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Independent Pricing and Regulatory Tribunal (**IPART**)
Level 16, 2-24 Rawson Place
SYDNEY NSW 2000

By email: ipart@ipart.nsw.gov.au

To whom it may concern

Draft terms of reference: the future of embedded networks in NSW

Energy Locals Pty Ltd (ACN 606 408 879) and its related entity, Energy Trade Pty Ltd (ACN 165 688 568) (**Energy Locals**) welcomes the opportunity to provide a submission to IPART in relation to the request from the Minister for Customer Services, under section 12A of the *Independent Pricing and regulatory Tribunal Act 1992* (Cth) to investigate and report on embedded network issues in NSW.

Energy Locals specialises in energy procurement and management, energy generation and the provision of energy efficient technologies for residential, commercial, and industrial projects. We have extensive expertise in the management and implementation of embedded networks, which include electricity, gas, hot water, solar PV, electric vehicle charging, battery storage and telecommunications.

Energy Locals actively supports and promotes the societal, environmental, and economic benefits of embedded networks and encourages the review of current frameworks regulating embedded networks where positive customer outcomes and renewable energy benefits can be demonstrated. Embedded networks are, in many cases, a bundled service spanning capital investments (including renewable energy, distributed energy assets and centralised hot water) recouped via charges over time. Residents in Energy Locals' embedded networks have access to low energy rates (due to our price match policy), low common area costs, centralised services with cost and space savings, indirect access to renewable energy and distributed energy assets (including electric vehicle chargers) and higher resale values. Capping the energy component could unwind this bundling approach, resulting in no investment in centralised hot water (with higher capital investment, space and operational inefficiencies) and less or no investment in renewable energy or distributed energy assets in new apartments.

Energy Locals strongly supports the enhancement of protections for embedded network customers but implores IPART to consider the need for a viable business model to remain that allows for these types of investments that benefit residents and result in smarter, more efficient builds. Through this submission, Energy Locals aims to emphasise the importance of targeted and relevant measures to ensure that the benefits of embedded networks can be recognised by customers and the community to the fullest extent without impacting opportunity for growth and innovation.

Our response is structured follows:

- Initial thoughts on merits of embedded networks and the issues related to IPART's Review. We expect to expand on these points once the review commences.
- Comments and suggestions directly relating to the Draft Terms of Reference (**ToR**).

Initial comments on IPART's Review

1. Methodology for setting maximum prices for utilities – hot and chilled water

We understand that the NSW Government intends for embedded network operators to bill hot and chilled water embedded network customers in the underlying energy source, meaning that customers must be billed based on the energy used to heat or cool water (i.e., c/kWh), rather than in litres of water heated or cooled. The proposed maximum price would then be applied to the underlying energy source.

While Energy Locals is supportive of introducing a means by which the pricing of hot and chilled water is more transparent and affordable for embedded network customers, the above approach presents a number of challenges, which we have set out below for your consideration.

a) De-incentivising investment

Capping the energy component could immediately remove the investment signal from embedded operators, who would no longer bundle services and result in individual hot water systems (at higher cost and taking up more living space than centralised systems), no behind-the-meter solar PV and battery storage, and additional capital cost for buyers of apartments due to the need to pay certain costs up-front (grid connection, metering, EV chargers, individual hot water systems etc.).

We strongly encourage IPART to consider the investment that we, and many other embedded operators, are making in centralised services including ones that would be difficult to access without the use of an embedded network, when contemplating an appropriate maximum price for hot and chilled water embedded networks.

b) Dedicated meters

The NSW Government has stated that compliance with the above requirement is only expected where the centralised hot or chilled water system has a dedicated water meter and gas or electricity meter, supporting the calculation of a common factor for the energy input.

Less than 5% of centralised hot water systems owned and operated by Energy Locals have a dedicated gas meter, which means that we would be unable to calculate a common factor for the energy input. Our initial analysis has demonstrated that the installation of dedicated meters would require additional capital investment and disruption to supply. This would ultimately be detrimental to customers due to cost pass-throughs. We cannot provide any commentary around the availability of dedicated meters at other embedded network site but suspect other embedded network operators will have similar arrangements.

c) Conversion factors

Due to our inability to calculate a site-specific common factor for the energy input at the majority of our embedded network sites, we have considered the possibility of the use of a general conversion factor provided by the Independent Pricing and Regulatory Tribunal (**IPART**). Again, we foresee challenges with

this approach as a general conversion factor would likely not consider that embedded networks sites are different sizes and the hot water plants are different models and ages. For example; embedded networks that we manage range from just 15 apartments to over 250, hot water systems that we have installed range in cost from $6,000 to $144,000 and plant under our management could be gas-only, electric, electric heat pump, or solar-powered with supplementary electric or gas heating. In addition, the local environment, including the ambient air and water temperature, impacts on efficiency of the hot water plant and applicable conversion factor for heating water.

The proposed approach may be more acceptable if a suitable metering solution allowed for individual hot water usage to be measured at a customer level. This is not currently the case. The use of conversion factors in lieu of such a metering solution results in customers potentially having the perception of vague or inaccurate billing or being unwilling to cover the cost of hot water usage until their own usage can be proven – which it can't. Trying to force the provision of centralised hot and cold water services into the National Energy Customer Framework (**NECF**) by mandating these services in units of inputs (energy) rather than outputs (water) is at odds with the many principles the NECF enforces, not least of which is accurate billing via compliant metering. Furthermore, and depending on the electricity metering solution chosen, the disconnection of electricity supply (for non-payment or move out) risks the availability of hot water.

Finally, when customers choose to change their electricity retailer it will result in the embedded network operator having to recover the costs of maintaining the centralised hot water system over a smaller number of customers. At some point this will become untenable for the remaining customers. A likely consequence is that embedded operators will bill the Owners Corporation for the electricity associated with hot water usage and the Owners Corporation will, in turn, ask residents to pay for it based on individual hot water usage. The Owners Corporation will not hold a retail authorisation and so this will again be measured and billed by the Owners Corporation in per litre terms.

2. Methodology for setting maximum prices for utilities – gas

Currently there is no maximum price utilities can charge for gas. Energy Locals would be supportive of a market reference price, similar to the default market offer currently in place for electricity. However, we would not be supportive of introducing an embedded network specific price cap on retail gas sales without at the same time introducing the same obligations on non-embedded network retailers of gas.

3. Methodology for setting maximum prices for utilities – electricity

We understand that the NSW Government has asked IPART to undertake a review on whether the default market offer (**DMO**) price is an appropriate maximum price for electricity networks or whether a different method should be used to determine the maximum price.

Currently, the DMO is a maximum price that retailers can charge electricity customers on standing offer contracts. When determining the annual DMO price, the AER must have regard to a range of factors and ensure that retailers can recover the costs they incur to service customers and to ensure there remains headroom beneath the regulated price cap that allows for vibrant retail competition. The requirement for the price regulation framework to support retail competition is critical to ensure long-term market efficiency and is consistent with the NEO and over 20 years of NEM reform.

We have a number of concerns if IPART was to select the DMO as a maximum price for authorised retailers selling electricity to embedded network customers, which we have set out below for your consideration.

a) Different costs to serve customers

In many circumstances, on-market retailers and authorised retailers selling into embedded networks incur different costs to serve customers. Authorised retailers selling into embedded networks are often the, or a related entity of the embedded network owner and operator and seek to recoup capital investment in embedded network infrastructure via customer tariffs. For Energy Locals, this embedded network infrastructure includes occupant meters and other electrical infrastructure.

Energy Locals understands that a key consideration of the AER in setting the DMO is to ensure that retailers have incentives to compete, innovate and invest and is of the opinion that the proposed approach to the maximum price for embedded network customers could actually discourage innovation in this space by raising barriers to entry and innovation on the part of embedded network owners and operators.

b) No control over input prices

A number of major electricity market events occurred in 2022, which have made it increasingly more difficult for retailers to manage their exposure to high and volatile wholesale electricity prices. This increases the likelihood of retailer failure, declining competition, and higher bills for customers.

While standing offer customers are being protected from more significant price increases in the short term, price caps on standing offers are limiting retailers' ability to increase prices as underlying costs change, adding to financial pressures on retailers. This will only have a more significant impact if a maximum price equal to the DMO is applied to embedded network customers.

There is currently no mechanism to change the Default Market Offer during a financial year, as there is for the Victorian Default Offer. We suggest that:

- a mechanism to adjust the Default Market Offer outside of the annual price review process be introduced to allow the AER to better manage future market disruptions;
- the DMO wholesale cost methodology be reviewed as part of DMO calculation to ensure that regulated retail prices reflect hedging costs in current market conditions; and
- if the NSW Government is to persist with a cap on retail prices, it should support this by a regulatory framework such as the Electricity Equalisation Tariff Fund (ETEF). This NSW government mechanism forced NSW generators to settle a load following hedge for all NSW small customers that settled at the regulated wholesale price set by IPART as part of setting tariffs. Reimposing this is within the power of the NSW Government, has clear precedent (it was in place for ~10 years) and wouldn't disrupt the NEM wholesale market.

c) *Not applicable to exempt sellers*

Energy Locals queries why the maximum price is proposed to be introduced for embedded network customers of authorised retailers but not exempt sellers. Arguably, embedded network customers of exempt sellers enjoy the least protections and benefits of electricity customers. We cannot understand

the Government's rationale for this and strongly recommend that the NSW Government prioritise introducing additional protections for these customers.

We do, however, strongly support the obligation for both authorised retailers and exempt sellers to use the DMO as a reference price when describing tariffs and discounts. This approach has brought greater consistency to on market customers and should be extended to embedded network customers.

4. Prohibition for hot and chilled water embedded networks

Energy Locals is aware that recently there has been a spotlight on hot water services in embedded networks and welcomes the introduction of a more targeted legislative framework. However, we strongly disagree with the notion that the prohibition of the establishment of new hot and chilled water embedded networks is the answer to the issues raised during the NSW embedded networks inquiry.

Hot water services in embedded networks provide a number of benefits to residents or tenants in buildings with shared supply. In particular, shared supply pipework and hot water plant results in reduced build cost and saves space as it negates the requirement for individual electronic hot water systems. Individual systems require additional space, including in many cases space for gas meters, and specific airflow requirements in certain circumstances. Additionally, gas pressure available to the building may not be sufficient to run all individual hot water systems at maximum demand.

Centralised hot water plants also provide decarbonisation benefits by reducing the number of plants required to meet to demands of the sites. For example, if a residential building contains 110 individual lots, those 110 individual hot water systems could be replaced with 12 hot water burners reducing the requirement for gas and emissions produced from the building.

Prohibiting these centralised services would lock in inefficient building design, reduced usable space for residents, systematically higher carbon emissions from many less efficient systems. The result will be higher cost apartments with less usable space and greater associated carbon emissions.

5. Compliance and enforcement framework for new price protections

As we see it, there are two key compliance and enforcement framework changes that the NSW Government and IPART can prioritise that will be most effective in protecting customers in embedded network customers, including in relation to costs associated with essential services.

These are:

- requiring that all sellers of electricity and gas to embedded network customers be authorised under the existing NERL licensing regime. Any exceptions granted should be subject to a rigorous

application process and only approved if the seller can demonstrate that selling energy is not a core function of its business; and

- designing and delivering a legislative regime and regulatory framework tailored to the requirements of consumers of hot and chilled water in embedded networks.

We have elaborated on these two suggestions below.

a) Regulations applying to Exempt Sellers

At the time that the NECF was introduced, the exemption framework aimed to capture situations other than where the AER authorised mass market energy retailers were selling energy for profit to residential and small business customers. However, as the embedded network industry has grown, it can no longer be said that the exemption framework is for entities who are not selling energy as their 'core business'. Arguably, the application of the exemption framework guidelines for retail exemptions and the historical lack of administration of the AER's register of exemptions has played a role in the development of a for-profit industry selling energy, with minimal regulatory consumer protection or price protection to embedded network residential customers.

As an authorised electricity retailer under the National Energy Retail Law (**NERL**), Energy Locals is obliged to abide by the conditions of our license and the legislative framework, a lot of which is not applicable to 'Exempt Sellers' granted exemptions from holding an authorisation by the Australian Energy Regulator (**AER**). To ensure that customers receive protections equivalent to those available to on-market customers, we strongly support the requirement for embedded network sellers to be authorised under the NERL. This would ensure that embedded network sellers have the necessary organisational and technical capacity, as well as adequate financial resources, to operate as a retailer.

At a minimum, we recommend that embedded network sellers be subject to the obligations applicable to authorised retailers under the NERL. This would ensure that embedded network customers (including both residential and small business customers) have access to additional protections such as:

- Accessibility – authorised retailers are subject to a number of obligations which aim to reduce complexity and enhance accessibility, including the requirement to provide; information in community languages, access to interpreter services and clear and concise customer-facing information;
- Complaints and dispute resolution – authorised retailers are obliged to make available to customers, and adhere to, their complaints and dispute resolution procedure;
- Hardship support – authorised retailers are required to implement a hardship policy, which is reviewed and approved by the AER and intended to identify customers experiencing payment difficulties due to hardship and to assist those customers to better manage their energy bills on an ongoing basis.

Further, if embedded network sellers were authorised under the NERL, they would be subject to the compliance and performance reporting obligations set out in the NERL and enforced by the AER. We consider that this would greatly support compliance improvements and monitoring of the regulatory framework for embedded networks.

b) Hot and chilled water regulation

We reiterate that Energy Locals is supportive of introducing a means by which the sale of hot and chilled water is subject to a similar regulatory regime to the sale of energy. However, we are concerned that, for the reasons set out in section 2 above, a significant number of customers will not be billed in the underlying energy sources and therefore not benefit from consumer protections under the NERL and related legislation. We also question the appropriateness of bringing centralised water services under the NERL via mandated billing units as a matter of legislative and regulatory expediency when these services differ materially from supply of electricity and gas.

Energy Locals proposes that the sale of hot and chilled water should be subject to its own legislative regime that addresses the specific requirements of consumers of this service. We understand that the implementation of such a regime is likely to take more time and work, however, we believe that this will provide the best result for providing these customers the required consumer protections.

The recommendation to require the sale of hot water to be measured in units of energy appears to be a way to stop exempt sellers from bypassing the additional customer protections offered by licensed retailers. We support this aspect but note that the use of conversion factors will mean that consumers are ultimately still paying in units that are originally measured in per litre terms, along with a conversion factor that may or may not be appropriate to the circumstances of the plant and embedded network. We anticipate that explaining the conversion factor to customers will lead to additional confusion and reduced transparency on customer bills.

Comments on Draft ToR

The issues highlighted above inform our suggestions on the ToR below. We have no comment on the "Task" as outlined in the ToR. We also support the process and consider 9 months an appropriate time to consider these complex issues and to allow for sufficient consultation. We suggest that the "Relevant Considerations" in the ToR be expanded (as shown below in bold) to account for the issued raised in this submission.

Relevant considerations

The Tribunal's recommendations should be those that the Tribunal considers best contribute to the national energy objectives.

In undertaking this task, the Tribunal should, where relevant, take account of:

*a) the efficient and competitive costs of providing the relevant services**, including:***

a)(i) the extent to which any regulated price cap maintains retail competition for the services via headroom between the efficient cost of service provision and any regulated price

a)(ii) consideration of the cost of a counterfactual case where the relevant services are provided without an embedded network

a)(iii) the impact that regulating the price of electricity, gas or water services within embedded networks will have on the overall bundled service model, including with regard to consumer benefits and service innovation

b) statutory and legal obligations, including conditions imposed by the Australian Energy Regulator (AER) when issuing registration exemptions

b)(i) the appropriateness of applying existing legislative and regulatory framework for energy to centralised hot and chilled water services

c) the short and long term outcomes for customers in embedded networks, including how they compare to other electricity and gas customers (with a direct parent connection point to the grid)

d) the benefits available to customers in embedded networks, including opportunities or limitations for embedded networks to support innovation and sustainable technologies

*e) the financial impacts on customers and existing embedded network providers**, including the financial impacts of existing embedded network providers with regard to sunk capital costs of legacy embedded network assets***

f) effectiveness, practicality, benefits and costs associated with compliance and enforcement options, including cost recovery considerations

g) recent reviews of embedded networks

*h) transitional issues as a result of IPART's recommendations**, including the appropriateness of grandfathering arrangements for legacy embedded network assets***

i) any other matter the Tribunal considers relevant.

Conclusion

We would like to take this opportunity to thank IPART for the opportunity to provide this submission. This submission has been authorised by Chief Executive Officer of Energy Locals. I would be pleased to support IPART's review as required and look forward to the IPART's recommendations.

Yours faithfully,

[redacted]

[redacted]
Chief Executive Officer
Energy Locals Pty Ltd