differently from fossil fuels and may have particular regional synergies, such as between bioenergy and agriculture or salinity control. Any comprehensive review of energy markets, with recommendations for the decades to come, must deal with renewable energy as its importance will only grow with time. Its omission is a direct result of the failure to enunciate long-term policy objectives for the energy sector and even to acknowledge existing government policy objectives, such as sustainable development.

In line with sustainable development objectives, the wider introduction of gas might be viewed as a desirable transition strategy towards a renewable energy economy in the long term. Were such aims defined, an appropriate market structure and policy framework to deal with the required transition might more easily follow. Without this framework, the report makes the extraordinary claim that “the conservation of non-renewable resources ... is ... not an issue for Australia” (page 138, para 1). In fact, concern about the depletion of gas and oil reserves are already being expressed in Australia and world-wide, while energy supply security continues to be one of the strongest energy policy drivers. Systematic development of the renewable energy sector is critical to long term energy supply. This requires transition to appropriate market structures which place value on resource security, renewability and low emissions, as well as continued technology maturation.

Emissions Reduction and the Mandatory Renewable Energy Target

Renewable energy options are viewed in this report solely on the basis of their short term emissions reduction potential, and assumed to be:

- “less efficient carbon reducing options, (which) will burden the economy with unnecessary costs” and
- adequately dealt with via a supposedly “technology neutral” emissions trading scheme.

On this basis, the report recommends the “immediate cessation of the poorly targeted schemes (e.g. MRET, GEC, benchmarking)”, along with the introduction of emissions trading within three years.

The introduction of an emissions trading scheme in Australia would be a significant and welcome policy outcome which, if appropriately structured, could greatly assist the transition to an economy with lower carbon intensity. Of course, the consequence of an emissions trading scheme would be a transition to gas, which would be further assisted by the report’s recommendations on further development of the gas market.

It is critical that, while the advantages of gas are exploited and reserves being depleted, there is a concerted effort to develop renewable energy technologies for the longer term. In the short term, even if the optimistic aim of implementing emissions trading within three years were possible, renewables are left without market development support in the interim. Even if the recommendation to cease MRET is rejected by government, damage, perhaps irreparable for some projects, has already been done by this poorly thought out recommendation, just at a time when renewable energy industries were cautiously emerging to take advantage of the first longer term policy support mechanism after decades of stop-start government policies.

The Mandatory Renewable Energy Target operates under the *Renewable Energy (Electricity) Bill 2000*, which has the stated aim of “establishment and administration of a scheme to encourage additional electricity generation from renewable energy sources, and for related purposes”. Specific objectives of the renewable energy target are, by 2010:

- to accelerate the uptake of renewable energy in grid-based applications, so as to reduce greenhouse gas emissions;
- as part of the broader strategic package to stimulate renewables, provide an ongoing base for the development of commercially competitive renewable energy; and
- to contribute to the development of internationally competitive industries which could participate effectively in the burgeoning Asian energy market.

Within the renewables sector, MRET is technology neutral and operates via tradable renewable energy certificates. It therefore meets the efficiency aims sought by the COAG Energy Market Review and is consistent with the principles of policy development already adopted by COAG. It was never intended to be judged purely on its ability to achieve least cost emissions reduction.

In the longer term, if and when an emissions trading scheme is introduced, it may be appropriate to re-examine MRET to see whether and how it might be merged with emissions trading. In the interim, it should remain in place, albeit with some modifications following the planned 2003 review.

Similarly, if emission trading is to be an efficient economy-wide signal towards lower emissions, there must be no exemptions. Rather, it must be implemented as part of a broader restructuring of the tax system towards a regime that reflects ecological aims. In this way, industries or sectors that are adversely impacted by the new tax, can be compensated in other ways.

As Tate points out “Ninety percent of Australia's exports are sold to countries that have ratified the Kyoto Protocol. It is expected that these markets will become increasingly sensitive to the emissions associated with the production and use of Australian products and may seek to find alternative providers that can meet Kyoto criteria... The EU is determined - and has already legislated - to prevent the involvement of non-ratifiers such as Australia and the US in European carbon trading. Many governments are using Kyoto ratification as a motivation to prepare their business community for a future carbon constrained world.” (Tate, 2002).

Need for a Chapter specific to Renewable Energy

While some of the broader market issues relevant to renewables are recognised in the report, they are not well addressed for the renewables sector. Hence, although there would be a level of overlap with other sectors, it is important that the key issues facing renewables be specifically addressed in a separate chapter of the report. These include:

- transmission access
- distributed generation
- retail contestability
- demand management
- industry development
- infrastructure development
- introduction of technologies with different characteristics into an established energy infrastructure.

Need for a Chapter specific to Energy Efficiency

As with renewable energy, the important topic of energy efficiency deserves a chapter in its own right. Institutional issues are at least as important as market design issues in facilitating improvements to end-use energy efficiency because dynamic efficiency is particularly important in this context. Appropriate policy instruments must be used to foster innovation in technology and institutions in consort with efficient retail market implementation.

Market Structure

Governance and regulatory arrangements

The role of regulation in markets is to ensure that imperfect market ‘means’ lead to desired societal ‘policy’ ends. Energy markets pose particular challenges for regulation given the physical realities of energy networks, the ‘essential public good’ nature of many energy services, concentrated ownership on the supply side of the market and very significant social and environmental externalities. All of these limit the power of competition by itself to effectively regulate market participant behaviour.

Some of the key principles in market design are that (OECD, 2001):

- regulatory institutions must be responsive to political direction, yet at the same time regulators must be able to resist parochial interests that undermine more general efficiency goals, and to resist short-term goals when a longer-term perspective is necessary
- communication and consultation with affected interests are important, but must be disciplined to prevent regulatory capture and undue influence by narrow interests.

The discussion in the draft report covers many of the issues associated with these two points and identifies important weaknesses in the present governance and regulatory arrangements. One key question that may require further attention is how to

incorporate wider government policy objectives into the regulatory framework. The proposal that this only be done through legislation (p. 53) seems potentially unwieldy, given the regulatory needs outlined above. Another key question is how to appropriately manage stakeholder input (see p. 53, bottom left paragraph) given that market participants will generally prefer a market design that is biased in their favour, rather than one that is competitively neutral.

The draft report makes considerable discussion of the deleterious impacts of regulatory risk on investment in the industry. While the substantial capital requirements and long asset lives of much energy sector investment certainly creates a challenge, some types of regulatory risk must be a necessary fact of life for market participants. The very high environmental and social externalities of many current energy technologies requires that such investments not be effectively offered a 'business as usual' guarantee of future returns.

With regard to the report's proposed solutions we have the following comments:

Create a National Energy Regulator to replace ACCC, State regulators and NECA

It appears to us that some State governments are intervening excessively in the present arrangements. However, there are also dangers in a single national regulatory body, due to loss of diversity and opportunities to innovate in regulatory approach at the state level. If the NER is established, we believe that the following issues should be considered:

- The relationship between the NER and ACCC must be satisfactorily resolved. In our view, it may be more desirable to task the NER with code development for both electricity and gas, while the ACCC retains the adjudication role to assess the public benefit of code amendments, thus providing some "separation of powers". In that case, National Energy Agency (NEA) may be a preferable name.
- The NER (NEA) should not have either a single Commissioner or one appointed by each State,
- The Commissioners should be appointed on merit by an open and transparent process for a sufficiently long term of office to be independent from government
- The Commissioners should be charged with achieving closer integration between electricity and gas industry market rules over time and with facilitating dynamic efficiency, in particular a transition to a more sustainable stationary energy sector.

Enhance NEMMCO's role to lead the electricity code change process

As the draft report suggests, NEMMCO could take on the role of leading the electricity code change process if its research capacity was enhanced and formal processes for stakeholder consultation were introduced. However, giving this role to NEMMCO would introduce potential conflicts of interest. As indicated above, it may be better to shift the code change process to a NEA, along with gas code development. In either case, the code change process should be based on analysis of market performance and the identification of strategic directions for the evolution of market design. Consultation should extend to small end-users and to stakeholders outside the existing industry.

Create a Gas Advisory and Code Change Committee

We support this recommendation, subject to representation for all stakeholders and a clear brief to improve the consistency between the approaches adopted for electricity and gas. As indicated above, it may be preferable for a NEA to assume this role.

Have the Ministerial Council on Energy (MCE) as the Ministerial decision-making body

It is very important to have a consistent national approach to the stationary energy sector, providing that approach did not preclude the emergence of solutions that were appropriate in the local context. The MCE would clearly be better placed to achieve this than the NEM ministers Forum. Therefore we support the proposal to have the MCE subsume the role of the NEM Ministers Forum. The MCE would have its primary interface with the NEA, if that concept were to be adopted.

Make important changes to the way network assets are regulated

We support the proposal to move towards less intrusive regulation, so long as appropriate incentives are provided for network service providers (NSPs) and the planning function is moved to an independent body with appropriate expertise and contextual knowledge. The proposed move to price regulation, rather than revenue cap regulation, while having the advantage indicated in the draft report, would also strengthen existing NSP incentives to “grow” demand and to resist the introduction of embedded generation. There may also be practical problems. To achieve efficient locational and temporal signals, the prices may need to vary with both location and time of use. This would make price regulation complex. Therefore the apparent contradiction between this and the following recommendation on embedded generation must be resolved.

Have the NER establish a mandatory code of practice for dealing with embedded generation.

While this is a useful recommendation, experience with the NSW Demand Management Code for Distribution Network Service Providers (DNSPs) suggests that it would not be sufficient to fully overcome the barriers to embedded generation and reference should be made to the recommendations of the IPART demand management report. Moreover the concept of embedded generation should be broadened to the concept of “distributed resources”, which also embraces demand side options, including the important issue of improvements to end-use efficiency. It is also important to support this initiative with other measures, particularly (as recommended elsewhere in the draft report) the introduction of interval metering (with availability and quality of supply measurement) for all network users, including residential end-users. Another important issue is to clarify the legal obligations of DNSPs to end-users. The present, open-ended “obligation to supply” doesn’t provide a satisfactory level framework for embedded generation and it has on occasions been used to justify uneconomic network augmentations while artificially ruling out embedded generation and demand side options.

Electricity market mechanism and structure

The draft report identifies important weaknesses in the present market arrangements and proposes a number of solutions, to which we have the following comments:

Make the current pool system perform as intended

We agree that Australia's gross pool system is very similar to a net pool system. A much more important issue than the label is how well the various aspects of the system work.

End ETEF and BPA

We agree that these arrangements introduce unfortunate biases and should cease. However, they may be viewed as responses to an inadequately defined framework for derivative trading and end-user participation, which should be enhanced as recommended in the draft report. New arrangements should be designed that more carefully manage the way in which end-users are exposed to risk (for example ETEF protects small end-users from short-term risk but exacerbates their long term risk exposure by building in network investment costs that could otherwise be avoided. Also, ETEF, in conjunction with profiling, transfers the price risks of those who consume intensively at times of supply scarcity onto less profligate consumers).

Increase transmission, make FTRs available

We agree that transmission plays a vital role in a restructured industry, however we believe that the complexity of the network role means that a number of consistent steps must be taken to allow it to be better managed. Thus FTRs could play a useful role in improving the representation of the network in derivative trading, but the network role in ancillary services should also be considered in a consistent manner. For example, it may sometimes be cost effective to purchase network support services in order to increase the transfer capabilities of the existing network in lieu of further network augmentation. Markets in FTRs should take account of such options, eg through links to forward markets in network support services. Also, as previously indicated, it will be difficult to make progress on network issues without introducing interval metering (with availability and quality of supply measurement) for all network users, including residential end-users, and clarifying the legal obligations of NSPs to their customers. Thus a consistent package of measures should be developed for network representation rather than relying on FTRs alone.

Introduce a demand side 'pay as bid' mechanism

Demand side participation is very important, but it would be better to address it by developing an efficient retail market design than by direct participation in the NEM. The intent should be to engage all end-users as active market participants in an efficient manner over time and to address network issues as well as NEM issues.

Further disaggregate the NSW and possibly Queensland generators

We agree with the view that attention should be paid to market power issues in electricity markets, including options such as disaggregation of generator portfolios to the power station level. However this would only be effective in the context of private ownership and if that is not feasible, it may be possible to heighten competition and reduce the perception of government interference by divesting disaggregated long term rights to direct the operation of a power station and receive the spot market revenue. Effective competition would also require an efficient market structure covering ancillary service, spot and derivative markets that provided incentives for investment in generation when and where appropriate, including the maintenance of appropriate standards of quality and availability of supply.

Tighten the ACCC merger guidelines

Strongly supported, subject to the qualifications discussed in respect to the previous recommendation. Horizontal re-aggregation in generation and re-aggregation of unregulated and regulated businesses are perhaps of greatest concern, whereas a merger of a retailer and a generator is less likely to have deleterious effects.

Electricity transmission

The draft report identifies important weaknesses in the present electricity transmission arrangements and proposes a number of solutions, to which we have the following comments:

Give NEMMCO responsibility for transmission planning

We agree with the proposal to give responsibility for transmission planning to NEMMCO to provide NEM-wide consistency. This would build on NEMMCO's expertise with respect to operating constraints and its neutrality between network and non-network (distributed resource) options. Boundary issues of accountability between NEMMCO and NSPs would need to be addressed, as would boundary issues between transmission and sub-transmission.

Have NEMMCO auction off "firm" transmission rights (FTRs)

As discussed above, an FTR is a financial device that cannot ensure physical delivery, and thus "firm" only applies to the cash outcome at times when settlement residues fall short of anticipated values. Therefore, consistent ancillary service arrangements should also be developed to ensure that this initiative delivers improved physical outcomes. Otherwise this might result in smearing of price signals without delivering real gains.

Use the price of FTRs as the key indicator of the need for transmission augmentation

The effectiveness of this proposal depends on whether the price of FTRs delivers a clear forward signal and the extent to which investment decisions are driven by market as against reliability reasons. A carefully designed, coherent set of changes to the NEC would be required to achieve this recommendation, including greater reliance on non-network options to meet reliability criteria.

Introduce explicit incentives that penalise/reward transmission entities according to the availability of lines during times of most pressing market need

This is a worthwhile initiative, however it may not in itself be sufficient. For example, operating constraints are often a function of generator and load characteristics as well as network characteristics. Another issue is that market need may only emerge after a network element outage has commenced (for example through changes in bidding behaviour). For planned outages, it may be better for NEMMCO as FTR issuer to buy back FTRs before the outage so as to retain feasibility and to minimise incentives to game on the spot market. Ideally, buy-back would be to the account of TNSP. Likewise, it would be rational to reschedule outages if this would enhance the profits in sale/buy-back of FTRs.

Allow the number and location of regions to be set by the needs of the NEM

This is an important initiative and a more specific recommendation should be made.

Electricity financial market development

The draft report identifies important weaknesses in the present financial market arrangements and proposes a number of solutions, to which we have the following comments:

Abolish ETEF and BPA

Supported, as discussed above.

Improve transmission augmentation mechanism, introduce FTRs

Supported subject to qualifications as discussed above.

Disaggregate NSW and possibly Queensland generators, raise merger hurdles

Supported as discussed above but effectiveness would be subject to the feasibility of privatisation or divesting disaggregated long term rights to direct the operation of a power station.

Ensure all code changes take explicit account of financial market effects

Supported, subject to leaving final discretion with the NER (NEA), after taking costs and benefits into account.

Review in 1-2 years the need for NEMMCO to facilitate the introduction of a voluntary clearing service

Supported.

Demand side participation and full retail contestability in electricity

This section discusses demand side participation in markets but not the equally important issues of end-use efficiency, fuel switching etc, that are critical to a transition to a more sustainable stationary energy sector. The absence of an adequate discussion of the latter is an example of insufficient attention to dynamic efficiency, which we will return to under Greenhouse issues.

The relationship between energy conservation, load shifting and wider end-use energy efficiency, and the response of these to price signals is complex. The draft report identifies one major demand side barrier as that of ‘residential consumers do not see price signals’ (p. 105). It would be more correct to say that most consumers do not currently see pricing that reflects short-term prices in the wholesale market.

Exposure to short term prices are not a powerful driver for energy efficiency, as noted in the draft report (p. 106). The view that “it is clear that governments at all levels have extensive energy efficiency promotion programs which are well funded and active” (p. 106) would not seem to be supported by comparisons of Australian per capita spending in the sustainable energy area in comparison with other countries (Australia Institute, 2002). The clear evidence of present market failures in delivering cost effective end-use energy efficiency is highlighted by the outcomes of Federal AGO and ITR programs in this area.

For the important weaknesses in demand side participation identified in the draft report, and the solutions it proposes for these, we have the following comments:

Introduce FRC into all markets

The retail market design should encompass ancillary services, spot energy and derivatives, with a standardised forward contract structure for small end-users. The legal obligations of NSPs to their customers should be clarified at the same time. The intent should be to engage all end-users as active market participants over time and to address network issues as well as NEM issues. It may be appropriate to retain a franchise distributor/retailer for small end-users in some circumstances, particularly in rural areas.

Remove retail price caps

As indicated above, this should be done in the context of a standardised forward contract structure for small end-users that provide carefully managed risk exposure.

Mandate roll-out of interval meters for all NEM households

Supported as previously indicated. Metering should record key indicators of availability and quality of supply as well as market-interval energy.

Introduce 'pay-as-bid' mechanism into NEMMCO dispatch and pool price setting for demand reduction.

Demand side participation is very important but it would be better to address it by developing an efficient retail market design than by direct participation in the NEM. Direct participation in the NEM is already permitted and does occur to a limited extent. "Pay as bid" has particular problems with respect to hedging and locational pricing.

Gas industry issues

We believe that it is most important to improve the efficiency of the gas industry and we support the proposed solutions in the draft report.

The discussion of Government facilitation for new gas projects (p. 121) draws some interesting conclusions on market externalities that are useful to consider in the previous chapter on demand side options and the following chapter on Greenhouse Gas Emission reductions. In particular, the panel recognises that some benefits of new projects such as employment and enhanced energy security through diversity of supply are not directly captured by developers. In such market failures, they agree that there is a role for government incentives.

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