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ENERGY TECHNOLOGY

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Chief

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ENVIRONMENT AND NATURAL
RESOURCES COMMITTEE

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Divisional Headquarters

26 August 2005

Ms Jenny Lindell, MP
Chair
Environment & Natural Resources Committee
Level 8
35 Spring Street
Melbourne VIC 3000

Dear Jenny

Thank you for your letter dated 8 August 2005 regarding an inquiry into the Energy Services Industry.

Please find attached a submission from CSIRO, Energy Technology.

Please contact me if you have any questions.

Yours Sincerely

Dr David Brockway
Chief

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Enquiry into the Energy Services Industry

CSIRO Energy Technology has an active research team in Distributed Energy which covers aspects of energy efficiency and particularly demand management. CSIRO has performed a number of industry studies in this area, including a study on solutions to the barriers to distributed generation. CSIRO was part of the consortium that delivered the Energy Users Association Demand Response trial and leads Australia's contribution to the International Energy Agency Demand Response Resources Task XIII. Consequently, CSIRO is quite well qualified to make comments on this matter. Some brief responses to specific items of your enquiry are as follows;

2. *Range of services and technologies available and the diversity of business models compared with those in other OECD countries*

CSIRO has identified numerous gaps in the availability and diversity of technologies and services in Australia. Consequently CSIRO has actively engaged in promoting new technologies and business models based on best overseas practice. For example CSIRO introduced CO₂ supermarket refrigeration to Australia, which when fully rolled out, is expected to save over 1 MTCO₂/yr of greenhouse gas savings. Despite being commercially attractive and widely deployed in Scandinavia, this technology would not have entered the conservative Australian market without change agent organisations such as CSIRO and SEAV. Similarly, demand response aggregators are common in the USA, but the first aggregator has only recently joined the market in Australia with some initial help from CSIRO. Publicly funded organisations can play an important role in this area.

4. *The main barriers to and drivers for the development and uptake of energy efficiency services in the residential commercial and industrial sectors*

The barriers to energy efficiency are well documented. However, of particular note are the market distortions between the supply side of the industry and the demand side of the industry. In particular

- Distribution networks are able to receive essentially guaranteed returns on their infrastructure investment. This is not available to energy service providers
- Distribution networks smear large localised investment costs across the entire network, thereby dramatically reducing the investment signal for energy service providers who otherwise, could competitively supply alternative local infrastructure solutions
- Generators have access to a greenhouse gas emissions reduction market (MRET) that is not available for other carbon reducing technologies that might be provided by the energy services industry.

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6. *Measures to promote the energy efficiency services industry, including the production of data on the performance of various technologies and information to identify and facilitate investment in the energy services industry*

Many energy efficiency products are available, but buyers are very wary of "snake oil" claims. Independent testing by a well known credible organisation can make a significant impact on product acceptability and should be encouraged.