27 May 2005

Gary Banks
Energy Efficiency Inquiry
Productivity Commission
LB2 Collins Street East
MELBOURNE VIC 8003

Dear Mr Banks,

Re: Energy Efficiency – Draft Report

The ERAA welcomes the opportunity to make this submission and is generally supportive of Productivity Commission (PC) Draft Report findings and recommendations.

Please find the ERAA's submission enclosed. Should you have queries regarding this submission please contact our office.

Regards

[Transmitted by Email]

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Energy Retailers Association of Australia

Submission to

Productivity Commission Draft Report

"Energy Efficiency"

Issued May 2005

Executive summary

ERAA welcomes the opportunity to make a second submission to the Productivity Commission Inquiry into Energy Efficiency. In ERAA's view the Draft Report delivers on the Inquiry terms of reference and makes an important contribution to the energy efficiency policy debate in Australia. The approach adopted by the Commission and subsequent findings and recommendation are considered rigorous and comprehensive.

ERAA concurs with the Commission's finding that information problems and split-incentives are the most important barriers to improving energy efficiency. ERAA also concurs with the Commission's recommendation that independent evaluation of the Regulatory Impact Statement process for energy efficiency regulation is undertaken before existing programs are expanded. Although the NFEE is a positive step toward much needed national coordination of energy efficiency policy it is critical that the benefits and costs of mandatory energy efficiency ratings and standards are measured as accurately as possible to ensure that the promotion of real energy efficiency improvements occurs.

Clearly regulated energy performance standards and ratings for energy appliances and residential and commercial buildings have a role to play in overcoming identified market failures. However fully cost-reflective energy pricing is by far the most important determinant of consumers' behaviour and therefore the attainment of privately cost-effective levels of energy efficiency investment. Continuation of national energy market reforms and the development an economy-wide carbon signal are both critical to the achievement of greater cost-reflectivity in energy prices. In the absence of full cost-reflectivity the optimal level of energy efficiency investment is unlikely to occur.

ERAA looks forward to participating further in this Inquiry and to the outcome of the Final Report.

General

Behavioural and organisational limitations on the adoption of energy efficiency improvements do not of themselves warrant government intervention. Understanding these limitations may, however, be helpful in designing efficiency programs that address environmental externalities, information failures and other sources of market failure (Draft Finding 5.1)

Other barriers and impediments that are not market failures (for example, high transaction costs, risk and uncertainty in implementation) may provide rational reasons for the non-adoption of energy efficiency improvements that appear (to an outsider) to be privately cost effective. The role of governments in addressing these issues may be quite small (Draft Finding 5.2)

ERAA supports these Findings. It is not the role of government policy to target behavioural and organisational limitations *per se* which tend to be symptomatic rather than causal in the matter of investment in energy efficiency. Nor is it the role of such policy to encourage individuals and businesses to ignore barriers and impediments not related to market failure but a function of real resource costs and therefore a valid part of rational decision-making.

Numerous case studies have found that producers and consumers fail to adopt some energy efficiency improvements that appear to be cost effective for them. These case studies, however, are based on many debatable assumptions, including:

- *the criterion for cost effectiveness*
- *business-as-usual improvements in energy efficiency*
- *extrapolation of audit and best-practice study results to a whole sector*
- *representativeness of simulated producers and consumers (Draft Finding 6.1)*

Assumptions such as those referred to the Report are likely to explain a significant portion of the purported gap in cost effective energy efficiency investment. This gap refers to the difference between observed levels of energy efficiency in Australia and current upper technical limits adopted in other countries. In ERAA's view observable market outcomes will refect the true underlying economics of energy efficiency, including differing energy mixes across countries, in the absence of market failure.

National uniformity has been achieved in the regulation of energy labelling and minimum energy performance standards (MEPS) for electrical appliances and this is appropriate. If a revised scheme for energy labelling and MEPS for gas appliances is to be introduced, a similar approach to coordination would be desirable (Drafting Finding 11.1)

There does not appear to be an economic justification for treating gas appliances differently to electrical appliances as far as labelling and minimum energy performance standards are concerned. A similar approach would also be entirely consistent with convergence of regulation of these two fuels more generally.

The current state and territory based variations in energy efficiency standards for new houses increase costs for the building and building products industries. The case for such variations appears to be weak (Draft Finding 11.2)

Apart from the question of the appropriate level of standards, there should be no variation in standards purely as a result of jurisdiction. Climate and other factors may

result in different standards in some jurisdictions but these ought to only relate to energy efficiency variables and the cost effectiveness of standards under different conditions (which are also likely to vary within a jurisdiction).

The Australian Building Codes Board should examine ways to reduce the scope for local governments to erode the uniformity of minimum energy efficiency standards for new houses (Draft Recommendation 11.1)

ERAA supports this recommendation. The purpose of regulation is not to reflect the many and varied preferences of consumers. Markets perform this function dynamically and far more effectively and efficiently as a result. Regulation that varies from region to region distorts allocation decisions and is likely to impede rather than enhance the markets' ability to reflect consumer preferences (especially where standards are too prescriptive and/or high).

The National Framework for Energy Efficiency has the potential to improve national coordination and guide the development of energy efficiency programs. At present, however, there is insufficient clarity on the rationale for, and the objectives of, government intervention. There has also been insufficient evaluation of past policies and programs (Draft Finding 11.3)

The National Framework for Energy Efficiency represents a victory in terms of jurisdictional policy coordination in this area and participating governments are to be acknowledged for this. However, ERAA concurs that there is insufficient evidence of the effectiveness of energy efficiency programs to justify expansion of these programs (across jurisdictions and/or in terms of the levels of energy efficiency they impose). In the absence of this evidence, implementation of NFEE policy recommendations run the risk of imposing net costs on consumers of energy (reducing economic efficiency in the course of increasing technical energy efficiency).

National Framework for Energy Efficiency Stage One proposals (that are not directly affected by other recommendations) should be deferred until independent evaluations of existing energy efficiency programs have been undertaken. The evaluations should determine the effectiveness of these programs in promoting the uptake of cost-effective energy efficiency improvements (Draft Recommendation 11.2)

While NFEE proposals that are expected to deliver net-benefits should not be held up any longer than necessary, it is imperative that the validity of the purported benefits of current programs be confirmed first. If not net costs may be compounded given that additional regulation in this area tends to build on (increase) energy efficiency standards established in current programs. If there are net benefits, they will undoubtedly stand up to scrutiny and provide a sound basis for justification of additional program implementation.

A national energy efficiency target is a poorly focused policy instrument that would be very difficult and costly to implement in an effective manner. It can not be justified on the grounds of privately cost-effective energy efficiency. It may help to drive investment in energy efficiency, but this would be at the expense of economic efficiency. As a measure to address greenhouse gas abatement, it has serious disadvantages compared to other options such as an emissions trading (Draft Finding 12.1)

ERAA concurs strongly with this finding. A national energy efficiency target is an inappropriate and potential costly policy tool for the purpose of targeting market

failure impeding energy efficiency. Establishing a target level of energy efficiency implies that policy makers can determine the optimal level of energy efficiency. This level is likely to change with economic circumstances over time and is best determined by individual decision makers on a case-by-case basis rather than centrally.

The ERAA believes greenhouse gas abatement objectives are best delivered through a national framework which is based on a market.

Residential

Appliance energy-performance labels are not a major determinant of which appliances householders buy. But the labels do have some influence on consumers after they have short listed products on the basis of characteristics such as price, performance, capacity and style. While the benefits of energy-performance labelling may have been overstated in regulatory impact assessments, labelling is likely to have produced net benefits for consumers (Draft Finding 7.1)

Labelling is a relatively low cost regulatory option designed to provide consumers additional information about the energy efficiency dimension of a product (to be assessed in conjunction with other product information). While the value of such information is likely to vary considerably from buyer to buyer and product to product, the overall impact of labelling is more than likely to improve market efficiency.

The National Appliance and Equipment Energy Efficiency Committee should adopt procedures to ensure that future regulatory impact assessments of appliance minimum energy performance standards (MEPS) include a more comprehensive analysis of:

- ***why consumers — with guidance from an energy-performance label — are not best placed to judge what is in their best interests;***
- ***whether a voluntary standard, such as the Energy Star program, would be more cost effective;***
- ***what proportion of consumers would be prevented from buying appliances that are more cost effective for them;***
- ***the extent to which consumers would be forced to forgo product features that they value more highly than greater energy efficiency;***
- ***the distributional impacts, including the extent to which MEPS are regressive;***
- ***whether MEPS would reduce competition and how this would affect prices and service quality; and***
- ***whether a dis-endorsement label would achieve a more cost-effective result (Draft Recommendation 7.1)***

ERAA supports this recommendation. Mandatory minimum energy efficiency standards is a relatively interventionist form of regulation. This is because of its direct impact on the range (and attributes) of energy appliances available on the market and hence consumer choice. If there is any doubt as to the rigour and basic accuracy of the regulatory impact statement process that determines mandated minimums, it should be eliminated before higher standards are contemplated.

Before the States and the Northern Territory mandate energy-performance ratings for existing dwellings at the time of sale or lease, the Ministerial Council on Energy

should commission an independent evaluation of the ACT rating scheme that has operated since 1999. The evaluation should include an assessment of:

- ***the accuracy of home energy ratings in predicting the actual energy performance achieved by home buyers and tenants; and***
- ***the costs, benefits and effectiveness of the scheme, taking account of the diverse preferences and financial circumstances of individual home buyers (Draft Recommendation 7.2)***

ERAA supports this recommendation. Insufficient evidence as to the cost effectiveness of current mandatory energy performance ratings in the ACT is available to warrant their expansion without review and assessment. As with mandatory minimum standards, any question of cost effectiveness should be resolved before standards are imposed in other jurisdictions.

Energy efficiency standards for residential buildings are based on computer simulation models — such as the Nationwide House Energy Rating Scheme energy-rating software — that exclude many of the determinants of a building's actual energy efficiency (Draft Finding 7.2)

A ranking of residential buildings by star rating (using energy-rating software such as Nationwide House Energy Rating Scheme) may be very different from a subsequent ranking based on actual energy consumption or efficiency (Draft Finding 7.3)

New or more stringent energy efficiency standards for residential buildings should not be introduced until existing standards have been fully evaluated. The evaluation should be commissioned by the Australian Building Codes Board to:

- ***consider whether defining building standards in terms of simulated heating and cooling loads is an effective way to raise actual energy efficiency;***
- ***investigate whether weaknesses in energy-rating software distort the housing market in favour of particular building designs that are not necessarily the most cost effective, particularly over the longer term as innovations are made in building design;***
- ***evaluate costs and benefits in a way that takes account of the diverse preferences and financial circumstances of individual home buyers;***
- ***assess how effectiveness and compliance costs differ between the deemed-to-satisfy and performance-based standards;***
- ***analyse the distributional impacts of standards on different socio economic groups, including first-home buyers and less-affluent groups; and***
- ***examine the process used to set the stringency of standards in the Building Code of Australia, including the impact of any increase in stringency by individual States and Territories (Draft Recommendation 7.3)***

ERAA supports this recommendation. Clearly, biases in measuring the energy efficiency of building (using software simulations as a proxy in this case) need to be rectified to avoid the imposition of building requirements that cost more but fail to deliver net benefits to the consumer.

Commercial and industrial

There are many reasons why firms might choose not to adopt energy efficiency improvements that appear to be privately cost-effective, but the only two that might

warrant government intervention are market failures in regard to information and split incentives (Draft Finding 8.1)

Government should not become involved in accreditation of energy consultants and energy service companies because this function can be adequately performed by an industry or professional association like the Australasian Energy Performance Contracting Association (Draft Finding 8.2)

The costs and benefits of a policy of government facilitation of business transactions with energy service providers should be evaluated against alternative mechanisms which promote the market provision of energy efficiency advice or services (Draft Finding 8.3)

In ERAA's view, information problems (including non cost-reflective pricing) are at the source of market failure in energy efficiency and that the only legitimate role for Government policy is to target these areas. Further, policy interventions in these areas must be careful to avoid crowding out alternative private sector responses to information problems (which may be more efficient).

The need for special energy efficiency research and development funds has not been substantiated, given that funds can be sourced from existing more general research and development programs (Draft Finding 8.4)

ERAA concurs strongly with this Finding. Support for legitimate research and development in energy efficiency is already available under general government research and development programs.

The Commission does not support provision of direct subsidies to firms to undertake energy efficiency improvements which are privately cost effective for those firms. Subsidies may, however, have a role in encouraging the uptake of improvements that have important spill-over effects (Draft Finding 8.5)

The case for government subsidies to encourage energy efficiency improvements should be separated from the means of funding those subsidies, such as by hypothecated levies (Draft Finding 8.6)

ERAA concurs strongly with these Findings. Government policy that targets information problems (as opposed greater energy efficiency *per se*) is a more direct and cost effective way of stimulating the optimal level of energy efficiency investment. If there was a case for subsidies, hypothecation of levies would only be efficient in the unlikely case that a strong nexus existed between the levy and the area of funding.

A policy of mandatory energy efficiency opportunities assessments is not warranted on private cost-effectiveness grounds. There would be no justification for mandating the implementation of Energy Efficiency Opportunities Assessment results (Draft Recommendations 8.1)

ERAA agrees that mandatory audits and the implementation of energy efficiency audit results are unnecessary and potentially costly to the economy (given that information problems are at the source of potential market failure in this area).

Energy efficiency standards for commercial buildings should not be introduced without a more thorough evaluation of the costs and benefits of such a policy and a comprehensive analysis of the other policy options. In such an evaluation, the Australian Building Codes Board should give greater consideration to:

- ***the sensitivity of regulatory impact statement estimates of cost savings to the assumptions used;***
- ***the costs of introducing energy efficiency standards, including administration costs and compliance costs; and***
- ***the effectiveness of standards in achieving higher actual energy efficiency (Draft Recommendation 8.2)***

ERAA supports this recommendation. Insufficient evidence as to the cost effectiveness of current energy efficiency standards for commercial buildings is available to warrant their expansion without review and assessment. As with mandatory minimum standards and mandatory energy performance ratings, any question of cost effectiveness should be resolved before standards are imposed in other jurisdictions.

Transport

Markets provide extensive information to consumers regarding fuel consumption of motor vehicles. Nonetheless, the Australian Government's Fuel Consumption Labelling Scheme and Green Vehicle Guide provide relatively low cost, accessible and comparable information to consumers, and may be justified as part of the more fundamental objective of encouraging consumers to reduce the adverse environmental impacts of motor vehicle use (Draft Finding 9.1)

Fleet-wide fuel consumption targets for new motor vehicles sold in Australia are likely to have had only a limited impact on the fuel efficiency of the new vehicle fleet. Significantly tightening such targets and making them compulsory would be likely to impose additional costs on consumers (Draft Finding 9.2)

Efficient road congestion pricing would lead to increases in energy efficiency by improving traffic flow and diverting some peak-hour journeys to alternative times or to more energy-efficient means of transport. These increases would be cost effective for the community (if tolls are set appropriately) in that costs to those excluded are more than offset by the gross efficiency benefits to those who continue to travel. However, these energy efficiency gains will not be privately cost effective for all road users. Reductions in fuel consumption and cleaner burning of fuel would also provide significant local environmental benefits and reductions in greenhouse gas emissions (Draft Finding 9.3)

The TravelSmart program improves the energy efficiency of transport by providing consumers with information regarding less fuel-intensive travel options and means to reduce the need to travel. TravelSmart simultaneously addresses several policy issues — greenhouse gases, air pollution, and personal health and fitness — in a way that allows consumers to choose which options are most cost effective for them (Draft Finding 9.4)

There remains some scope for additional regulatory reform in the road and rail sectors, which would improve overall efficiency and would probably lead to some increase in energy efficiency within each sector. Reforms may alter the competitive position of road freight compared to rail, which might change the energy efficiency of the overall freight task, but this would not be an appropriate reason for delaying such reforms. There appear to be few regulatory impediments to a privately efficient modal split in the freight sector that would have any significant impact on energy efficiency (Draft Finding 9.5)

ERAA agrees that more cost reflective transport infrastructure and fuel price signals will drive further cost effective energy efficiency in the transport sector in the same way that more cost reflective signals in the residential energy market are expected to.

Government as energy users

The use of energy targets for government operations could result in a deterioration of the overall effectiveness and efficiency of government services. Using energy-intensity performance indicators instead of targets can reduce this risk and help identify opportunities for cost-effective improvements in energy efficiency (Draft Finding 10.1)

Addressing cost-effective energy efficiency in procurement policies, provided there is sufficient flexibility, could lead to environmental benefits and a small increase in the overall efficiency and effectiveness of government operations. There may be some additional benefits through demonstration effects and market development, but these are unlikely to justify procurement decisions which are not cost effective for government operations (Draft Finding 10.2)

Government, as a user of energy, should approach energy consumption and investment decisions in the same way as a large firm would (notwithstanding the demonstration and leadership role it could take on behalf of the community). Government should not be expected or forced to invest in levels of energy efficiency beyond what is privately cost effective, for the same reasons that firms, such as ERAA members, should not. Public resources are as valuable to society as private resources.

Role of energy market reform

More cost-reflective pricing has the potential to improve energy efficiency by influencing both consumer and supplier behaviour, particularly in the longer term when consumers have both more information and opportunity to modify their behaviour, and producers have the opportunity to respond to changed market conditions (Finding 13.1).

Any mandated roll out of interval metering devices should be subject to a comprehensive benefit–cost analysis. Mandated roll out of technologies should not preclude choice in the device or competition between service providers (Draft Recommendation 13.1)

ERAA supports this recommendation. While ERAA supports the move to cost-reflective pricing of energy, which will be facilitated by interval metering technology, it does not support the case for *mandating* the adoption of this technology. With technology costs declining ERAA would expect the deployment of this technology by the market when and where there are clear commercial drivers for doing so. Premature adoption of interval metering technology (forced by mandatory roll out) is more costly than allowing a market- based deployment to occur naturally.