Local Government Association of the Northern Territory

11 January 2019

Mr Chris Pattas
General Manager, Networks
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001

Sent by email to:
NTPowerWater2019@aer.gov.au

Dear Mr Pattas

POWER AND WATER CORPORATION'S 2019-2024 REVISED PROPOSAL FOR ELECTRICITY NETWORK DISTRIBUTION PRICING (29 November 2018)

This submission comprises the response:

- from the Local Government Association of the Northern Territory (LGANT) on behalf of local governments in the Northern Territory to the Australian Energy Regulator
- to the the 2019-2024 Revised Proposal ('the Revised Proposal') from the Power and Water Corporation ('the Corporation')

The submission focuses specifically on the issue of the Corporation's proposed approach to unmetered electricity supply for street lights in the Northern Territory and associated smart technology and innovation.

LGANT is the peak body representing the interests of, and providing a voice for, five municipal, three shire and nine regional councils in the Northern Territory.

LGANT forwarded an initial submission to the Australian Energy Regulator on 16 May 2018 and a number of issues in that submission LGANT believes are still unresolved.

BACKGROUND

Northern Territory local councils took ownership and full responsibility for the operation of street lights in major towns from 1 January 2018.

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With the transfer of ownership of public lighting, councils in the Territory have taken a nationally leading position in their proposals to widely deploy LEDs, smart controls and associated smart city devices over the coming regulatory period. Of note and demonstrating the immediate relevance of these issues to the current pricing determination is that:

- Katherine Town Council has already installed 969 LED luminaires across two categories of road lighting and each is fitted with a smart controller
- Darwin council has awarded a tender for LEDs in preparation for the mass replacement of its street lighting in March 2019 together with the completion of the switching on Darwin (CBD) project which incorporates all street lighting and public area lighting into smart lighting in May 2019.
- Palmerston council is currently staging an LED and an installation tender in preparation for the mass replacement of its street lighting
- Litchfield council is considering a LED replacement program from 2019/20 and has resolved to replace all lights relating to maintenance with LEDs for its 274 lights
- With the support of the Territory Government, both Darwin and Palmerston councils have been awarded substantial Commonwealth grants under the Smart Cities and Suburbs Program which involves the replacement of street lighting with LEDs and smart controls and with associated smart city devices.

Based on the above and the stated intentions of other councils, LGANT's assessment is that the majority of NT street lights are likely to be operated by smart controls before the end of the 2019-2024 regulatory period.

While ownership of street lights has transferred to councils, most street lights are directly connected to the Corporation's electricity supply. They are also unmetered and their retail electricity loads are based on electricity consumption bands established by an Electricity Pricing Order (NT).

Councils are particularly concerned about pricing proposals that could:

- directly or indirectly raise the underlying wholesale pricing; and/or
- create disincentives to deploy new energy efficient technologies that can successfully cut energy consumption and increase service levels.

COMMENTS ON REVISED PROPOSAL

LGANT acknowledges the Corporation's Revised Proposal (*Section 2.1 Engagement Since Initial Regulatory Proposal*), in which it confirms it engaged with both local councils and LGANT and has come to understand their concerns about the initial proposal.

The Corporation's acknowledges in its Revised Proposal:

- the concerns of local councils
- the potential for changes to made to the calculation of unmetered electricity loads.

While this is welcomed, the Revised Proposal lacks clarity in how the concerns of local councils will be addressed, namely:

1. Accurately estimating unmetered energy use
2. Options for councils to adopt actual meter reading capabilities (if or when available)

1. Estimating unmetered energy use

The Corporation's Revised Proposal for public lighting is to retain the use a kWh charge for unmetered supplies including public lighting. The Corporation acknowledged in Section 13.2.2 of its proposal that:

> *"The NT NER Chapter 7A requirements for calculating Type 7 consumption are still unclear and as such we will continue engaging with the Department of Treasury and Finance to determine an appropriate calculation methodology prior to 1 July 2019."*

As such, there is currently no detail provided in the Corporation's Revised Proposal to address councils' concerns. Furthermore, there is no commitment for consultation with councils in determining the appropriate calculation methodology.

In developing an appropriate calculation methodology LGANT recommends considerations of incentives (or at least ensuring there are no disincentives) for:

- saving energy and reducing network load
- improving public safety
- enabling the deployment of smart controls and smart city devices

which are consist with current Federal and Territory Government policies.

Save Energy and Reduce Network Load

Considerations should be made to incentivise councils to:

- save energy by dimming lighting in off-peak hours
- permanently trimming excessive lighting
- optimising start and stop times
- implementing constant light output controls.

It is particularly important that the charge is not based solely on maximum device consumption as there would be no customer benefit flowing through from a wholesale level for future energy efficiency initiatives.

Improve Public Safety

Higher capacity LED lights are becoming a commonplace practice so that there is headroom to raise lighting levels above normal levels during:

- evening commutes
- periods of adverse weather
- emergencies
- special events
- periods when there are elevated risks of anti-social behavior.

Additional LED output capacity now comes at low marginal cost but this would be largely lost and act as a heavy disincentive to work towards achieving such capacity if tariffs are based on the maximum energy consumption of a luminaire.

Enable deployment of smart controls and smart city devices over 24hr periods

As smart controls and smart city devices are added to street lights, a 24-hour power supply will be required for the lighting asset. Although the smart controls are anticipated to reduce total electrical consumption of the asset, tariff pricing for a 24hrs operation is significantly more expensive than the 12hr operation tariff. Therefore, the current definitions for the tariff pricing schedules appear as a disincentive to deploy smart control and smart city devices. Further clarification is required on how this issue will be addressed.

2. Actual Meter Reading

The Corporation's Revised Proposal does not provide for options to develop meter reading through smart control owned and operated through councils.

The Institute of Public Works Engineers Australia (IPWEA) in February 2018 developed a paper titled *" Proposal for a new 'Small Load' Metering Regulatory Framework for Street Lighting"* which LGANT supports and believes should be given consideration due to rapid changes in smart technology and small devices.

The Corporation is proposing the 'Type 7' metering approach (which, according to IPWEA, assumes street lighting loads:

- *'are constant*
- *remain as first measured in a lab when lights were new*
- *turn on fully at sunset and turn off at sunrise.'*

This approach is entirely appropriate for the previous generation of street lighting but is now inadvertently creating barriers for councils to adopt street lighting smart control technologies and other supporting devices.

LGANT believes that the uptake of smart controls for street lighting by councils will be well established during the 2019-2024 regulatory period and as such provisions should be made to incentivise energy savings through actual metering reading capabilities available on smart control devices.

CONCLUSION

LGANT and Councils contend that items above can be fully addressed by leaving wholesale pricing for street lighting on an estimated consumption methodology with an optional provision for buy-in to meter reading alternatives (as technology and capability advances). Further clarity is needed in considering:

- How smart control devices will be incorporated into the new tariff structures
- How incentives for variable lighting outputs will be incorporated into the new tariff structures
- Provisions for options to use meter readings through smart control devices (owned and operated by councils)

LGANT and Northern Territory councils welcome continuing discussions with the Australian Energy Regulator, the Territory Government and the Corporation on approaches for addressing the above matters in the pricing review to date; however, as with LGANT's earlier submission on 16 May 2018, member councils still require further clarification. I remain happy to speak to all parties at any point.

Yours sincerely

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Cc:
NT Councils
Jodi Triggs, Senior Executive Manager Network Regulation and Commercial, Power and Water Corporation.
Samantha Byrne NT Treasure