



ENM Solutions Submission
Independent Pricing Authority and Regulatory Tribunal
(IPART)
The Future of Embedded Networks in NSW

September 2023



Submission to IPART Industry Consultation Paper

1. Are these the right criteria to use for assessing different pricing options? Are there any criteria we have missed?

Partially. ENM Solutions agrees that the list of seven points should form part of the consideration process; however, we would also assert that IPART should consider existing mechanisms in place that can be adopted or modified for this purpose. Specifically, the Default Market Offer (DMO) for adoption, and Victorian Default Offer (VDO) as a mechanism guide.

The DMO does not currently apply to tariffs charged in embedded networks. However, in situations where an embedded networks customer purchases their electricity from an [exempt seller](#), they do have their prices indirectly capped at the DMO. This is because the exempt seller cannot charge more than the standing offer from the local area retailer, which is itself capped at the DMO.

Shadow Pricing should also be a consideration for price setting.

2. How should maximum prices be set?

Electricity – the maximum price for electricity should be the same for all customers in a local area. The maximum price should therefore be the same as the Default Market Offer (DMO), which will also ensure a consistent approach across the National Electricity Market (NEM).

Hot Water – Hot Water is a product in itself; however, utilising the cost of its major components, such as water and gas/electricity, will be a good starting point. There will then be a requirement to apply the efficiency of the plant and overall system efficiency during the circulation process. The Essential Services Commission (ESC) has defined this methodology in Schedule 4 of the Energy Retail Code of Practice – though it has not been updated in quite some time.

Chilled Water - We do not have a position on how the maximum Chilled Water pricing should be set.

3. Is the Commonwealth Government's Default Market Offer the appropriate maximum price for electricity embedded networks? If so, why?

Yes. The Australian Energy Regulator's (AER) Default Market Offer (DMO) is the most appropriate way to set the maximum price for electricity embedded networks. Consistent maximum price measures allow customers within an embedded network to compare the discount they may have to the same as those who are purchasing directly from a retailer.

In Victoria, the Victorian Default Offer (VDO) is the maximum price for selling electricity to embedded network customers in Victoria. This is a simple and effective approach which keeps embedded network operators' pricing in line with that of a Licenced Retailer.

Broadly, the perceived issues caused by embedded networks are not based on the “maximum price”, but how they are regulated and under what framework. In our opinion, the best way to ensure consumer protections in embedded networks are the same as the retail market, including maximum pricing, is by elevating the requirements on Embedded Network Operators to the same level as Authorised Retailers.

The National Electricity Market (NEM) does not need to separate jurisdictional rules around managing embedded networks, specifically pricing. This is evident by Victoria’s retail and network exemption frameworks closely mirroring the AER’s retail and network exemption frameworks.

The framework has previously been addressed by the Australian Energy market Commission (AEMC) in their 2019 final report “Updating the Regulatory Framework for Embedded Networks”.

4. How should different metering arrangements be taken into account? For example, how should prices be set where services are unmetered, or where water is metered rather than energy?

A “user pays” model should be utilised for all utilities, which requires accurate metering which, at a minimum, should be National Measurement Institute (NMI) approved. If a utility is not metered, then the cost generally falls on the Owner (which may be a corporation or individual) and gets carried through to the end user through higher Body corporate Fees and/or rental prices.

Looking retrospectively at metering arrangements, the time and financial investment for new and replacement metering will be significant. IPART should take a definitive position for the useful time of a utility meter, which is usually about 10 years, and use that as a guide to implement change.

We note that the unmetered sale of energy is restricted to Legacy networks that had this arrangement in place prior to 2015 and large commercial entities. Maximum price methodologies should remain consistent for the unmetered sale of energy, as for the metred sale of energy.

5. Should prices be set differently for different types of customers, and different types of embedded networks? For example, residential customers, land lease communities, small business.

No. Authorised Retailers in the NEM are not restricted by the type of customer, but how much they consume. This should be a cornerstone for pricing policy.

Charge groups defined within the [Network Exemption Guideline](#) under section 4.6, already outline arrangements for how Network charges can be applied to different groups of customers, including Shadow Pricing for Network costs and maximum pricing for all-inclusive tariffs. Further defining customers beyond this may result in greater complexity and confusion, as well as a difficulty to compare their offers through usage levels via existing Government comparison tools.

6. Are there any issues or systems constraints on using the common factor to calculate the units of energy for heating and chilling water?

Within its [2019 report](#), the Australian Energy Market Commission (AEMC) addressed some limitations in applying the Common Factor as a Converting Unit. The report cited how this factor is calculated or applied may vary across providers, resulting in an estimated amount of energy being billed to heat the water they consume. The primary constraint on this model operating to maximum effect is the lack of regulation that applies to the Common Factor and Hot Water as a sale of energy, currently not captured within the [Exempt selling](#) and [Network Guidelines](#) – a position reinforced within the recent [AER Review](#) for these guidelines.

IPART should also consider a range of efficiencies when looking at common factors, specifically older equipment with less efficiencies against newer, more efficient, equipment. If there is a push from gas to electric hot/chilled water plants, then an incentive scheme on the common factor could support this transition.

7. How can the maximum price for hot and chilled water be set to provide incentives for energy efficiency?

Price capping the sale of hot and chilled water could incentive the electrification of Hot Water Plant and implementation alongside solar generation to complement this model. Demand management around when hot water is heated using electricity may enable shifting use of the system to off-peak hours and less energy intensive periods of the day. However, shifting to these more efficient systems relies on also improving the piping and site infrastructure – all of which come at a substantial up-front cost. Whether a maximum price cap can provide strong enough incentive to push Networks into a significant financial cost that will need to be recouped, likely prior to pricing improvement for tenants, remains to be seen.

8. How can the maximum prices provide incentives for low emissions energy generation?

Setting a maximum price may incentivise the inclusion of solar generation in embedded networks to facilitate reductions in the pricing that can be offered to customers. However, the opportunities for different embedded networks to facilitate a solar installation that will substantially improve their pricing outcomes, is great and varied. This fails to also consider the option for an owner's corporation to improve the profitability of their embedded network, allowing for re-investment into the building, infrastructure, and modernisation over time.

Outside of on-site generation, concessions in the maximum price for embedded networks utilising Greenpower at certain benchmarks could also provide the flexibility needed to afford the more expensive renewable energy, low-emission options. This would allow Owners to build a more flexible maximum into their pricing that reflects the availability and utilisation of renewable energy.

9. How should maximum prices be enforced?

The DMO is enforced by the Australian Competition and Consumer Commission (ACCC) under the [Electricity Retail Code](#).

Targeted information campaigns designed to educate and inform Embedded Network Operators on their obligations and customers on their rights would be the best first step, which may include where to report or ask questions about breaches of the Standing offer of the local retailer.

10. Should new hot and chilled water embedded networks be banned?

No. ENM Solutions does not believe that new hot and chilled water embedded networks should be banned.

Centralising services generate significant benefits for existing and new multi-tenanted developments, and any blanket ban would underhandedly negatively impact consumers through; smaller dwellings; higher energy bills; and lower individual and building efficiencies.