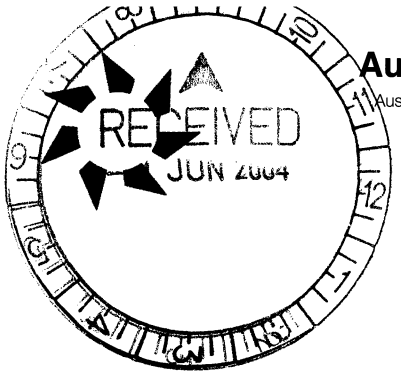


Australian Academy of Technological Sciences and Engineering
Australian Academy of Technological Sciences and Engineering Limited - Incorporated in ACT. ACN 008 520 394 ABN 58 008 520 394
Ian McLennan House, 197 Royal Parade Parkville Vic Australia 3052
Telephone: (03) 9347 0622 International: 61 3 9347 0622 Fax: (03) 9347 8237
Website: www.atse.org.au
PO Box 355, Parkville Vic 3052

31 May 2004

Mr John Feil
Executive Director
National Competition Council
GPO Box 250B
Melbourne, Vic 3001

Dear Mr Feil,

Ms Nevenka Cadevelle has asked the Academy to comment on some aspects of the application of Services Sydney for the Declaration of Sewage Transmission and Interconnection services provided by Sydney Water.

This follows the publication by the Academy of a comprehensive report of Water Recycling in Australia, which was prepared by Dr John Radcliffe AM ATSE under the guidance of a steering committee comprised of Fellows of the Academy and others with relevant expertise. A copy of this report is enclosed and it may also be accessed on the Academy's web site www.atse.org.au.

The two questions on which Ms Cadevelle suggested that we might be able to provide useful input to the work of the Commission were:

- Is the proposal by Services Sydney to reclaim water from sewage technically feasible , and
- Is such a process operated in other jurisdictions, and if so to what extent and to what effect?

Both questions are answered in our report, but before summarizing our response, I should like to make an over-riding comment that also arises from the study we undertook. The need for water policy, in all its manifestations, to come under the authority of a single state body underlies two recommendations on pages 185 and 186 of the report:

- Governments must resolve, at whole-of-government level, the conflicts of interest that may be extant at portfolio level in environmental management, resource provision, revenue generation and water pricing objectives.
- Any separation of the responsibilities for the ultimate management of water and wastewater resources, as has developed in the USA, should be discouraged in Australia.

In the case of water supplied to and potentially generated from metropolitan Sydney, we identified a number of policy-making institutional stakeholders whose interests would need to be taken into consideration by an integrating or over-riding authority. The list includes the Department of Conservation and Environment (including the NSW EPA), the Ministry of Energy, Utilities and Sustainability, the Department of Infrastructure, Planning and Natural Resources, the Sydney Catchment Authority, Sydney Water and the Health Department. The fact remains that in NSW the policy process is severely fractured by the roles and responsibilities of the many organisations. This means that overall management and control of the river systems that sustain metropolitan Sydney and of the 'whole-water-cycle' are very weak. However, there is no

inherent reason why water and sewage services cannot be provided by appropriate service agencies selected on merit and provided they are operating within a unified government policy framework that recognizes the entire hydrologic cycle in its stewardship of water resources.

Turning to the specific questions, we would observe (as set out in our report) that:

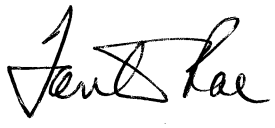
- Water technologies exist for recovery of high quality water from sewage (pages 14-16), and
- There are numerous applications of such technologies, some leading to (i) agricultural use of recycled water, for example by Shoalhaven Water (page 67) and Grampians Water (page 83), (ii) industrial use, for example BP Amoco oil refinery at Kuggage Point, Brisbane (pages 86-87) and (iii) treatment to drinking water standard in Singapore (pages 34-36).

Numerous other examples are provided in our report.

Finally, we wish to draw attention to the care needed in releasing recycled water into the environment, not only on grounds of water quality but also on hydrologic grounds, which include stream flow and the care needed for sensitive environmental management of this resource. It should be noted that the health of river and many natural ecosystems is dependent on the natural variability of seasonal flows. The replacement or substantial augmentation of natural flows, even by high quality effluent from wastewater treatment plants, must be carefully managed in a controlled manner at specific sites, in order to avoid significant deleterious environmental as well as economic impacts.

Thank you for the opportunity to comment.

Yours sincerely,



Professor Ian D Rae
Technical Director