

28 October 2021

Alisa Toomey
Senior Advisor
Australian Energy Market Commission
GPO Box 2603
Sydney NSW 2000

Dear Alisa,

RE: Submission to the AEMC Review of the Regulatory Framework for Metering Services (Ref: EMO0040)

This submission is made on behalf of the Institute of Public Works Engineering Australasia (IPWEA). IPWEA is the peak association for the professionals who deliver public works and engineering services to communities in Australia and New Zealand.

IPWEA has over 4000 members including senior engineering staff at almost all Australian local governments. In recent years IPWEA has expanded its traditional local government engineering focus to broader public works, covering all tiers of Government as well as the private sector, which comprises 40% of IPWEA membership. Almost all of Australia and New Zealand's professional consultancy firms that specialise in public sector infrastructure, including roads, water, power, rail, ports and airports, have managers and staff who are members of IPWEA.

In 2016, IPWEA launched a Street Lighting and Smart Controls Program (SLSC) to support our members, particularly those in local government and at the main roads agencies, with their transition of more than 2.5 million legacy street lights to LEDs and smart controls (see www.slsc.org.au). This program was launched with the support of the Commonwealth Government and a wide array of industry players. It has produced some important model specifications and guidance documents that have been widely used in the market.

While LEDs are now widely accepted and adopted in Australian public lighting, smart street lighting controls have not been widely deployed thus far. IPWEA therefore strongly welcomes the AEMC acknowledgement of the potential benefits for local governments of smart street lighting controls in the Directions Paper (Table 2.1).

One of the key barriers to the uptake of smart street lighting controls in Australia has been the lack of a mechanism that recognises their metering capabilities. This has restricted the ability of customers to get any financial benefit from dimming, trimming and constant light output controls. These are particularly important components of the business case and we'd therefore encourage the AEMC to identify ways in which their metering capabilities might be recognised in the National Electricity Market so that customers can take full advantage of this important technology.

The challenge of not having an approach that recognises the metering capabilities of smart street lighting controls was first identified in the IPWEA [SLSC Roadmap](#) in 2016. In the years since, it has severely delayed the take up of smart street lighting controls in Australia, particularly on utility-owned street lighting which accounts for about 90% of the installed base. Based on project announcements, IPWEA estimates that perhaps 3-4% of public lighting in Australia has or will have smart street lighting controls (and most of this is on council and road authority-controlled lighting).

The low uptake of smart street lighting controls in Australia now stands in stark contrast to New Zealand where committed projects will take deployments to over 70%, the UK where deployments already exceed 30% and key areas of the United States where major municipalities and utilities are undertaking large-scale deployments in conjunction with LED rollouts. Each of these jurisdictions has successfully found ways to accommodate the metering data produced by smart street lighting controls.

IPWEA has recently been provided with a copy of the Queensland Department of Transport and Main Roads (DTMR) submission to the Review which, in addressing the questions raised in the Directions Paper, is focused on the issue of smart street lighting controls. I am writing to express IPWEA's strong support for the DTMR submission. While the DTMR submission is based on their own large-scale deployment, it highlights all the benefits of smart controls raised in the IPWEA Roadmap as well as the challenges being experienced by our members across the National Electricity Market.

We'd encourage the AEMC to address this long-standing barrier to the adoption of an important new technology that can substantially improve the visibility of large and currently unmetered street lighting loads as well as save energy, reduce GHG emissions and make our communities safer.



We'd welcome any further discussions with the AEMC on this matter.

Yours

A handwritten signature in black ink, consisting of a large, stylized loop that encircles a horizontal line, with a small vertical stroke intersecting the loop.

David Jenkins
CEO IPWEA Australasia