REVIEW OF NATIONAL COMPETITION POLICY ARRANGEMENTS—DISCUSSION DRAFT

SUBMISSION BY ORIGIN ENERGY

17 December 2004

Introduction

Origin Energy is a strong advocate of National Competition Policy (NCP) and this Review. There is overwhelming evidence on the gains to the economy from NCP to date and there are likely to be significant additional gains available from further reform in many areas (including energy).

Completion of National Competition Policy

Governments should complete all outstanding NCP electricity and gas reforms.

Origin considers it a matter of urgency that Governments complete all outstanding NCP electricity and gas reforms. While the NCP reform program is largely complete in most jurisdictions the failure on the part of one or two jurisdictions to complete critical reform tasks, such as full retail contestability, seriously jeopardises the delivery of a fully competitive national energy market.

The Commission has recommended that the Ministerial Council on Energy (MCE) give priority to five areas in addition to their current work program for further energy market reform. Origin has considered three of these areas under the general heading of 'efficient market structure' and the remaining two areas under separate headings.

Efficient market structure

In Origin's view, energy market outcomes such as price, cost, investment and reliability are a function of energy market structure. The role of governance and regulatory arrangements is to create an environment that fosters evolution toward an efficient market structure over time. Inappropriate government intervention, that which unduly influences the number, size and conduct of market participants, is likely to impede the market's natural ability to allocate resources efficiently. Integral to the idea of efficient market structure are four conditions:

1. sufficiently low barriers to entry (or market access) which enables the threat of new entrants to cap the pricing power of incumbents;
2. fully cost reflective and transparent price signals that achieve the least cost balance in demand and supply;
3. determination, under competitive market forces, of the number and size of players in the market, independent of political considerations; but subject to
4. robust national competition regulation that enhances the public interest by balancing the incentive for efficient investment, and, the scope for monopoly power.

The current energy market arrangements broadly satisfy the first two conditions of an efficient market structure, notwithstanding the fact that more progress needs to be made in some jurisdictions. Recent MCE energy market reforms are designed to increase market access and improve the cost reflectivity of price signals. Of particular importance are transmission related reforms designed to encourage efficient levels of inter-regional trade and transmission development. If implemented as envisaged, the result will be even greater levels of energy market competition.

The Trade Practices Act (TPA) and Australian Competition and Consumer Commission (ACCC) arrangements satisfy the fourth condition of an efficient market structure. In particular, Origin considers that the ACCC merger guidelines are effective in addressing potential abuse of market power issues in the energy sector (as they are for other sectors in the economy). The justification for introducing specific criteria to guide decisions in relation to mergers between energy sector participants has not been rigorously demonstrated.

Any departure from current arrangements, in addition to being unnecessary, is likely to damage investor confidence because of the additional uncertainty it will cast over investment decisions (which are already risky by nature). This is of particular concern given the massive energy infrastructure investment requirement projected for the coming decade. Equally, jurisdiction-based competition regulation, in the form of cross-ownership rules and retail price regulation of energy specifically, is unnecessary and costly in term of the additional regulatory uncertainty it creates for investors.

Origin is firmly of the view that substantial public ownership of energy assets throws into question the satisfaction of the third condition of an efficient market structure. The most efficient level of aggregation of energy businesses (in the contestable segments of the market) can only be arrived at via a continual process of competitive forces determining the most economic mix of business sizes, technologies and strategies. In theory asset ownership *per se* should not impact this process but in practice it appears to have done so in the energy sector.

Governments can attempt to replicate the outcomes that would be achieved as a result of competitive market forces, but may be compromised in this attempt, as outlined in Box 9.4 of the Draft Report. For example, if publicly owned businesses are willing to accept lower than market rates of return, made possible by having tax payers as shareholders, price may not be sufficient to recover long run costs and ensure adequate new investment, which in turn creates a barrier to new private entrants.

It is Origin's strong contention that public ownership in the energy market is by far the most significant threat to the attainment of a fully efficient market structure and the efficient market outcomes.

The Ministerial Council on Energy should give priority to resolving whether generator market power in particular regions is still excessive and if there is a need for further disaggregation of government owned generation businesses.

The presence of transient market power in particular regions is unlikely to be excessive under an efficient market structure. In industries characterised by relatively high fixed costs, the ability to price above variable costs at certain times is essential for recovery of total costs and, subsequently, for dynamically efficient levels of investment to occur. Moreover, an expectation by prospective investors that long run costs can be recovered is critical in order to attract investment capital to maintain and add to existing generation capacity. This process is driven by the price increases that signal where and when investment is required.

Market power could only be seen to be a problem, in Origin's view, where it is unequivocally persistent and enduring, as the normal market mechanisms of new entry, or its threat, are likely to be insufficient to temper such market power. Potential sanctions under TPA and ACCC arrangements (in addition to provisions under National Electricity Law) are designed to temper such market power. In these circumstances disaggregation may be warranted, but, as the Federal Court of Australia found in relation to the AGL-Loy Yang Power acquisition, and in light of extensive legal and economic evidence, no such market power problem is apparent at the current time.

The MCE should instead give priority to ensuring a fully efficient market structure by addressing public ownership issues, rather than focussing on market power *per se*. This is a question for the ACCC to assess as part of the existing TPA framework, which Origin considers effective in addressing competition issues.

The Ministerial Council on Energy should give priority to assessing whether processes for screening the competition implications of any reintegration in the electricity industry need strengthening.

Reintegration and indeed disaggregation within contestable segments of the energy market is totally appropriate under an efficient market structure. Because retail and generation businesses were initially disaggregated by their government owners with a view to 'kick starting' competition it is reasonable to expect that a degree of consolidation might follow. Where there are genuine synergies available from reintegration (in risk management for example) there will be strong incentives for private businesses to adjust their business strategy to capture additional benefits. Competitive forces will ensure these benefits are passed onto consumers under an efficient market structure. There is no evidence that Origin can find that reintegration between competitive elements of the industry is inefficient or harmful to consumers. In this regard it is instructive to note that in the UK market significant consolidation and vertical integration have been associated with lower, not higher, prices.

Equally, private businesses may be able to create additional value by disaggregation. It should be noted that disaggregation, as well reintegration, has occurred in energy markets with the result that South Australian and Victorian consumers are benefiting from the increased economies of scale arising from the unstapling of retail and distribution companies, and their consolidation into large businesses focussed on either the regulated or competitive elements on the industry.

Again, the MCE should give priority to ensuring a fully efficient market structure by addressing public ownership issues, rather than focussing on the competition implications of re-integration *per se*. This is a question for the ACCC to assess as part of the existing TPA framework, which Origin considers effective in addressing competition issues. Moreover, State-based cross-ownership regulation should be phased out.

The Ministerial Council on Energy should give priority to improving the efficiency of retail price and access regulation, with particular emphasis on achieving nationally consistent principles and ensuring there are appropriate incentives for investment.

Price regulation in the contestable segments of the energy market is unlikely to be necessary under an efficient market structure. Retail price regimes were maintained by each jurisdiction with the introduction of FRC, and continue to be used in many jurisdictions to pursue social policy objectives, independently of market power issues.

In Origin's view there is no economic, or indeed public interest, justification for having effectively two layers of competition regulation over energy retail pricing as a permanent feature of the regulatory architecture. The balancing role of the national competition regulator, referred to in condition four above, is fundamentally the same across different energy and non energy sectors in the economy. Jurisdiction-based competition regulation is in effect duplicating the role of the TPA and ACCC arrangements which were designed to regulate competition for the economy as a whole.

Origin acknowledges the political sensitivity of retail energy prices and vulnerable energy consumers, but considers jurisdiction-based price regulation inappropriate as a social policy tool. As pointed out by the Commission, the danger is that if retail energy prices are unduly suppressed under these arrangements for too long, and investment in energy infrastructure capacity sufficiently deterred, the entire energy delivery system in Australia may be at risk of reliability failure. Origin agrees with the suggestion in the Draft Report that vulnerable consumers would best be supported via transparent community service obligations rather than through regulation and suppression of prices.

It is Origin's strong contention that retail price regulation should be removed in order realise the benefits of a fully competitive energy market. In the interim, all jurisdiction-based retail price regimes should be governed by a nationally consistent set of principles. Beyond an interim period all regulatory oversight of retail energy prices should be the exclusive responsibility of TPA and ACCC arrangements.

Origin considers current arrangements for regulation of access to natural monopolies broadly effective. Origin also supports the bulk of improvements recommended in this area as a result of the Commission's recent Inquiries into the National Access Regime and the Gas Access Code.

National approach to greenhouse gas abatement

The Ministerial Council on Energy should give priority to contributing to the development by CoAG of a more effective process for achieving a national approach to greenhouse gas abatement — CoAG should immediately take a greater role in addressing fragmentation and uncertainty in relation to greenhouse gas abatement.

Notwithstanding current coordination arrangements in this area, divergent approaches by governments to dealing with greenhouse gas emissions, as well as uncertainty about future policy directions, are impeding necessary investment in many parts of the economy. Origin strongly concurs with the Productivity Commission observation that CoAG has not translated the Parer recommendation of an economy wide emissions trading scheme into policy. Further the optimum way of delivering consistency and investment certainty is through such a scheme, and therefore, the planned implementation of such a scheme should be addressed as a matter of urgency.

The need for deep cuts to greenhouse gas emissions

In Origin's view early action to address regulatory fragmentation and promote greater policy certainty is a matter of urgency. Heavy investment in energy infrastructure must factor in the probable requirement for deep cuts in emissions in future periods.

The greenhouse debate has moved on. Whereas only a few years ago there was quite some focus on whether or not anthropogenic emissions are causing climate change, there is now no disagreement that long term deep cuts in greenhouse emissions are required in order to stabilise CO2 concentrations in the atmosphere. This raises two questions: by how much do we need to reduce emissions and what is the right policy framework to achieve those reductions while preserving Australia's competitiveness.

Both the Federal Minister for the Environment, Ian Campbell and the Chief Scientist for the Australian Government, Robin Batterham, recently reinforced the widely held view that Australia needs to reduce its emissions by 50 per cent by 2050, and perhaps 80% by the end of the century. The difficulty of this mammoth task cannot be underestimated, and must be put in context of the current projections through to 2020. Taking for example the energy sector, for which the ABARE July 2004 forecast provided an outlook over this timeframe, emissions from electricity generation are expected to increase from the current 130 per cent of 1990 levels to 166 per cent by the end of the next decade. And this assumes a strong growth in the use of gas and a decline in the emission intensity of all fuels, leading to a reduction in emission intensity from its current 0.85t per MWh to 0.70t per MWh. The illustration also serves to highlight that the achievement of a 2008-2012 target, with or without the assistance of land clearing, becomes irrelevant in the context of the need for greater cuts in the longer term.

Clearly, any Business-As-Usual approach will lead to a dramatic rise in absolute emissions, from which the achievement of 50 per cent of 1990 emissions by 2050 becomes even more difficult, and therefore more costly. There can be no doubt that

research and development, and ultimately deployment, of new technologies will form a critical part of the necessary response. But it is not sufficient or prudent to await their advent because even after the costs of the new technologies are established, there needs to be an incentive to drive their implementation.

Origin contends that a comprehensive greenhouse policy framework is required; one which facilitates and drives the development of new technologies, but also provides a signal for the appropriate deployment of all technologies including existing options, thereby putting the economy on an appropriate glide path towards achieving deep cuts at lowest cost. If deep cuts are required, it is not sufficient to begin by allowing emissions to grow unchecked.

Need for Investment Certainty

The Australian Government's recent White Paper "Securing Australia's Energy Future" reported the electricity industry as requiring $37 billion in investment to meet growing demand, estimated to increase by 50% through to 2020. In this context, the need for a stable policy framework that provides certainty for investors is universally recognised. However, the lack of a comprehensive greenhouse policy is arguably the biggest source of uncertainty for investors, particularly those considering new baseload generation.

It is clear that the stationery energy sector needs to play a major part in the reduction of emissions, as it contributes around half of Australia's emissions, and is the fastest growing sector. Emissions in 1990 were 209Mt, increasing to 262Mt in 2002. In that context investment certainty cannot be provided merely by asserting that there will be no carbon constraint. A stable framework is characterised by all potential investors understanding the basis on which investments are made and the extent to which they may be exposed to a carbon signal. This is critical given the long lead time of energy assets, and the fact that decisions made in the next few years will define the emissions profile beyond 2020.

> The long life of energy infrastructure also means that even long-term objectives can be affected by near-term decisions. Electricity plant built in 2004, for example, will still likely be operating in 2050 and beyond, and so contribute to Australia's emissions profile over that period (Securing Australia's Energy Future p140)

For that reason, it is essential that a domestic greenhouse policy framework be signalled early, even if implemented further down the track. Certainty for coal, gas or any other technology is therefore provided by every investment decision incorporating the long term greenhouse output of the plant. In addition, a comprehensive and national policy will render unnecessary the multi-layered policies currently being applied by various state and federal governments and agencies, sometimes on a project by project basis.

Role for Market-Based Measures

The Parer report to CoAG in 2002 recommended a broad-based economy wide emissions trading scheme as an effective response to greenhouse policy. This recommendation was based on the very sound principle that emissions reductions should be undertaken at least cost. If deep cuts are required, it is incumbent on policy makers first to set an appropriate target, and then ensure that it is met at the lowest possible cost; any other outcome penalises the Australian economy unnecessarily. This was also recognised in the Federal Government's White Paper.

> Should an effective global response be in prospect, the government will consider least-cost approaches to constraining emissions. This consideration would encompass the possible introduction of market-based measures (such as emissions trading) in the longer term, noting the potential for these to lead to a better resource allocation and provide industry and individuals with the greatest flexibility in determining how best to respond (Securing Australia's Energy Future p149)

The role of a market-based measure goes beyond providing investment certainty in new entrant decisions. In providing a carbon signal in the near to medium term, it can drive the development of existing, more greenhouse efficient technology such as super-critical plant, upgrades to existing plant, gas-fired combined cycle gas turbine (CCGT) and cogeneration. The GGAP process run by the AGO showed that there are a multitude of greenhouse abatement projects available at below A$10 per t CO2. In the longer term, as new technologies emerge from the R&D phase into the pre-commercial phase, the carbon signal will ensure their widespread deployment if their abatement cost is lower than the prevailing long term market price of carbon. Arguably, the creation of a financial incentive to drive greenhouse abatement will lead to the mobilisation of capital towards the very R&D activities that yield the breakthrough technologies. So Governments are not only less relied upon for funding for R&D activities, they are also freed from the requirement to "pick winners", leaving it to the market to determine how best to meet the required targets.

Origin recognises that there is a multitude of potential schemes capable of providing the carbon signal and investment certainty. There is a commonly used set of criteria that can be used to assess various policy responses, and to articulate what characterises good policy in that regard:

i. Effectiveness can be defined as the extent to which the scheme achieves targeted greenhouse reductions including the certainty with which it can be expected to deliver the desired target.

ii. Efficiency can be defined as the extent to which the scheme achieves a given greenhouse reduction target at least cost. This includes the cost of abatement and the transaction costs associated with implementing and operating a scheme.

iii. Administrative Simplicity. The minimisation of administrative costs and the simplicity and transparency of the regulations and regulatory processes are key requirements of a successful scheme.

iv. Distributional equity refers to the allocation of the burden of greenhouse reduction across society. The competitiveness of businesses relative to interstate and international competitors is a key consideration. Equity transfer between sectors of the economy (for example from taxpayers or consumers to the renewable energy sector) must also be considered.

v. Political feasibility. The scheme needs to be placed in the context of the political environment and assessed for its acceptability in the electorate.

vi. Compatibility with other schemes both domestically and internationally, with a view to the evolution of global policy, needs to be assessed. The fungibility of credits or permits is a key consideration. Compatibility with the future direction of international carbon trading (as provided by the EU leadership) is arguably more important than compatibility with existing domestic State-based measures.

In Origin's view, the attractiveness of emissions trading, particularly cap-and-trade emissions trading, arises from its proven effectiveness in guaranteeing a known environmental outcome at least cost. It is also readily acceptable in an international context, as it is the model adopted by the European Union in their emissions trading system, the largest carbon market in the world.

What happens if there is no carbon signal?

The continually optimistic forecasts for gas growth, relative to the somewhat lower actual growth rates, serve to illustrate one of the effects of the lack of carbon signal. Gas-fired CCGT projects are promoted for their low greenhouse intensity, around

0.4t/MWh compared to the cleanest coal around 0.85t/MWh. However, due to the relative economics, the vast majority of new baseload power stations in recent years have been coal-fired, displacing the potential gas-fired market. A modest carbon signal of less than A$10/tCO2 would see new entrant CCGT compete effectively with coal, thus providing a low cost source of emission reductions.

Fuel switching is just one of the many forms of existing technologies available today that could be deployed in the drive to find greenhouse abatement. Other technology options include the reduction of flaring, the use of super-critical boilers, energy efficiency, cogeneration, and upgrades to existing plant. The lack of a carbon signal renders many of these options commercially unviable, leading to higher emissions than would otherwise be the case. Investments that have been made in areas such as plant upgrades would have been even more economic had a carbon signal been in place.

There is a suitable and necessary focus on the delivery of future low emissions technologies, recognising that existing technologies will not be sufficient to deliver the required reductions in emissions. Technologies such as mechanical thermal expression of lignite and geo-sequestration may well have a place in a future energy mix, and there is clearly a role for the encouragement of R&D activities in this area. However, a focus on R&D, while important in its own right, is not sufficient of itself to drive the widespread deployment of commercialised new technologies. This was a theme identified in the White Paper:

> Gains from new innovations are realised only with widespread adoption, which generally lags the original concept by a long period of time. For example, several decades passed before gas turbines that were derived from military jet engine improved in efficiency and reliability to the point that they were cost-effective for electricity generation (Securing Australia's Energy Future p164)

If a low emissions coal-fired power station was built using the Low Emissions Technology Fund, and the cost range was narrowed down, it remains self evident that the costs of such a plant would still be higher then prevailing conventional plant (which did not sequester its greenhouse output). Even if clean coal technology was viable at, say, A$10 per t CO2, it would still require a carbon signal to provide a commercial stimulus for its widespread deployment through the industry. Without the carbon signal arising from a government decision to limit carbon, it would remain in the pre-commercialisation phase of the technology development cycle.

Another concern arising from the lack of a comprehensive national greenhouse framework is the fragmented approach by Governments. This has been observed not only in the proliferation of State-based schemes such as the NSW Benchmark Scheme and the Queensland GEC Scheme, but the project-by-project intervention of various State Governments through planning and environmental laws, and even the federal Government through initiatives such as the Generator Efficiency Standards. Such intervention has been a direct threat to investment, as evidenced recently both in New South Wales with the Redbank 2 plant and Victoria with Hazelwood's application for an extension of its mine licence. A market-based measure would allow investors to incorporate the greenhouse implications into their decisions, and free Governments and their agencies and regulators from the urge to regulate on a project-by-project basis.

Addressing International Competitiveness

One of the key reasons cited for not implementing a market-based measure is the effect of higher energy prices on industry, particularly internationally-exposed energy intensive industry. It is argued that any carbon impost will drive these industries offshore, resulting in an economic cost for Australia with no global reductions in greenhouse emissions.

This contention needs to be critically examined on several grounds. Energy costs, while critical to these industries, are among a range of factors that are considered when

determining investment risk. The White Paper quoted the Resource Stocks World Investment Risk Survey of 2003 which ranked Australia "number one in the world across a wide range of risk factors for energy and mineral industries". It should also be noted in this context that Australia has one of the lowest electricity prices in the world, and its cost has reduced substantially in real terms over the past decade, due to a major extent to the microeconomic reforms over that period. Therefore, while none of the elements contributing to the favourable investment environment should be taken for granted, it is arguable whether a small change in one factor would drive investment offshore.

More importantly, it is not an inherent feature of an emissions trading regime that energy intensive industries find themselves exposed to the extent that they will be driven to invest offshore. For example, Parer Review suggested that all such industries be exempted from the scheme. In New Zealand, companies or projects that can show that they are exposed to international pricing can apply for an exemption, and in return commit to follow World's Best Practice in relation to greenhouse in that specific industry.

It is acknowledged, however, that the most efficient (and therefore least cost) scheme would be as broad-based as possible. If energy intensive industry does not see a signal and does not factor the value of carbon into investment decisions, the onus on the rest of the economy becomes greater not only to fund the required abatement, but also to find the additional abatement to account for any new investments by the energy intensive sector. Of course within the framework of a broad-based scheme, there would be considerable flexibility in the design. The allocation of initial permits, for example, represents a mechanism for addressing the issue of distributional equity, allowing the burden on any specific sector can be ameliorated. There is no doubt that the resolution of the distributional equity issue via permit allocation will be contentious and will take some time to resolve. A commitment towards the comprehensive policy framework described earlier will enable the analysis and debate to commence.

When should it be introduced?

It is important to distinguish between the timing of the policy announcement from the timing of its implementation. While Australia is on track to meet its 108 per cent target by 2008-2012 and there appears no requirement for further constraint during that period, this does not obviate the need to put in place the policy framework required for emissions reductions in the longer term. It is difficult to contemplate that a post-2012 target, regardless under which international framework it is negotiated, would be any more lenient than Australia's 2008-2012 target. This suggests that a market-based mechanism should be in place for the period following 2008-2012.

There is little benefit to be achieved by delaying the decision to commit to the post-2012 scheme. Investment certainty for the near and medium term will be provided if all industry knows upfront that a framework for valuing carbon will exist in the longer term, and that no "carbon holiday" can be assumed by new entrants. While investors will need to take a view on the actual quantum of the carbon signal, just as they will need to take a view on all other costs and benefits of their proposals, it will be on the basis of a stable and practical greenhouse policy.

This clearly provides a suitably long lead time for the details of the scheme to be developed. One of the key features of a cap-and-trade emissions trading scheme is the flexibility in the setting of targets, and this will be a key design element. It should be done in such a way as to not expose the Australian economy to excessive costs ahead of its competitors. There is a large and growing body of knowledge, both domestic and global, informing the debate on the various design elements of such schemes, and this knowledge can be utilised to ensure that the local scheme specifically deals with the unique characteristics of Australia's economy. In addition, lead time can provide for

capacity building within industry in areas such as greenhouse measurement, reporting, verification and validation, ultimately leading to greater confidence in traded markets.

Independent monitoring of energy market reform program

The Ministerial Council on Energy should give priority to establishing a process for independent monitoring of the implementation and outcomes of the energy reform program and a stocktake of progress in 2009.

Origin considers that the energy reform program can be judged a failure if all it delivers is another layer of regulation above existing jurisdiction-based regulation. This would not only mean that further reforms had failed but that, overall, reform had slid backwards because of the cost on the market of over-regulation. Experience under NCP to date suggests that there may be inertia to further energy market reform in some areas. Effectively tackling this inertia is a role for CoAG.