

26 April 2002

Mr Michael Seery  
Program Manager Electricity  
Independent Pricing and Regulatory Tribunal  
Level 2, 44 Market Street  
SYDNEY NSW 2000

Dear Mr Seery

This letter constitutes AEEMA's response to the call for submissions on IPART's report *Electricity Undergrounding in New South Wales: An Interim Report to the Minister for Energy*.

AEEMA lodged a detailed submission to IPART on 4 February. The submission argued strongly in favour of placing energy and communication cables underground. This letter will not repeat those arguments, but will touch on the costs and benefits of new street lighting, technical and regulatory issues associated with undergrounding and issues associated with proposed undergrounding pilot projects.

### *Street Lighting*

The Interim Report states that an indicative cost for street lighting can be obtained by assuming one lantern each 50 metres of roadway, at a cost per installation of \$1,500 (equating to \$30 per meter of road).

AEEMA considers this cost to be excessive. The nominated cost and spacing relate to an older style of lighting for major roads. The newer style of road lighting for major roads - and the type that would certainly be installed should undergrounding of energy cables proceed - costs around \$1,600 per installation, but is spaced on average every 65 meters. Hence the average cost per meter for major road lighting is \$26, rather than \$30.

More significantly, the cost for *residential* roads - which account for around 65% of the lit roads within NSW - averages \$1,100 per installation, with the spacing averaging 55 meters. This equates to a cost of \$20 per meter of road.

The potential benefits of installing new road lighting may be summarised as follows:

- reduced maintenance costs by applying newer, more reliable technologies
- considerably reduced energy consumption (up to 50% per luminaire), with a consequent reduction in greenhouse gas emissions
- street lighting would comply with the Australian Standard, thereby increasing illuminance levels and reducing potential liability claims

As a final note on street lighting, the Tribunal's attention is drawn to an error with the word 'luminaries' on page 26 of the Report (it should read 'luminaires').

*Technical and regulatory matters*

The technical and regulatory issues associated with undergrounding communications cable, particularly when they are collocated with energy cable, are complex. The Interim Report does not address these issues in any detail, and clearly much more work needs to be done. As the representative body for the communications infrastructure industry, AEEMA can offer assistance in this area. AEEMA can also assist with technical advice by virtue of it being the representative organisation for the electrical capital equipment industry and the lighting industry.

For these reasons, AEEMA recommends that it be represented on the technical committee established by the Ministry of Energy and Utilities to consider technical issues associated with undergrounding.

*Pilot projects*

AEEMA supports calls made at the Public Forum on 19 April for an undergrounding pilot project or projects. It is understood that the Ministry of Energy and Utilities is also considering recommending that pilot projects proceed. Pilot projects have the potential to provide useful technical and cost data.

However it is important that the pilot projects be of a sufficient size to demonstrate the economies of scale that could be realized should undergrounding proceed on a major scale. Only if the pilot projects are substantial will they give a true indication of the costs of undergrounding on the scale envisaged by the Government. It is also important that the pilot projects be supervised by a competent consulting engineering firm capable of assimilating and applying the lessons of the pilot.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Bryan Douglas', with a stylized flourish at the end.

Bryan Douglas  
DEPUTY CHIEF EXECUTIVE