

# Energy prices in embedded networks

15 August 2023

## IPART is reviewing embedded networks' prices

IPART's review will recommend a method for setting a maximum price for the sale of electricity, gas and hot or chilled water to customers in embedded networks in NSW. We will also recommend whether the NSW Government should prohibit new hot and chilled water embedded networks.

There has been a rapid increase in the number of embedded networks across New South Wales. There are currently few limits on their prices, and it is difficult for individual customers in embedded networks to switch retailers if they are unhappy with their supplier. Last year's NSW Parliamentary Inquiry into embedded networks found customers have received unjustifiably high bills, with limited avenues for dispute resolution.<sup>1a</sup>

In undertaking this review, there are certain factors that we must consider including those outlined in our [terms of reference](#), such as the efficient cost of providing services, the benefits of embedded networks, and the financial impacts on customers and existing embedded network providers.

Other embedded network issues are being considered separately under the [NSW Embedded Network Action Plan](#).

## We want to hear from stakeholders

We are seeking stakeholders' views on how maximum prices should be set, and whether the benefits of hot and chilled water embedded networks outweigh any disadvantages. We are also seeking related information, such as the costs of supplying customers through embedded networks, and the prices being charged.

Submissions to this paper are due by 11 September 2023. We have also released a consultation paper for consumers. We also encourage you to attend our online stakeholder workshop after submissions close on 21 September 2023. There will be a further opportunity to make a submission to our Draft Report in November, before we finalise our recommendations in March next year.

### Have your say

Your input is critical to our review process.

You can get involved by making a submission and subscribing to our mailing list to receive updates on this review.

[Make a submission >>](#)

[Register to attend our online workshop >>](#)

[Subscribe for updates >>](#)

<sup>a</sup> The NSW Parliamentary Inquiry into Embedded Networks heard reports of residents receiving hot water bills of \$2,000 over a 9-month period and \$9,700 over a 14-month period.



## Key issues for this review

### What is the right level of protection?

The [NSW Embedded Network Action Plan](#) seeks to bring outcomes for embedded network customers in-line with those in traditional energy supply arrangements.

Price outcomes for "on-market" customers in traditional arrangements vary depending on their particular retailer and offer. They can choose to shop around for a better deal. The maximum price for electricity standing offers is capped at the Australian Energy Regulator's "default market offer" or DMO.<sup>2</sup> One of the key objectives of the DMO is to maintain incentives for competition, innovation and investment by retailers, and incentives for consumers to engage in the market.<sup>3</sup>

Unlike on-market customers, many individual customers in embedded networks do not have the opportunity to shop around.<sup>4</sup> Therefore a maximum price cap that supports competition is less relevant for embedded network customers. Consumer groups such as the Public Interest Advocacy Centre and EWON consider that our maximum price methodology should recognise consumers' inability to access retail competition.<sup>5</sup> In addition, the 2021 statutory review of the *Residential (Land Lease) Communities Act 2013* found that if energy prices increased to the DMO, there would be sharp increase in energy bills.<sup>6</sup>

We are aware that Ausgrid and Endeavour Energy are seeking to increase their network tariffs for embedded network operators.<sup>7</sup> However, even in light of these proposals, we note the potential cost savings available to embedded networks relative to on-market customers – both in terms of network costs and wholesale costs (through bulk retail offers and/or on-site generation such as solar).<sup>8</sup>

Taking these considerations into account, our preliminary view is that a methodology to set maximum prices should result in maximum prices for embedded network services that are comparable to prices paid by relatively engaged on-market customers. This would be lower than the DMO.

## What other criteria should we consider when assessing different pricing methodologies?

We consider that a methodology for setting maximum prices for embedded network customers, where practical, should:

1. Ensure there is no interruption to energy supply
2. Ensure that an efficient embedded network provider is able to recover its efficient costs of supply
3. Respond to changes in the costs of supplying customers
4. Incentivise customers and embedded network operators to supply and use energy efficiently
5. Be simple for customers to understand and easy to apply
6. Allow for cost-reflective pricing
7. Be enforceable.

### We are seeking your views



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

## How should maximum prices be set?

There are a number of issues that we will need to consider when recommending an appropriate price methodology, including the factors set out in our terms of reference. Our approach needs to be able to be applied to a very large number of sites, with different metering arrangements, and different combinations of services being provided under different business models.

### We are seeking your views



2. How should maximum prices be set?



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

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?
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 businesses.
6. Are there any issues or systems constraints on using the common factor<sup>b</sup> to calculate the units of energy for heating and chilling water?
7. How can the maximum price for hot and chilled water be set to provide incentives for energy efficiency?
8. How can the maximum prices provide incentives for low emissions energy generation?
9. How should the maximum prices be enforced?

## Should new hot and chilled water embedded networks be banned?

Common hot water systems are prevalent within high density apartments across NSW. Customers within these common centralised hot water systems are often billed as a gas or electricity service and therefore subject to the National Energy Consumer Framework (NECF). However, there has been significant growth in hot water embedded networks, with or without centralised hot water systems, where customers are billed based on the quantity of water consumption and therefore are not protected by the NECF.<sup>9</sup> However, hot and chilled water embedded networks may offer opportunities for innovation in the provision of these services and take advantage of energy generation or storage on site.<sup>10</sup>

### We are seeking your views

10. Should new hot and chilled water embedded networks be banned? What are the benefits and costs of supplying these services through an embedded network?









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<sup>b</sup> For common hot water systems, a "common factor" is the factor applied to litres of hot water consumed at each individual residence to determine the consumed energy for which the residence is charged for (MJ/litre). It is typically calculated by dividing the energy consumed at the master gas meter by the total hot water used for the building.

## Information from embedded network operators and authorised retailers

We are seeking information from embedded network operators, exempt sellers and authorised retailers about your operations. Please indicate where information is confidential.

### We are seeking information

-  11. How many customers do you have by site and by embedded network type?
-  12. What are your prices?
-  13. Do you generate, extract or store energy on site? If so, please provide details.
-  14. What are your costs, and how do you recover these?
-  15. Please describe your chilled water service, including the energy sources used, the network configuration, and the relevant metering arrangements.
-  16. How are the short and long term interests of consumers considered when designing an embedded network?
-  17. Do you offer "energy-only" offers to customers in embedded network?
-  18. Do you charge customers on "energy-only" offers with another provider for their use of the network?

<sup>1</sup> Legislative Assembly Committee on Law and Safety, [Embedded Networks in NSW](#), Report 3/57, November 2022, pp 18, 51.

<sup>2</sup> Australian Energy Regulator, [Electricity price safety net](#), March 2023, p 1.

<sup>3</sup> Australian Energy Regulator, [Default Market Offer Prices 2023-24 Final Determination](#), May 2023, p 2.

<sup>4</sup> Legislative Assembly Committee on Law and Safety, [Embedded Networks in NSW](#), Report 3/57, November 2022, p 40.

<sup>5</sup> Energy & Water Ombudsman NSW [submission to IPART Draft Terms of Reference](#), April 2023, p 4; Public Interest Advocacy Centre [submission to IPART Draft Terms of Reference](#), April 2023, p 4.

- <sup>6</sup> NSW Department of Customer Service, [Residential \(Land Lease\) Communities Act 2013 Statutory Review](#), November 2021, p 37.
- <sup>7</sup> Ausgrid, [2024-29 Regulatory Proposal](#), January 2023, p 161; Endeavour Energy, [Tariff Structure Explanatory Statement 2024-29 Regulatory Control Period](#), January 2023, p 67.
- <sup>8</sup> Ausgrid, [Our TSS Explanatory Statement for 2024-29](#), January 2023, p23; Energy Locals submission to IPART Draft [Terms of Reference](#), April 2023, p 1.
- <sup>9</sup> Energy & Water Ombudsman NSW, [Spotlight on hot water embedded networks](#), March 2021.
- <sup>10</sup> Energy Locals submission to IPART Draft [Terms of Reference](#), April 2023, p 5.