

29 January 2024

Independent Pricing and Regulatory Tribunal PO Box K35 Haymarket Post Shop NSW 1240

Lodged electronically: IPART website.

Dear Sir/Madam,

Embedded Networks Draft Report

Origin Energy appreciates the opportunity to provide comment on the Independent Pricing and Regulatory Tribunal's (IPART) Embedded Network Draft Report.

We believe the regulatory solutions proposed by IPART largely address the concerns raised by the 2022 NSW Legislative Assembly Committee on Law and Safety.

Customers in embedded networks should have the same protections and regulatory oversight as standard supply customers. This should include access to all applicable residential customer rebates and concessions, hardship policies, and the Energy and Water Ombudsman scheme and associated dispute resolution services.

We acknowledge the arguments raised by IPART around the inappropriateness of using the default market offer as a maximum price because of the physical constraints of embedded networks which limit a consumer's ability to change retailers. However, we believe IPART's proposed maximum price of the median of lowest market offers will result in prices well below what a relatively engaged non-embedded network customer would pay and may result in embedded network operators not being able to recover their efficient costs.

A more accurate reflection of the price paid by a relatively engaged non-embedded network customer would fall within the range of the default market offer as the upper bound and the median of lowest offers as the lower bound.

Origin is strongly of the view that new hot and chilled water networks should not be prohibited. These services can deliver lower costs for consumers and increased reliability over individual stand-alone systems by utilising more efficient technologies and central maintenance. They can also provide non-monetary advantages such as better use of space, improved aesthetics and noise control, and reduced carbon emissions through fewer, more efficient units.

Origin's responses to each of IPARTs consultation questions are provided at Attachment A.

If you have any questions regarding this submission, please contact me on

Yours sincerely



Sean Greenup Group Manager Regulatory Policy

1. Revised pricing objectives

The 2022 NSW Legislative Assembly Committee on Law and Safety (the Committee) found residential customers in embedded networks have reduced consumer protections and some face unjustifiably high energy costs.

To solve the problem of consumer protections, we strongly support the National Energy Customer Framework applying to embedded network customers.

IPART's Terms of Reference requires it to develop an appropriate method to use in setting maximum prices for electricity, gas and hot and chilled water. In its Issues Paper, IPART's preliminary view was that its methodology should result in maximum prices for embedded network services that are comparable to prices paid by relatively engaged on-market customers.¹ It has not changed this position in its Draft Report.

However, IPART has not defined a "relatively engaged customer". Establishing a definition is critical to ensure the proposed pricing solution is meeting its objective that embedded network customers are not paying more than relatively engaged non-embedded network customers.

As noted by the ACCC, electricity consumers fall within a wide spectrum from those who are actively engaged, seek out better deals often three to four times a year, and feel confident dealing with their electricity retailer to those who do not or are not able to engage.² We believe a relatively engaged customer falls in between these two and is characterised as a customer that feels confident dealing with their electricity retailer but is likely to only review their prices once a year normally at the expiry of their benefit/discount period.

The ACCC's recent Inquiry into the National Electricity Market report provides some insight into the proportion of active and engaged customers. The ACCC found that in NSW most customers are either paying the default market offer (DMO) or fall within a discount of about 10 per cent.³ Those customers that achieve the highest discounts (the most active) are the minority and can be as low as 3 per cent of total customers in a given year.

This differentiation in engagement is important when forming a judgment of what corresponding price each of these customer types are likely to pay. Retailers run pricing campaigns to align with a particular pricing and acquisition strategy at a point in time. In our experience, aggressive discounting normally occurs for a short duration, typically for 6 to 12 weeks within a 12-month period. For the remainder of the year, a retailer's prices are likely to oscillate between the DMO and above its most aggressive discounts.

This highlights that the median of lowest offers is not representative of the price paid by a relatively engaged customer but is instead the price paid by a lower proportion of actively engaged customers. We address a more appropriate alternative price for relatively engaged customers in the section below.

2. Proposed pricing approach

Non-embedded network customers are on a wide distribution of prices reflecting how active they have been in engaging with the market. Some will be on high discount offers, some on or near the DMO, while some consumers may be on offers that exceed the DMO.

IPART's pricing approach involves taking the lowest median daily supply charge and the lowest median usage rate. Under its approach, these rates could be derived from different retailers. However, the most active customers could not obtain these rates because they have no ability to mix and match different rates from different retailers. Therefore, these rates are not representative of the lowest median market offer and are likely lower.

Furthermore, a retailer's price at different points in time reflects its pricing policy and pricing strategy. Retailers typically take a cost build-up approach to setting prices in the first instance to ensure cost

¹ IPART, Energy prices in embedded networks Industry Consultation Paper, 15 August 2013, p. 2.

² ACCC, Inquiry into the National Electricity Market: December 2023, p. 73.

³ Origin analysis from: ACCC, Inquiry into the National Electricity Market: December 2023, Figure 3.5, p.54.

recovery. Prices may then be adjusted up or down to achieve target profit margins, ensure regulatory compliance, retain market competitiveness, and reduce customer churn, among other considerations. As a result, a retailer may offer below cost prices or loss-leading offers for very short periods of time as part of a short short-term strategy to build or protect market share. The majority of times, prices are set at more sustainable cost reflective levels.

In some instances, this loss leading can be highly aggressive and lead to undesirable pricing practises. For example, once the customer has signed up, these heavily discounted prices are then increased significantly. This is a practise employed by several small retailers to acquire market share. We are aware of one instance in NSW where a retailer was offering significant discounts and then undertook a January '24 price change, increasing prices by about 30 per cent. A view could be that this retailer acquired customers on below cost market offers and are now re-pricing them at more sustainable levels.

This is not a practice we support and consider IPART should be aware of this because these prices are not representative of efficient or sustainable discounted offers but would nevertheless be included in the derivation of the median of lowest offers under IPART's proposed approach.

The issue of an appropriate range of discounted prices was considered by the AER when developing its initial DMO. While the AER's policy intent was different to IPART, understanding what different retail prices represent remains vitally important. As noted by the AER, the lowest range of prices offered by retailers may not reflect a reasonable profit margin. The AER concluded that setting the DMO using these prices would not allow retailers the efficient costs of serving customer in each distribution zone.⁴

We believe the lowest median daily supply and usage charges do not deliver a price paid by a relatively engaged customer. We believe a more representative price would fall within the following range:

- Upper bound The DMO. This represents the highest price that a non-embedded network customer will pay and acts as the safety net for those who are not engaged.
- Lower bound The median of lowest offers of the largest five retailers. This provides an indication of offers available to the most active customers. It will also include any potential below cost prices/loss-leading offers that may not reflect a reasonable profit margin.

We propose that a price that best represents the price paid by a relatively engaged customer is the midpoint between the median fixed and usage DMO charges of the largest five retailers and the median of lowest offers of the largest five retailers.

This approach would generate a price that is well below the DMO and provides the necessary discount to ensure that embedded network customers are not paying more than relatively engaged non-embedded network customers. Furthermore, it is also sufficient to provide IPART with comfort that it is meeting its objective of allowing retailers to recover their efficient costs including a return.

We also believe this approach addresses IPART's concerns that retailers may influence the price level by placing a lot of offers at the top price range regardless of whether customers are taking them up because the upper bound is set by the median of DMO offers not the number of offers at or around the DMO.

This approach is also workable for gas. In this case, the upper bound could be set at the median standing offer.

We agree that it would be appropriate to adjust the maximum price every 6 months. We consider that this interval is the most effective way of ensuring the pricing methodology is responsive to volatile cost changes while maintaining a reasonable level of price stability for customers.

We also propose that our method could be reviewed at pre-determined intervals, say five years, to ensure it remained fit for purpose.

⁴ AER, Default Market Offer Price, Draft determination, February 2019, pp. 32-33.

3. Maximum price methodology for hot water

We support an approach of setting a per litre charge based on the costs of supplying hot water with a centralised gas hot water system.

Representative Consumption

We consider the representative annual consumption of a gas embedded network customer in NSW is notably less than 10,000 MJ. Origin data suggests that this overstates the consumption by 10 to 20 per cent. We consider that IPART should undertake further analysis to identify a more representative usage level.

Supply Charge

IPART has specified that no additional supply charge will be allowed for hot water services. We agree that a customer should not pay multiple supply charges for the same fuel. We also agree that fixed costs should not be recovered through hot water usage charges.

Notwithstanding, supply costs are a legitimate operating cost for embedded networks. These costs include the fixed daily supply charge incurred from gas distribution networks at the parent connection point, network administration, and billing and meter reading. It is appropriate for an embedded network operator to recover these costs through a fixed charge to all embedded network consumers. This currently occurs through a fixed charge levied on each premise.

IPART should make clear that its regulated pricing structure includes a hot water usage charge and a fixed supply charge. This will allow embedded network operators to recover their incurred efficient fixed costs.

Common Factor

We note that there can be significant variations in the common factor across buildings due to the design of the pipework in the building, insulation, or age of centralised heating systems. Many of these factors are not within the control of the embedded network provider, particularly if the heating plant is owned by the Owners Corporations. With allowance for only one Common Factor, an embedded network provider will have a reduced ability to recover capital costs under this draft proposal for some portion of projects.

The result is that some buildings will simply not be economic for an embedded network provider to offer their services, and Owners Corporations will be stranded with energy bills for the centralised plant, without an ability to recover costs. For these reasons, we recommend that an exemption application process may be sensible for buildings where achieving a common factor of 0.4 MJ/L is not possible, or where the cost of achieving 0.4 MJ/L exceeds the resources of the Owners Corporation.

4. Maximum pricing methodology for chilled water

We agree in principle that chilled water embedded networks should be inclusive of all centralised airconditioning systems. We also agree that embedded network sellers must use the same method for charging all customers at a given site.

We consider that IPART's proposed 2 kWh/day to set the maximum flat daily fee is too low. This figure is based on the annual consumption benchmark for a comparable individual air-conditioning unit for a given system size and star rating as per the Commonwealth Government's Energy Rating website. We are concerned that these ratings are applicable for new appliances and do not consider legacy assets and that systems become more inefficient over time. Importantly, it is the Owners Corporation that always owns the air-con systems, so the EN operator cannot control efficiency of the system.

Also, apartment buildings and individual units can vary widely with average air conditioning usage, depending on the size of apartments, number of rooms with air con vents/fans, building insulation, amount of windows, orientation towards the sun, etc. Origin varies its pricing to customers based primarily on the number of bedrooms. We also monitor usage and adjust prices where there is underrecovery.

At a usage rate of 2 kWh/day, some buildings will not be economic for an embedded network provider to offer air conditioning services, and Owners Corporations will be stranded with energy bills for the air conditioning services without an ability to recover costs.

We believe there is a need to accommodate buildings with an average usage above 2 kWh/day where required. For example, an exemption application process may be sensible for buildings where average usage amount is well above 2 kWh/day.

We also believe IPART should consider the application of a varied fixed daily pricing in apartment buildings based on the number of bedrooms in apartments. This provides a fairer allocation of cost to energy users and could be easily applied maintaining IPART's current usage benchmarks. Origin's experience is that this approach is well understood and accepted by consumers.

5. Compliance and enforcement framework

As a general principle all embedded network suppliers of electricity or gas to be required to hold a retail licence which would allow enforcement to occur via the retail licence.

In terms of price reporting, we consider that all embedded networks are required to publish their standard embedded network prices on their websites. This will provide IPART with a clear reference to assess: 1) are the proposed prices compliant; and 2) whether the published prices are those charged to customers.

We believe these price disclosures should be complimented with a complaints-based system. To enable this, consumers in all applicable embedded networks including hot water embedded networks must have access to EWON. Access to EWON should be extended to all embedded network sellers, including sellers of hot and chilled water. This would allow the regulator to review the compliance of embedded network sellers in respect of any customer complaints received.

This would also allow EWON to be authorised to refer potential embedded network pricing breaches and supporting information to IPART. However, it is not clear what penalty provisions would apply in the event where IPART deemed a breach. We consider that IPART should be explicit about the penalty provisions for each specific breach.

6. Future of hot and chilled water embedded networks

Origin is strongly of the view that new hot and chilled water networks should not be prohibited.

Hot and chilled water embedded networks can deliver lower costs for consumers and increased reliability over individual stand-alone systems by utilising more efficient technologies and central maintenance. They can also provide non-monetary advantages such as better use of space, improved aesthetics and noise control, and reduced carbon emissions through fewer, more efficient units.

We accept there are several concerns about how hot and chilled water embedded networks currently operate. However, we strongly believe the solutions proposed by IPART will address these. Setting a maximum below the DMO and existing gas standing offers will provide effective price protections. Extending the NECF will also ensure that consumers are guaranteed the same protections as non-embedded network customers.

7. Additional Questions

Are embedded network sellers currently using time-of-use tariffs, demand tariffs, or any other innovative tariff designs?

Origin has a very small number of customers using time-of-use tariffs. In our experience, TOU tariffs are not generally requested by customers in apartments. TOU tariffs are also of particularly low interest to apartment dwellers because of the low usage and less ability to shift load (e.g. pool pumps, EVs, etc.).

We do not offer demand-based tariffs.

Notwithstanding, we continue to explore innovative designs to cater to diverse customer needs within embedded networks, ensuring transparency and fair pricing.

How are embedded network sellers charging for electric vehicle charging at the site? What are the prices?

Origin employs two different pricing models for electric vehicle (EV) charging depending on the design of the project:

- If the individual customer chargers are connected to a Public Light & Power (PLP) meter (or common area meter), we charge the PLP rate and these costs are allocated to the Owner Corporation.
- If the customer has a dedicated EV charging meter, we charge the customer their embedded network residential rate. This is our recommended solution and design guideline to developers as it provides a better customer experience.

Would a complaints-based compliance system deliver the right level of consumer protection?

We support a complaints-based system. We also believe that all embedded network customers should have access to EWON. This would also allow EWON to be authorised to refer potential embedded network pricing breaches and supporting information to IPART.

Should embedded networks using gas hot water systems be prohibited in new developments to assist in addressing cost of living pressures and assist in the NSW Government meeting its net-zero policy?

We do not believe gas hot water systems should be prohibited in new developments.

Electricity is not always appropriate for hot water heating. It requires significantly more space and storage of large amounts of water. In addition, the current heat pump capital investment is significantly more than that required for gas centralised systems.

While electricity-based heat pump technology is emerging, it remains an inferior option to gas centralised in the majority of developments.

Furthermore, while a centralised system is a preferred option, there are some sites where a noncentralised system is more practical for design reasons. Hence, it is better to have the flexibility for noncentralised systems if required, and a ban should not be imposed.