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Emissions Trading Working Group Secretariat
The Cabinet Office
GPO Box 5341
SYDNEY NSW 2001

18 November 2005
Re: *A National Emissions Trading Scheme*

Dear Sir/Madam

AGL welcomes the opportunity to provide a submission to the Inter-jurisdictional Working Group on the Emissions Trading background paper, *A National 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.

An emissions trading scheme would have a significant impact on a number of stakeholders. AGL believes that representative groups should be established to provide ongoing 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 on the final report and the proposed variation. Should you require further information, please contact Tim Nelson, Manager Environment Policy and Strategy on (02) 9921 2516 or by email at tanelson@agl.com.au.

Yours sincerely

Mary Darwell
Manager
Group Environment

AGL SUBMISSION ON A NATIONAL EMISSIONS TRADING SCHEME

1. Introduction

AGL is a leading energy company, with significant electricity and gas customer bases in South Australia, Victoria and New South Wales. AGL also owns gas and electricity distribution networks and a number of electricity generation assets including Loy Yang Power (minority investment), the Hallett peaking power station in South Australia and the Somerton peaking power station in Victoria. Recently, AGL was announced as the successful bidder for the power generation assets of Southern Hydro.

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.

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.

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).

2. AGL Greenhouse Gas Policy

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.

3. Cap and Trade or Baseline and Credit Approach

There are generally two types of emissions trading schemes:

- **Cap and Trade**: Under a cap and trade approach, total emissions are capped. Permits are then distributed (either allocated or auctioned) to market participants. All businesses must surrender permits for each unit of greenhouse gas emitted. Participants are free to buy and sell permits.
- **Baseline and Credit**: Under a baseline and credit approach, emissions are capped but participants are allocated a baseline rather than permits. Each business is not allowed to emit beyond its baseline. However, businesses are able to purchase abatement (e.g. carbon sequestration credits) to offset increases in emissions.

The fundamental economic decisions being made by firms under either scheme are the same. Where it is cost effective, firms will invest in (or purchase the rights for) abatement projects. If the cost of investing in abatement (represented by purchasing an emissions permit or abatement certificate) is less than the cost of reducing production (and emissions), the firm will purchase certificates to maintain production.

The major advantage of a cap and trade approach is that it provides flexibility for businesses with significant capital investments. Under a cap and trade approach, businesses are able to earn a revenue stream from reducing their production and selling excess permits. This cannot occur under a baseline and credit approach because the baseline has no inherent monetary value.

However, the lack of monetary value can also be viewed as an advantage of the baseline and credit approach. Because the baseline has no monetary value (i.e. it is assigned and cannot be traded), Governments are not forced to determine 'winners' and 'losers' under the scheme through the permit allocation and/or auctioning process. Baselines determined on market share would reduce inequities between existing market participants and allow for new entrants.

Some commentators have argued that baseline and credit schemes provide incentives for low emission generation and abatement projects. However, there is effectively no economic difference in the financial incentive provided by either scheme. The price of an abatement certificate under a baseline and credit scheme represents the cost of increasing emissions by one unit. Similarly, the price of a permit under a cap and trade scheme represents the cost of increasing emissions by one unit.

However, a baseline and credit approach allows a new renewable project to 'contract' the abatement it creates at the beginning of the project. The financial certainty this provides is a major advantage of the baseline and credit approach. Under a cap and trade scheme, new projects are less able to obtain this financial certainty. This makes securing project finance more difficult.

A cap and trade approach provides for a more liquid secondary trading market than a baseline and credit approach. Under a cap and trade system, all emissions are tradeable. However, only abatement (or emission reductions) are tradeable under a baseline and credit scheme. The higher number of tradeable instruments in a cap and trade scheme provides for

a deeper more liquid market. This allows for timely price discovery and the economies of scale provided reduce unit transaction costs.

AGL believes that either the cap and trade approach or the baseline and credit approach will deliver similar outcomes. The most important design feature is how the baselines or permits are allocated. By allocating baselines or permits based on current emission levels (and decreasing the allocation to reflect the cap over time), there is no need to auction or sell permits. This would prevent Government decisions from determining 'winners' and 'losers' under the scheme.

If a cap and trade scheme is put in place, permits should be allocated to reflect a business' share of emissions. As the cap is reduced, the price of permits would rise. At the appropriate point, existing businesses would have a financial incentive to sell permits to new entrants. The major advantage of this approach is that it reduces the sovereign risk for investments made before the commencement of the scheme. It would also avoid the need for auctioning and other forms of permit allocation that create 'winners' and 'losers' under the scheme.

4. Scheme be National and Sector Based

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. Overall National Emissions Abatement Target

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 accepted view by Governments about the reductions that individual countries should pursue, some degree of estimation will be required.

A long-term target should be set for emissions in 2050 and clear interim milestones (targets) should be established. 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.

Once the overall long term target and milestones are set, consideration needs to be given to allocating a share of the emissions reduction to the sectors covered by the emissions trading scheme and sectors not covered by the emissions trading scheme. It is crucial that sufficient clear notice is given of the detail of the new scheme and a timeline for its introduction.

6. Sectoral Targets

It is unlikely that all sectors will be able to be covered by the emissions trading scheme. In sectors with large numbers of emitters (e.g. transport), the transaction costs of introducing an emissions trading scheme may mean that emissions trading is not the most effective policy response.

Nevertheless, targets should still be set for those sectors not covered by the proposed emissions trading scheme. Governments should develop a comprehensive policy package that includes the most appropriate and cost effective policies for reducing emissions in individual 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).

For those sectors covered by the proposed emissions trading scheme, a single target should be identified as outlined in the previous section. The targets identified for non-covered and covered 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.

7. Coverage

AGL strongly believes that sectors covered by the emissions trading scheme should be determined before the scheme is established. 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.

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 Background Paper states that the emissions trading scheme would initially cover emissions from electricity generation, gas processing, and all combustion emissions associated with the use of coal and gas in non-transport uses. AGL is not opposed to greenhouse liabilities being placed on electricity generators that produce emissions. There is no need to regulate non-emitting generators.

However, it is unclear how many of the other liabilities can be cost-effectively assigned (e.g. measuring residential gas customer usage and assigning permits would be very inefficient and costly). It may be that emission reductions in these sectors would be best pursued through separate policies.

In this context, one of the main implications related to coverage is the tradeoff between the target adopted and offsets. The overall abatement achieved under an emissions trading scheme is determined by the overall target (for the sectors covered by the scheme) and the abatement that can be used as offsets from outside the covered sectors. The burden on 'covered' sectors can be minimised where abatement that is created in 'non-covered' sectors can be purchased to meet obligations under the emissions trading scheme.

8. Coverage of all Six Greenhouse Gases under the Kyoto Protocol

The 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.

9. Permit (Baseline) Allocation.

There are two general methods of permit allocation that could be used in an emissions trading scheme:

- Historical Emissions: Permits can be allocated based upon historical emissions. For example, if we assume there is one business that emits 100 tonnes before a scheme is put in place to reduce emissions by 5%, it would be allocated permits or a baseline equal to 95 tonnes. The major advantage of allocating permits through this process is that investments made prior to the scheme are treated equitably.
- Output and the Industry Average: Permits (or a baseline) can also be allocated based upon energy output of the individual business multiplied by the average emissions intensity. This approach provides incentives for businesses to reduce their emissions intensity to the average. However, given that much of the energy sector capital stock is difficult to retrofit, this option can unfairly penalise existing participants.

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 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.

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.

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.
- 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.

10. Penalty

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 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.

The Background Paper discusses penalty linkages with other international schemes. AGL does not believe that compatibility with an existing international emissions trading scheme should be given more weight than other factors. If Australia is linked to an international emissions trading scheme (such as the EU scheme), there are likely to be significant cost impacts as the price of emissions has increased sharply over 2005 (current prices are around \$35 per tonne).

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.

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).

11. Offsets

AGL supports the inclusion of 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, as discussed in a previous section, there is a tradeoff between the target adopted and offsets. This needs to be taken into account when assessing whether offsets should be allowed.

12. Adverse Effects and Structural Adjustment

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.

A crucial issue in this context is the emission reduction pathway required by the emissions trading scheme. AGL supports emission reductions that allow businesses to respond gradually over time. An emission reduction pathway that involves small reductions in the first few years but then increases over time is more appropriate than a linear reductions pathway.

Low-Income Households

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.

Trade Exposed and Energy Intensive Industries (Including Employees)

Exemptions from the scheme should be avoided where possible because of the administrative burden and complexity this would create. Exemptions would increase the costs to other energy users but the benefits of reducing greenhouse emissions would be experienced by the entire community. In this context, it is appropriate that Government (through tax adjustment policies and the like), representing the community, provide assistance to those commercial customers (and their employees) that are significantly

disadvantaged by an emissions trading scheme. It is more appropriate for the community, rather than other energy users, to fund structural adjustment packages.

13. 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.

Early Abatement Action

The Background Paper discusses using an industry average to determine baselines (or permit allocation) that recognise early abatement action. This does not necessarily incorporate early mover activities as the business may still be above the average. A fairer, more transparent approach may be to compare the growth in emissions of a particular business over a reasonable time period (e.g. 10 years) with the growth in the regional industry average.

New Entrants

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.

14. 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 and the Commonwealth Mandatory 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 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.