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ENVIRONMENT AND NATURAL
RESOURCES COMMITTEE



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SUBMISSION

NO. 20

Ms Jenny Lindell MP
Chair
Victorian Parliamentary Environment and Natural Resources Committee
Level 8, 35 Spring Street
MELBOURNE VIC 3000

30 August 2005
Re: *Inquiry into the Energy Services Industry*

Dear Ms Lindell

AGL welcomes the opportunity to provide a submission on the Victorian Parliamentary Environment and Natural Resources Committee Inquiry into the Energy Services Industry.

Energy services expertise allows AGL to deliver value for our customers in a competitive retail market. By improving energy efficiency, both economic and environmental benefits can be realised.

Please find enclosed AGL's submission. Should you require further information, please contact Tim Nelson, Manager Environment Policy and Strategy on (02) 9921 2631 or by email at tanelson@agl.com.au.

Yours sincerely

Mary Darwell
Manager
Group Environment

AGL SUBMISSION ON THE ENVIRONMENT AND NATURAL RESOURCES COMMITTEE INQUIRY INTO THE ENERGY SERVICES INDUSTRY

1. Introduction

AGL is Australia's 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.

Given our business experience, the focus of this submission is on our energy services expertise. In addition, the submission identifies how the provision of energy services is a necessary activity for a successful energy retailer.

2. Overview of AGL Energy Services

AGL provides a number of energy services to our major commercial and industrial customers. These services are designed to add value for our customers by improving energy efficiency, reducing costs and reducing their environmental footprint. While the price of energy is likely to be the most fundamental driver in determining whether to sign a contract with a particular energy retailer, the cost-effective provision of energy efficiency services is also a consideration for customers.

Importantly, AGL is a retailer of both electricity and gas. This allows us to provide advice to our customers on cost effective energy solutions rather than solutions that relate specifically to electricity or gas. For example, where customers seek to reduce greenhouse gas emissions, we are able to provide advice about energy conversions (Natural gas has an emissions intensity of 51.7 kg of CO₂e per GJ, almost half the emissions intensity of brown or black coal).¹

The following services are available for our major customers:

- **Comprehensive Energy Efficiency Programs:** AGL offers all-embracing energy efficiency programs to select industrial and commercial major customers. Such programs include a very wide spectrum of energy efficiency measures including specific equipment/appliance efficiency, fuel substitution, controls strategies, generation, co-generation and user behaviour measures. The programs invariably commence with energy audits and surveys, including energy consumption benchmarking, through to implementation of identified energy efficiency measures via a range of delivery methods geared to suit the customer's operating methods.
- **Energy Performance Contracting:** In select instances AGL offers delivery of energy efficiency measures to major customers in the form of an energy performance contract. This is usually done in instances where the customer is looking for an external entity to carry the risk on energy savings. The certainty about guaranteed energy savings enables the customer to underwrite the cost of capital with energy savings.
- **Combustion Analysis:** As a major energy retailer (both electricity and natural gas), AGL is able to inspect gas-fired appliances and identify any problems. We can then provide recommendations for their effective, efficient and safe operation.
- **Energy Conversions:** AGL is able to provide advice and convert appliances with burners to natural gas.
- **Compressed Air and Steam Trap Surveys:** By finding and eliminating process leaks in steam or compressed air reticulation, AGL is able to deliver significant energy savings to major customers.

¹ AGO Factors and Methods Workbook 2004

- Appliance Sizing: The required size of natural gas and electrical appliances can be overlooked to minimise up-front capital costs. AGL is able to identify opportunities for saving energy by determining the most economically efficient size of natural gas and electrical appliances.
- Load Monitoring: Some businesses are aware of their overall energy consumption but unable to accurately determine the energy usage of specific parts of their production process. AGL provides load monitoring services that allow consumption of individual sites or appliances to be determined.
- Power Factor Correction: Power factor is a measure of how effectively businesses use their electricity. Optimising the power factor at a site allows production to be increased without additional energy infrastructure being installed. AGL is able to determine power factors quickly by comparing the power available at the switchboard with the amount actually used by equipment.
- Load Curtailment: Where production schedules allow for small variations in load at relatively short notice, AGL can develop systems that allow the business to reduce its exposure to price volatility in the electricity market. Where the costs associated with turning off a production line are less than the benefits in terms of reduced energy costs, the business will benefit.
- HVAC Studies and Lighting Surveys: AGL provides advice on the most appropriate appliances and lighting systems to minimise energy costs.
- Greenhouse Audits: AGL is able to conduct greenhouse audits and environmental studies for major customers. An audit measures current emissions which allows for the development of an environmental management plan. AGL is also able to make practical recommendations for reducing emissions.

There are generally two ways in which these services benefit customers and the community. Firstly, by more efficiently using scarce resources, overall costs can be reduced. Secondly, by reducing energy usage, associated greenhouse gas emissions can be avoided.

However, energy efficiency is only one way in which AGL works with its customers to reduce greenhouse gas emissions. We also offer two green energy products:

- Green Energy: Customers that purchase Green Energy are able to elect to receive a proportion (10%, 25%, 50% and 100%) of their energy from Green Power accredited renewable energy sources.
- Green Balance: Customers that purchase Green Balance are able to elect to offset the emissions associated with a proportion of their energy usage (50% and 100%). Green Balance is an affordable way for businesses to reduce their environmental footprints.

3. Energy Services Industry in Victoria

The energy services industry in Victoria is not significantly different from other States. The drivers behind energy services in Victoria are similar to those in other States:

- Economic efficiency: The primary driver for firms utilising the energy services capabilities of AGL is economic efficiency. Economic efficiency occurs when the costs of amending production processes are outweighed by the benefits obtained through reduced energy costs.
- Reducing environmental footprints: Businesses are increasingly becoming focused on environmental sustainability as part of their core business activities. By using energy more efficiently, companies are able to reduce their environmental footprints.

- Government regulation: There are a number of Government regulations that require businesses to undertake energy efficiency audits or other types of energy services.

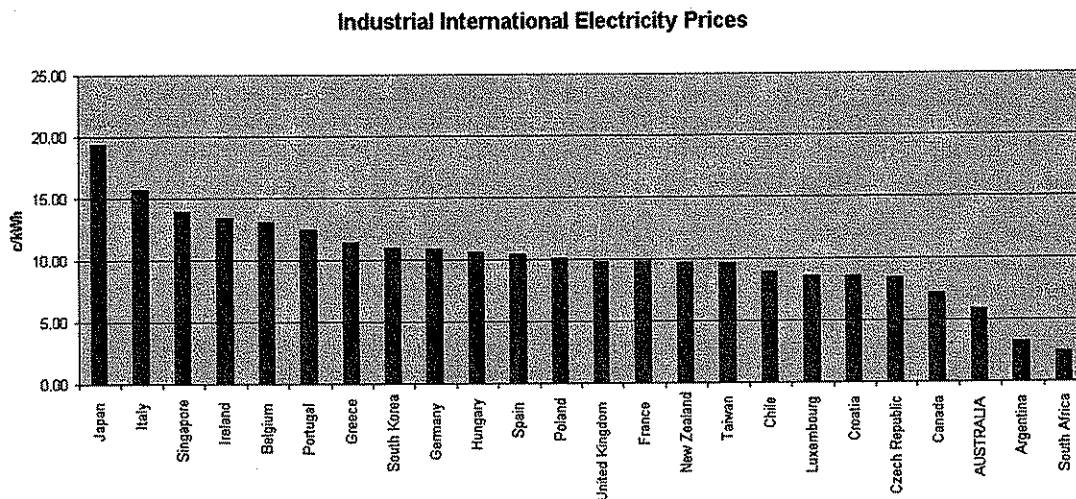
The energy services industry is relatively small in Australia. Further information can be obtained from the following sources:

- Business Council for Sustainable Energy: This body represents member companies such as AGL. The focus of the Council is on renewable energy and energy efficiency opportunities. Further information is available at www.bcse.gov.au.
- Australasian Energy Performance Contracts Association. This body supports the commercial growth of members through education, industry promotion, self-regulation and industry standards. Further information is available at www.aepca.asn.au.

4. Barriers to the Uptake of Energy Efficiency

There are three main barriers to the uptake of energy efficiency in Victoria and Australia more generally. These are energy prices, information gaps and the size of the energy services industry.

Energy Prices: The price of delivered energy in Victoria is significantly lower than in most countries. The Chart below highlights this trend²:



The Chart shows that Australian electricity prices are the third lowest of the countries sampled. Only Argentina and South Africa have lower prices. In many European countries, the price of electricity is more than double the price paid in Australia. This has significant implications for the energy services industry.

Generally, energy efficiency measures are only implemented where they provide a positive return on capital. More specifically, the servicing cost of upfront capital must be less than the reduced energy costs. Therefore, as energy prices rise, more capital can be cost effectively allocated towards effective energy efficiency.

As would be expected, the uptake of energy services is often greater in countries with higher energy prices. For example, many European countries have a large energy services industry and this is often cited by policy makers when analysing the Australian energy services industry. However, direct comparisons should only be made when examining the rate of return on energy efficiency improvements.

² Source: ESAA

It is unlikely that the rate of return on energy efficiency improvements adopted in Australia is significantly higher or lower than overseas. However, more projects are undertaken in Europe because of the greater benefits associated with reduced consumption at higher prices. Because all companies are capital constrained, energy efficiency improvements will only be made if the rate of return is higher than if the capital was used for another project.

Energy efficiency improvements are likely to become increasingly cost effective in countries with mandatory emission reduction programs. For example, in Europe the traded price of emitting carbon dioxide equivalent is currently around € 22 (\$A 35). These carbon costs will increase the benefits associated with energy efficiency projects (reduced energy consumption reduces the additional carbon costs). Where the additional benefits generate competitive rates of return, projects will be adopted.

Information Gaps: Because energy consumption may only comprise a small proportion of a businesses expenditure, little knowledge is often kept within the business about energy usage and efficiency. Increasing the awareness of businesses about the benefits of energy services is a key way of overcoming this information gap.

Training and Skills: One of the most overlooked barriers to successful uptake of energy services is the relatively small size of the industry. In addition, because of the highly technical nature of the work, finding staff with the right skills can be challenging. This is explored further in the following section.

5. Training and Skills

The energy services industry is highly technical. For example, while one technician may be proficient about commercial building energy efficiency, another may be required to provide advice on manufacturing processes. The detailed and highly variable nature of the work requires both technical specialists for individual projects and generalists who are able to identify cost effective opportunities across an entire business operation.

Because of the relatively small size of the energy services industry, finding suitable staff at appropriate times can be very difficult. This is particularly important to energy retailers such as AGL that offer energy performance contracts and comprehensive energy efficiency programs to major customers.

Increased focus on appropriate training and skills development is required. In this context, training and skills development would be a more appropriate policy response than mandatory energy efficiency programs.

6. Role of State and Commonwealth Governments

There are a number of existing State and Commonwealth Government programs aimed at energy efficiency. These include:

- **The National Framework for Energy Efficiency (NFEI):** This joint initiative of the Commonwealth and State Governments outlines a series of measures to improve energy efficiency.
- **Energy Efficiency Opportunity Assessment:** As part of the Commonwealth Energy White Paper policy package, all businesses that use more than 0.5 PJ of energy per annum will be required to undertake energy efficiency opportunity assessments.
- **NSW Energy Savings Action Plans:** As part of the NSW Government Energy and Water Demand Management Funds, businesses in NSW that consume more than 10 GWh of electricity per year are required to complete energy savings action plans.
- **Victorian Mandatory Rollout of Interval Meters:** The Victorian Government is progressively rolling out interval meters to electricity users throughout Victoria.

In addition, many of the other States (including Victoria) have announced that they are preparing energy efficiency strategies.

Unfortunately, many of these initiatives overlap and impose unnecessary costs on businesses. For example, a large energy business operating in NSW will soon have to complete both Energy Saving Action Plans and Energy Efficiency Opportunity Assessments. It is highly likely that both requirements will deliver the same outcome.

Overlapping State and Commonwealth requirements result in less energy efficiency measures being pursued. At worst, all of the resources available within a business for energy efficiency measures could end up being utilised to meet overlapping reporting requirements. Because of the small nature of the energy services industry, overlapping requirements can also result in human capital being under-utilised.

In this context, AGL believes that new State-based measures related to mandatory reporting and activities are unwarranted. In a national energy market, State based measures impose unnecessary costs on large energy users. Furthermore, there is a need to ensure that existing measures are consolidated to reduce regulatory overlap and red tape.