THE ROYAL AUSTRALIAN INSTITUTE OF ARCHITECTS

27 May 2005

Dr Neil Byron Presiding Commissioner Productivity Commission Locked Bag 2 Collins Street East MELBOURNE VIC 8003

Dear Dr Byron

Re: Energy Efficiency Draft Report

The Royal Australian Institute of Architects (RAIA) thanks you for the opportunity to comment on the Draft Report released by the Productivity Commission regarding Energy Efficiency. As you are no doubt aware, we contributed to the initial Public Inquiry by way of an extensive submission, and we would like to re-assert the points raised in that submission. In addition, we offer the following response in relation to your preliminary findings:

Current Issues

There has been a long history of difficulty with NatHERS as a simulation tool for the often complex housing that architects design. Part of the problem lies in the restricted assumptions of the computer simulation tool (the settings) and part of the problem is the lack of correlation with real world experience and a verification of the tool to show its accuracy.

Computer simulation tools

While we understand that some of the issues of the "settings" have been addressed in the revamped simulation program "Accurate" developed by the CSIRO, to date there have been no studies done to correlate these changes to the standards set by the earlier program NatHERS to establish ongoing continuity and equity. The RAIA recommends that all Governments that rely on the use of simulation tools undertake a comprehensive study of the correlation of the old tools and the new tools prior to the introduction of any new tool as part of a regulatory regime.

Verification of Computer Simulation Tools and Real World Experience.

It is vital that there be verification of the computer simulation against real usage to establish the sensitivities and accuracy of the rating tools currently used to determine the standards that houses are required to reach by regulation. To this time there has been no such correlation and the lack of verification means that architects have low confidence in the stringency levels being adopted in the regulations.

The RAIA recommends that all Governments that rely on the use of simulation tools undertake a comprehensive study of the correlation between the computer simulation models and real world experience in order to validate the stringency levels on which the tool is based. This is a matter of utmost urgency in jurisdictions where Computer Simulation is relied upon for a planning approval.

Basix

The RAIA supports the use of Basix in NSW as a planning tool for determining sustainability targets, taking account of the comments above. RAIA members however, have experienced difficulties with the introduction of these tools with short lead times. All designers including architects should have available a period for familiarisation with the tools and related stringency levels prior to the formal introduction of those levels.

As the design of buildings can be protracted and as issues of sustainability have significant impacts at an early stage in the design process, it is essential for there to be a period of familiarisation with the stringency of the tool prior tool the introduction of that tool. At the present time this particularly relates to the introduction of requirements for the Multi Unit and House Alterations and Additions.

We trust that the Productivity Commission will seriously consider the above views of the RAIA as well as those contained in our original submission, when preparing the final report. We hope to be kept informed of the Commissions' progress and final report in due course.

Should you require further information or if you have any questions, please do not hesitate to contact me.

Yours sincerely

Ross Clark Acting Chief Executive Officer