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Ms Anthea Harris
Project Leader
National Emissions Trading Working Group Secretariat
The Cabinet Office
GPO Box 5341
SYDNEY NSW 2001

22 December 2006
Re: *Possible Design for a National Greenhouse Gas Emissions Trading Scheme*

Dear Ms Harris

AGL Energy (AGL) welcomes the opportunity to provide a submission on the discussion paper prepared by the National Emissions Trading Taskforce: *Possible Design for a National Greenhouse Gas Emissions Trading Scheme*.

AGL is committed to engaging with Government and other stakeholders about the most efficient way to reduce greenhouse gas emissions. The AGL Greenhouse Gas Policy calls upon the State and Commonwealth Governments to agree on a national greenhouse gas reduction target for 2050 with clear interim milestones. AGL supports the use of market mechanisms (including emissions trading) to achieve this goal.

To ensure ongoing consultation, AGL believes that representative groups should be established to provide input on the features of the proposed scheme. Representative groups should incorporate industry participants (such as AGL), community groups and environmental stakeholders.

Please find enclosed AGL's submission. Should you require further information, please contact Tim Nelson, Manager Carbon and Renewable Strategy on (02) 9921 2516 or by email at tanelson@agl.com.au.

Yours sincerely

Jeff Dimery
General Manager
Merchant Power

AGL ENERGY SUBMISSION ON POSSIBLE DESIGN FOR A NATIONAL GREENHOUSE GAS EMISSIONS TRADING SCHEME

1. Introduction

AGL Energy (AGL) is Australia's leading energy company. AGL is well placed to comment on emissions trading because of the diversity of our operations. We operate across the supply chain and have investments in energy retailing, coal-fired electricity generation, gas-fired electricity generation, renewables and upstream gas extraction. The diversity of this portfolio has allowed AGL to develop a detailed understanding of the risks and opportunities presented by climate change policy and emissions trading.

AGL is Australia's largest retailer of gas and electricity with 2.8 million customers in New South Wales, Victoria, South Australia and Queensland. We also have an additional 0.8 million customers in the Australian Capital Territory and Western Australia through joint ventures with ActewAGL and AlintaAGL. AGL has significant investments in upstream energy markets. We own and operate 645 MW of hydroelectric power generation assets and the Somerton and Hallett gas-fired power stations. AGL also has a 32.5% equity investment in the Loy Yang A power station.

AGL is developing a number of new energy assets. It is important to note that all of these assets are consistent with a carbon constrained future. The assets in development include Hallett wind farm (95 MW), Bogong hydro power generator (140 MW), Hallett gas-fired power station expansion (250 MW), Townsville gas-fired power station (370 MW), Bluff wind farm (45 MW), Dollar wind farm (79 MW), Macarthur wind farm (330 MW) and Leaf's Gully gas-fired power station (300 MW).

2. Climate Change Policy Overview

AGL recognises that climate change is a critical issue facing all countries. AGL accepts the scientific consensus that greenhouse gases in our atmosphere need to be stabilised at concentrations below 550 parts per million so as to avoid 'dangerous' climate change. Based upon this principle, AGL believes that policies should be developed internationally and nationally that place Australia on a pathway of reducing its greenhouse gas emissions in a way that is compatible with this objective.

It is crucial that Australia continue to engage with other nations on the need to reduce global greenhouse gas emissions. Without a broad international agreement that includes all emitters over the longer-term, achieving the stabilisation objective outlined above will be impossible. That said, AGL supports appropriate early action taken by Australia to reduce emissions.

It is important that governments focus on all sources of greenhouse gas emissions. In Australia, this should include stationary energy, transport, agriculture, industrial emissions and waste. Policies should be developed which allow for reductions in all of these sectors. AGL does not necessarily believe that each sector should be covered by emissions trading or another single policy. However, policies should be established to ensure that overall emission reduction requirements are fairly distributed across these sectors.

There are likely to be a range of appropriate non-emission trading policy responses for individual sectors. For example, it may be more efficient in the transport sector to require new vehicles to meet increasingly stringent emission intensity targets (thereby encouraging the use of fuels such as LPG, CNG and hybrid vehicles). The level of abatement required in individual sectors should be determined using the following two principles:

- **Lowest Marginal Costs:** Theoretically, abatement should be pursued in each sector so that the least cost options for reducing emissions are pursued up to the point where the abatement task is achieved.
- **Equity:** Some sectors will have significantly more lower cost opportunities than others. Consideration will need to be given to ensuring that sectors are not disproportionately

burdened on the basis of cost. Each sector (with the possible exception of agriculture) will have scope for reducing emissions in the longer term through the deployment of new technologies. Policies should be developed to ensure that technological development is pursued across all sectors, not just stationary energy.

In the stationary energy sector, AGL believes that there are two policy drivers necessary to reduce greenhouse gas emissions: policies to encourage the development of low emission technologies and market based policies that provide a financial incentive for low emission technologies to be deployed. There is significant potential for the States and Commonwealth to combine existing approaches such as the proposed State-based emissions trading scheme and the \$500 million low emission technology fund.

3. AGL Greenhouse Gas Policy

AGL supports the development of an emissions trading scheme to reduce greenhouse gas emissions. However, a national emissions trading scheme should be developed jointly by the States and Commonwealth. The development of a State-based scheme would be a second-best outcome.

The AGL Greenhouse Gas Policy supports the establishment of a long-term greenhouse gas emissions reduction target for 2050 and the creation of market-based mechanisms to achieve this goal. Notwithstanding current uncertainties, AGL believes that a prudent approach is to internally cost carbon in current business decision making.

AGL supports Australian Governments reaching agreement on policy principles for the management of greenhouse gas emissions. The proposed principles are:

- National management: Greenhouse gas abatement policy and measures should be developed on a national basis. The intent of existing State based schemes should be incorporated into a national scheme to avoid confusion, lower compliance costs and achieve uniform outcomes.
- Clear policy objectives: A clear emissions reduction objective should be set and be consistent with international approaches to emissions reduction.
- Economy wide approach: Greenhouse gas abatement should be tackled across all sectors of the economy.
- Least cost abatement: Greenhouse gas abatement should be pursued on a least cost basis. This may involve the introduction of a carbon trading scheme so that least cost outcomes, such as efficiency of use and the inclusions of offsets, can be determined by the market. AGL believes that the use of natural gas in the generation of electricity will prove to be a significant low cost way for Australia to reduce greenhouse gas emissions. Impediments to least cost outcomes should be avoided.
- Management of price impact: Clear consumer price signals should be allowed. Price shocks to energy end users and export industries should be minimised through phased programs and long-term policies.
- Coverage: Greenhouse gas abatement policy should cover carbon dioxide equivalent and therefore all of the six main greenhouse gases.
- Equitable allocation of emissions rights: A critical factor relates to the allocation of an emissions base, and rights to emit. Investments made in the context of current regulatory settings should be recognised. For example, equitable 'grandfathering' of emission levels should be considered.
- Administrative simplicity: A national approach should be administratively simple and facilitate international linkages.

- Development of new technologies: Technologies that can reduce greenhouse gas emissions should be supported.

4. The Proposed Emissions Trading Scheme

AGL strongly supports a national approach to emissions trading. There is considerable effort being made by Governments and industry to further enhance the national character of the Australian energy market. Implementing a State-based emissions trading scheme would be inconsistent with this work. The major risks associated with implementing anything other than a national scheme are:

- **Perverse Policy Outcomes.** If an emissions trading scheme is implemented in one or more jurisdictions but not all jurisdictions, investment decisions may be distorted and greenhouse emissions may actually increase. All of the States and Territories (except WA and NT) are, or soon will be, connected through the national electricity market. A scheme that is not implemented in all States and Territories could simply result in greenhouse intensive energy being exported by the non-covered jurisdiction (carbon leakage).
- **Higher Transaction Costs.** One of the primary objectives of the national energy market reform process is to minimise the different regulatory requirements in each of the jurisdictions. Most energy retailers compete in a number of States. Different regulatory requirements impose unnecessary costs on retailers which lead to higher end prices for consumers. Multiple greenhouse trading schemes (e.g. NSW Greenhouse Gas Abatement Scheme, 13% QLD Gas Scheme and Mandatory Renewable Energy Target) impose unnecessary costs on retailers and consumers.

AGL supports the use of a sector based approach to setting the cap. A single emissions cap should be set for the overall scheme rather than a series of State-based caps. The market is best placed to determine the most cost effective way of reducing emissions.

Every effort should be made to utilise existing regulatory bodies and structures. Significant expertise has been developed through the NSW Greenhouse Gas Abatement Scheme, Mandatory Renewable Energy Target and 13% QLD Gas Scheme. Registries and scheme administrators have been put in place for each of these schemes. There is likely to be significant scope for utilising this infrastructure in developing an emissions trading scheme.

5. Commencement Date of the Proposed Emissions Trading Scheme

AGL supports the proposed commencement date of 2010. However, it is crucial that the rules underpinning the operation the scheme are known well before this date. If adequate notice of the rules is not given, there is likely to be significantly more permit price volatility early in the life of the scheme. AGL believes that there is sufficient time for the development of the legislation, rules and other instruments well ahead of its proposed commencement in 2010.

6. Coverage of Emitters

In previous submissions, AGL has stated that when assessing which sectors should be covered, the following principles should be used:

- **Potential for Emission Reductions:** Sectors that have no potential to reduce emissions should not be covered by an emissions trading scheme. Instead, policies should be established that focus on technological improvements and other factors that will drive emission reductions over time.
- **Suitability of Emissions Trading:** Some sectors are more suited to emissions trading than other policy responses and vice versa. For example, it would be very difficult to place liabilities on farms because of livestock emissions. Nonetheless, Governments should develop further emission reduction policies for sectors that are not suited to emissions trading.

- Emissions Contribution of Sector: Consideration should be given to the total emissions of the sector relative to the overall emissions footprint.
- Existing Reporting and Regulatory Frameworks: Where possible, existing regulatory and reporting frameworks should be used to minimise the reporting burden on businesses.

The Taskforce is currently recommending that the electricity generation sector be covered when the scheme commences in 2010. Each generator with a capacity greater than 30 MW would be required to hold permits for each unit of emissions produced. AGL supports this approach.

In addition to this initial coverage, the Taskforce is recommending that other stationary energy participants be covered by the scheme five years after its commencement. Stationary energy sites that produce more than 25 kt of carbon dioxide equivalent each year would be required to hold permits for each unit of emissions produced. Gas retailers would be responsible for imputed emissions arising from gas sales to customers. AGL supports this approach on the condition that the Taskforce recommendation, that additional sectors and emission caps be set before the scheme commences in 2010, be adopted.

It is not clear why gas retailers have been selected as liable parties for imputed emissions arising from gas sales to customers. Given that most gas production facilities will be producing more than 25 kt of carbon dioxide equivalent, these sites will already be covered by the scheme. It would be very easy to calculate the imputed emissions associated with sales by major gas producers. Furthermore, the number of companies being covered would also be significantly lower.

In this context, it is important to note that AGL is both a gas producer and gas retailer. For administrative simplicity, AGL believes that gas producers rather than retailers should be responsible for imputed emissions arising from gas sales. To ensure that trade exposed gas producers are not adversely impacted, permits could be allocated as outlined in the discussion paper for other trade exposed energy intensive industries.

AGL has significant concerns about the Taskforce recommendation to phase in additional sectors after the scheme has been operational for five years. The phase in of additional sectors could significantly alter the overall emission reduction target and the level of abatement available to meet it. As the price of permits will be determined by the overall target and the cost of abatement options available, phasing in additional sectors is likely to significantly alter long-term prices and lead to increased price volatility.

Because of these price impacts, including additional sectors after the scheme is established and operating has the potential to significantly alter the commercial viability of investments in low emission technologies and abatement projects. This will increase the risk premium that is applied to new projects and increase the overall cost of compliance. If additional sectors are to be included, a period of at least five years notice should be given to minimise any price volatility.

It is unclear from the information provided in the discussion paper why the Taskforce has recommended against covering petroleum refineries and the transport sector generally. The paper states that:

'The increase in oil prices over the last two years is equivalent to an emissions price of around \$180 per tonne of carbon dioxide equivalent, which is significantly greater than any change in relative prices that might occur under an emissions trading scheme.'

The response of consumers to price changes is heavily dependant upon their expectations about the duration and permanency of the price change. Permanent price changes such as those created by an emissions trading scheme would have a much greater effect than price changes perceived by customers as temporary in nature. The increase in oil prices over the past few years has resulted in some changes in consumer behaviour. This is evidenced by the increased uptake of efficient diesel engines, hybrid electric engines and increased sales

of smaller passenger vehicles. There may be significant potential for reducing emissions in the transport sector at lower costs as a result of the shorter capital investment timeframe relative to the electricity sector (i.e. vehicles are replaced more frequently than power stations).

7. Coverage of Greenhouse Gases

The proposed emissions trading scheme should be focused on reducing anthropogenic emissions. Industry is best placed to determine the most cost effective way of achieving such a reduction. AGL is not opposed to the inclusion of all six greenhouse gases under the Kyoto Protocol. Reducing emissions of gases other than carbon dioxide may be a more cost effective way of reducing greenhouse gas emissions in the short-term than reducing emissions of carbon dioxide.

However, the scheme should also be designed to minimise compliance and administration costs. In this context, reporting should be as simple as possible. The use of carbon dioxide equivalent (CO₂e) should be used to minimise the reporting burden. A simple format should be used where standard conversions are utilised to report an aggregate measure of emissions based upon their global warming potential.

8. The Overall Scheme Cap

The overall national emissions abatement target should be related to the overarching outcome being pursued: the stabilisation of greenhouse gases in the atmosphere at an acceptable level. Given that greenhouse gas emissions occur all over the world and there is still no universally accepted view by Governments about the reductions that individual countries should pursue, some degree of estimation will be required.

It is crucial that a long-term target for the entire economy be set as soon as possible and based upon the best available scientific information. Once an economy wide target is set (e.g. 60% reduction in emissions by 2050), consideration should be given to setting a collective target for those sectors covered by the emissions trading scheme and all other sectors. It is unclear why and how a target for the electricity sector would be set in the absence of a national target being in place.

9. Duration and Trajectory of the Caps

The discussion paper states that firm annual caps would be set for the first 10 years of the scheme. A range of possible future caps ("gateways") for the following decade would also be set. Each year after the scheme commences, governments would announce a firm cap for an additional year (within the initial gateway) on a rolling annual basis. Every five years, the gateways would be updated and extended by a further five years.

AGL supports the setting of firms targets for the first 10 years of the scheme. This will provide a significant amount of certainty for investors in new energy generation. While AGL also supports the concepts of gateways for the periods after 2020, AGL believes that they should be updated in the same way as proposed for the annual caps: extended by a year on a rolling annual basis. Gateways would then effectively be consistently set for at least the ten year period beyond the period of firm caps.

The gateways set should balance the policy objectives of certainty for business investment and flexibility for environmental effectiveness. AGL believes that an actual target should be identified for each of the years beyond 2020 (and up to 2050). The target identified would be consistent with the overall objective of the scheme, reducing emissions to assist Australia in meeting its obligations to stabilise the concentration of greenhouse gases in the atmosphere. A fixed percentage variation would then be used on each of the targets to identify an appropriate gateway (e.g. +/-10%).

AGL believes that the timeframe outlined in the discussion paper is not long enough. Investments in energy infrastructure often have lifetimes of 40 years or more. A long-term gateway should be set for emissions up to 2050 to provide investment certainty. As outlined

above, the target set should be informed by the overall national target adopted to meet Australian obligations to stabilise greenhouse gas emissions in the atmosphere.

Given that technological developments are required to reduce emissions in the future, the targets should be relatively small in the first few years of the scheme and gradually increase over time. This gradual 'transitioning' of the economy will minimise the economic costs associated with reducing emissions. The shape or trajectory of the targets outlined in the discussion paper is consistent with this principle. The report "Options for Moving Towards a Low Emission Future" by AGL, WWF-Australia and Frontier Economics outlines the costs associated with pursuing different pathways. A copy has been attached to this submission.

10. Adjusting the Cap for Increased Coverage

AGL does not support broadening coverage of the scheme after it commences (unless coverage timetables and new caps are known before the scheme commences). As the price of permits will be determined by the overall target and the cost of abatement options available, adjusting the cap after the scheme commences is likely to significantly alter long-term prices and lead to increased price volatility.

11. Banking and Borrowing

AGL supports the inclusion of banking and borrowing in the proposed emissions trading scheme. Banking adds to the environmental effectiveness of the scheme (by allowing early abatement to be recognised in later periods). AGL believes that market participants are unlikely to bank permits for long periods of time. This is because there is an opportunity cost associated with holding permits (i.e. if they were sold, the money obtained could be used to earn interest). The inclusion of limited borrowing would ensure that liable parties are not penalised for relatively small mistakes made during the course of the scheme that have no bearing on its environmental effectiveness.

12. Penalty

The discussion paper states that a civil penalty for non-compliance (i.e. not holding the required level of permits) should be set at a level that caps the cost of the scheme at an acceptable level but also encourages compliance. AGL supports this approach.

The penalty should be set just above the estimated marginal cost of compliance (determined by economic modelling). By setting the penalty at this level and adjusting the penalty over time to account for inflation, there is no financial incentive for industry to avoid reducing emissions. However, if the modelling has significantly underestimated the cost of compliance, the penalty will act to cap the cost of the scheme. This will provide business with investment certainty.

If a business fails to meet its obligations, the penalty paid should be used by government to purchase additional abatement. This would remove the need for a 'make good' provision. If penalty payments are assigned to an abatement fund, AGL does not believe that there is any justification for inclusion of a make good provision.

13. Offsets

AGL supports the inclusion of domestic offsets in the proposed emissions trading scheme. Offsets are a key way of reducing the cost to business of complying with the scheme while ensuring that environmental outcomes are achieved. All forms of offsets such as industrial activities and forest sequestration should be included in the scheme.

However, it should be noted that there is a trade-off between the target adopted and offsets. This needs to be taken into account when assessing whether offsets should be permitted. As outlined in a previous section, AGL believes that targets should also be set for other sectors. If projects from these sectors are permitted as offsets in the emissions trading scheme, targets will need to be adjusted to ensure environmental effectiveness.

The Taskforce has considered a range of offsets and AGL broadly supports the approach taken by the Taskforce for each offset category. In particular, AGL strongly supports the eligibility of projects relating to the collection and combustion of methane from landfills and from wastewater and other treatment facilities. These projects are currently economic as a result of the NSW Greenhouse Gas Abatement Scheme. Continued eligibility under the proposed emissions trading scheme would ensure their continued operation.

AGL is less supportive of the inclusion of international offsets in the proposed emissions trading scheme. The purpose of the emissions trading scheme is to reduce Australian emissions relative to an Australian target (which has been set to achieve a global objective based upon other nations adopting similar initiatives). The inclusion of international offsets will only be environmentally effective if other nations have similar targets over similar timeframes. If international offsets are to be permitted, AGL supports the Taskforce's recommendation regarding consistency with the mechanisms developed under the Kyoto Protocol.

It is important to note that there is no 'magic pudding' with regard to emissions trading and international offsets. If international offsets, and in particular Clean Development Mechanism credits, are included in the scheme, Australian energy consumers will effectively be paying for emission reductions in other countries that do not have the same emission reduction obligations. International carbon trading will only be environmentally effective if all nations adopt agreed targets which are reflected in the level of permits allocated in each emissions trading scheme.

The focus of international linkages should be on ensuring that abatement created in Australia is recognised under international treaties (e.g. Kyoto). Careful consideration needs to be given to this issue because of the small size of the Australian carbon and abatement markets. Australia is more likely to be a 'price taker' than 'price setter' in this context.

14. Economic Modelling

AGL has carefully considered the modelling work done by MMA in relation to the economic impacts of the proposed emissions trading scheme on the electricity sector. The carbon price pathway identified by MMA is broadly consistent with AGL expectations, based upon the targets identified and internal AGL assumptions.

A key area of difference and concern is the inclusion of carbon capture and storage in the modelling completed for the Taskforce. While this technology is likely to emerge at some point in the future, it is not clear that it will emerge within the timeframe and cost range identified by the Taskforce. As permit allocation is to depend heavily upon the results of economic modelling, AGL strongly believes that only existing technologies should be included in economic modelling exercises.

It is important to note that technologies that allow for cost-effective emission reductions have already been developed. The emissions intensity of natural gas is around half that of black coal. AGL believes that natural gas has a significant role to play in reducing greenhouse gas emissions. Using natural gas reduces the emissions intensity of the economy and provides further time for the development of zero emission technologies (e.g. geosequestration, solar).

AGL has developed significant expertise around modelling the economic impacts of reducing greenhouse gas emissions. In May 2006, AGL, together with our partners WWF-Australia and Frontier Economics published the report "Options for Moving Towards a Lower Emission Future." This report outlines the costs associated with reducing electricity emissions to 120 million tonnes by 2030: between \$0.43 and \$2 per Australian per week to 2030. A copy of this report is attached.

15. Permit Allocation

AGL supports the recommendation that the proposed scheme have only one form of permit – the annual permit. AGL believes that this approach (whereby permits would be 'date

stamped' with the first year they become valid) allows for long-term certainty because the permits can be allocated ahead of time allowing participants to know their shortfalls and surpluses over a longer time period.

AGL strongly supports that permits be structured as secure property rights. Given that the community in general benefits from action taken to address climate change, it is fair that certainty be provided to those impacted. AGL encourages the Taskforce to establish a working group comprised of relevant companies such as AGL to advise on the most appropriate tax and accounting treatment of permits to ensure environmental effectiveness and investment certainty.

A number of design principles should be considered when determining permit allocation. These design principles recognise that permit allocation can significantly impact on the distribution of costs and benefits under an emissions trading scheme.

- **Investment Recognition:** Investments made before the introduction of the emissions trading scheme should not be unfairly disadvantaged. While there has been debate about climate change for several years, owners and managers of capital (particularly public company Directors) have not been in a position to respond to this debate because of a lack of regulatory certainty.
- **Revenue:** Where auctioning is used to distribute permits, the revenue raised should not be used for general Government purposes. The money should be allocated for emission reduction projects developed by industry.
- **Early Action:** Some industry participants have altered production processes to reduce their emissions intensity. Action taken before the implementation of the emissions trading scheme should be taken into account by the scheme administrators.
- **New Entrants:** If an emissions trading scheme is to be successful, new entrants (with lower emission intensities) will be required. A free permit allocation process to existing generators would not disadvantage these new entrants.
- **Investment Certainty:** The permit allocation process should provide long term certainty for industry participants.

It is important to note that the 'value' of permits is theoretically determined by the overall target and the cost of technologies required to reduce emissions. The method of allocation should not alter the overall cost of compliance. However, the method of allocation does have significant impacts on equity and sovereign risk.

AGL is strongly opposed to permits being 'sold' by Government to industry. The value of permits should be determined by the market and represents the cost of deploying technologies to reduce emissions to the target level. Selling permits simply redistributes wealth from industry participants to the Government. There is no policy justification for selling permits to industry.

The other method of permit distribution involves auctioning. AGL does not support the use of significant auctioning as a means of distributing permits. When any good or service is 'auctioned' in a market, the seller is providing some valued good or service to the market. An emissions permit is an 'artificial' financial instrument that has been created by Government. If permits are auctioned, the Government is effectively altering the conditions under which an investment is permitted to operate (even though it may have been constructed prior to the scheme's commencement).

Free allocation (of permits or a baseline) is a more appropriate policy response as businesses would not be required to outlay funds up front to continue operating. This would minimise the sovereign risk associated with introducing a new requirement on existing businesses. It would also not disadvantage new entrants. An existing generator would have an incentive to sell permits where the permit revenue is greater than the cost of abatement (investing in plant upgrades and the like). There would be no incentive for the generator to hold onto the

permits as it could earn additional revenue by selling them to a new entrant. AGL believes that the Taskforce has correctly identified that 'use it or lose' rules¹ would provide generators with perverse incentives and as such should not be considered.

While the method of permit allocation/auctioning adopted would have distributional impacts, the overall cost of achieving the target should not be affected. It is important to note that even if permits are allocated for free, they still retain an economic value. The permit holder has the ability to sell the permit for its market value. Theoretically, auctioning and free allocation should not alter the underlying cost to consumers and the economy of an emissions trading scheme.

Essentially, there will be two types of energy companies requiring permits: existing generators; and new entrant generation. AGL does not believe that new entrants should be allocated permits as all companies will be facing the same investment scenario. No new entrant will have an advantage over another because they will all be required to purchase permits to operate plant that produces emissions.

For existing generation, AGL supports a high proportion of grandfathering of permits. AGL does not agree that a high proportion of grandfathering will result in overall windfall gains for generation companies. The value of grandfathered permits for existing generation companies is a function of higher pool prices, the intensity of the plant being operated, quantity of electricity produced by the generator, the value of permits allocated and the length of time which permits are grandfathered for.

This last point regarding the length of time permits are grandfathered is critical. It has been assumed that full grandfathering results in windfall profits for existing generators as has been seen in the EU Emissions Trading Scheme. AGL believes that there are only limited lessons to be learned from this scheme. This is because the EU Scheme has only been in operation for a very short period of time and medium term targets have not even been established.

The impact of grandfathering upon individual generators is dependant on all of the factors listed above but the overall time period is the most crucial factor. Modelling completed by AGL (and other economic forecasters) shows that:

- In the short-term, existing generators can increase overall revenues with full grandfathering. This is because of the combination of factors listed above (higher pool prices, changes in output etc).
- In the medium term, full grandfathering of permits is likely to produce an equitable outcome. As greenhouse gas emission targets are tightened, existing generators become less able to compete because of their higher cost structures. At the limit, this can cause generators to shut down completely. The grandfathering of permits compensates generators for the loss in economic value as a result of lower output and operating revenues.
- In the long term, full grandfathering of permits is likely to produce a positive outcome for existing generators. This is because an infinite grandfathering arrangement provides the generator with an infinite source of revenue (as the permits can be sold even if the plant does not operate).

Based upon this analysis, there is likely to be an optimal length of time during which permits should be grandfathered. Alternatively, there is likely to be an optimal level of grandfathering which should be adopted for a fixed time period. This is the method that the Taskforce has chosen.

The Taskforce has recommended that a detailed estimation technique be used to determine the optimal level of grandfathering which ensures that a generator's net economic value is

¹ Use it or lose it rules would require a generator that shuts down to hand back any permits it has been allocated.

not diminished. The economic modelling completed by the Taskforce has shown that a high proportion of grandfathering is required to maintain generator value (over 70%). AGL supports this concept but believes that there are significant risks associated with estimation techniques over such a long time period. AGL believes that the calculation to determine permit allocation should be done over the expected life of the asset prior to the emissions trading scheme being implemented and should compare Business as Usual profits with those expected in the emissions trading environment². The current proposal of 20 years does not reflect the realistic value of generation assets based upon their projected economic life.

To overcome uncertainty associated with economic modelling, AGL believes that the Taskforce should consider setting a reasonably high level of grandfathering based upon historical emissions. Over time, governments could use other policy mechanisms (e.g. taxes, royalties) to offset any economic impacts associated with unforeseen consequences.

AGL strongly supports grandfathering of individual generation assets rather than generation portfolios. Portfolios change significantly over time as a result of merger and acquisition activity. For example, in the past three years, AGL has acquired 32.5% of the Loy Yang A power station and 645 MW of hydroelectric generation capacity. As such, the AGL generation portfolio has changed substantially. Furthermore, an asset within a portfolio may not be controlled by the owner of the portfolio. For example, through an undertaking with the ACCC, AGL is not able to influence the day to day operation of the Loy Yang A power station. If grandfathering was implemented on a portfolio basis, it would significantly disadvantage companies which do not have full control of assets within their portfolios.

16. Assistance to Trade-Exposed and Energy Intensive Industries

AGL strongly supports efforts by Governments to address structural adjustment as a result of the introduction of an emissions trading scheme. For many customers, structural adjustment will not be a significant issue. However, energy intensive industry, low income households and trade exposed industries may be adversely impacted where they are unable to respond to price signals. AGL supports the criteria for defining these industries outlined in the discussion paper. In particular, AGL believes that assistance should be focused on companies that:

- Are subject to a high degree of international competition;
- Produce products that have prices which are set on world markets; and
- Face competition from countries that impose no comparable emission constraints.

As a large electricity retailer, AGL sells a significant portion of its electricity and gas to large customers that exhibit these characteristics. It is therefore in AGL's economic interests to work with governments to ensure that economic impacts on these customers are minimised. The permit allocation arrangements proposed by the Taskforce for these customers are supported by AGL.

17. Use of Revenue Collected Through Auctioning

AGL believes that all revenue collected by government through either auctioning or penalty payments should be used to develop new technologies and assist other groups impacted by the emissions trading scheme. For example, the revenue could be used to assist low-income households manage higher electricity bills. AGL already has significant resources devoted to working with low income households to minimise hardship. In the event that an emissions trading scheme was established, AGL would continue to work with Governments to minimise customer hardship.

² To overcome uncertainty associated with the proposed gateways, the mid point should be used to calculate economic impacts on generators.

18. Institutional Arrangements

AGL strongly supports the preferred option of the Taskforce regarding legislation. Ideally, the Commonwealth and States should establish the scheme as a joint policy initiative. The use of mirror State-based legislation (e.g. based around examples such as the National Electricity Law) should be regarded as a second best option. This option would entrench the scheme's focus on the electricity generation sector.

AGL does not believe that an existing Ministerial Council should be used to provide policy oversight for the scheme. A more appropriate vehicle would be the Council of Australian Governments (CoAG). The need to address climate change is an issue which affects all government portfolios. As such, a coordinated whole of government approach is appropriate. CoAG should be supported by a dedicated agency. The existing Taskforce would be an appropriate model to base this agency on.

AGL supports the Taskforce recommendation regarding the need to establish an independent regulator. An existing regulator or similar agency such as the Office of the Renewable Energy Regulator should be considered in the first instance. While the Australian Energy Market Commission has been suggested, AGL believes that a regulator with a broader focus and experience in market-based environmental regulation (e.g. MRET, NSW GGAS) should be preferred. AGL believes that for ease of tracking & verification, a registry should be established that is similar to the existing registries. The registry should be up and running well in advance of the scheme's implementation.

AGL understands the need to review the operation of the proposed scheme within a time period after it commences. However, to ensure that business certainty and environmental integrity are maintained, the review should be limited around areas of efficiency and effectiveness. At the very least, a key objective of the review should be to maintain investor certainty and minimise sovereign risk.

One of the most important but overlooked design features of an emissions trading scheme is the ability for additional costs to be passed through to end consumers. AGL believes Governments would need to remove barriers to cost reflective energy pricing before an emissions trading scheme could be successfully implemented.

An emissions trading scheme would impose additional costs in wholesale energy markets. A proportion of these cost increases would be passed through to retailers in the form of higher wholesale energy prices. The current regulatory constraints in place at the retail level would prevent retailers from restructuring their tariffs. There would be no incentive for consumers to adjust their consumption (e.g. by purchasing less greenhouse intensive energy).

19. Lessons from the EU ETS

The discussion paper states that an important part of designing a scheme is to learn from the experiences of other schemes – the most obvious example being the EU Emissions Trading Scheme which commenced in 2005.

AGL believes that the Taskforce and others should be careful in applying too much weight to the outcomes seen to date in schemes such as the EU Emissions Trading Scheme. It is important to note that the EU Scheme is very short in nature with caps only applying over a very short time period and there is significant regulatory uncertainty surrounding the operation of the scheme. The proposed State-based scheme overcomes the major shortcoming of the EU Scheme by setting targets over a longer timeframe.

20. Early Action and New Entrants

AGL supports the use of mechanisms to recognise early abatement action and facilitate new entrants. Investments in low emission technologies and projects that have been made before the start of the scheme should be valued under the scheme.

Consideration needs to be given to balancing the need to facilitate new entrants with the sovereign risk associated with changing the policy environment existing businesses are operating in.

New entrants would not be disadvantaged if emission permits are allocated to existing businesses. Once the cap (and permit price) reflects the need to install new low emission capacity, existing businesses would sell their permits to new entrants. The additional revenue for existing businesses from this allocation would partially offset the sovereign risk associated with the introduction of the scheme.

21. Transitional Arrangements

AGL believes that significant consideration needs to be given to arrangements for incorporating existing schemes into the proposed emissions trading scheme. These schemes include the NSW Greenhouse Gas Abatement Scheme, QLD 13% Gas Scheme, Commonwealth Mandatory Renewable Energy Target, Victorian Renewable Energy Target and proposed NSW Renewable Energy Target.

AGL has the following arrangements in relation to these schemes:

- Retail contracts: AGL contracts for NGACs and RECs with commercial customers for periods of between 1 to 5 years.
- Counterparty Contracts: AGL has a contract position for its regulatory requirements under each of these schemes.
- Projects: AGL has a number of projects (such as landfill generators) where the price of RECs and NGACs impacts on the viability of these projects.

AGL and other businesses cannot make investment decisions until actual decisions are made by Government (reflected by changes to the legislative or regulatory environment). It is important that Governments limit uncertainty by not speculating on possible changes to the regulatory environment unless the changes are likely to occur.

Before a emissions trading scheme is introduced, Governments will need to outline exactly how existing certificates (and their underlying schemes) are to be treated. It will be necessary to design the emissions trading scheme so that investments made under existing schemes will be no worse off under the new scheme.

AGL believes that those schemes which are based upon the deployment of renewable energy should be able to operate in tandem with the proposed emissions trading scheme. The carbon prices identified by MMA in its report for the Taskforce would encourage non-renewable generation rather than deployment of renewables. As such, the schemes should be able to operate concurrently.