Draft Decision

Ausgrid Electricity Distribution Determination 2024 to 2029

(1 July 2024 to 30 June 2029)

Attachment 19
Tariff structure statement

September 2023

AUSTRALIAN ENERGY REGULATOR

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AER reference: AER212493

Amendment record

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19 Tariff structure statement

This attachment sets out our draft decision on Ausgrid's tariff structure statement to apply for the 2024–29 regulatory control period.

A tariff structure statement applies to a distributor's tariffs for the duration of the regulatory control period providing consumers and retailers with certainty and transparency in relation to their distribution charges. This allows consumers to make more informed decisions about their energy use. A tariff structure statement informs customer choices by:

- providing better price signals—network tariffs which reflect what it costs to use electricity at different times can allow customers to make informed decisions to better manage their bills
- transitioning tariffs to greater cost reflectivity—with the requirement that distributors explicitly consider the impacts of network tariff changes on retail customers, by engaging with customers, customer representatives and retailers in developing network tariff proposals
- managing future expectations—providing guidance for retailers, customers and suppliers of services such as local generation, batteries and demand management by setting out the distributor's tariff approaches for a set period of time.

In this round of tariff structure statements, all 6 participating distributors have continued to move towards more cost reflective tariff structures.[1] In particular, the tariff structure statements respond to the trend of increased consumer energy resources (CER) and the role network tariffs can play in assisting their integration into the grid by signalling how and when the use of those resources drives costs and benefits to the network. For example:

- the number of solar photo voltaic (PV) installations continues to increase, requiring distributors to manage minimum demand on their networks when solar generation is at its highest
- the uptake of electric vehicles (EV) is ramping up in all jurisdictions, requiring distributors to consider how to encourage charging of EVs in ways that minimise their contribution to existing demand peaks, avoid the creation of new peaks, and maximise their contribution to efficient use of the network
- there is increasing interest in residential, community and grid-scale batteries and several national and state level government programs encouraging their uptake.

Further supporting their path towards more cost reflective tariffs, distributors have been able to propose export reward tariffs for the first time in this round of tariff structure statements. It follows the Australian Energy Market Commission (AEMC) 2021 rule change, *Final determination - Access, pricing and incentive arrangements for distributed energy resources* to allow the introduction of two-way pricing (i.e. rewards and charges for exporting energy as well as consuming energy).

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[1] Ausgrid, Endeavour Energy, Essential Energy (NSW), Evoenergy (ACT), TasNetworks (Tasmania) and Power and Water Corporation (NT).

In addition to proposed tariff changes, some distributors proposed 'contingent tariff adjustments' for the first time. These make specific changes to a tariff parameter in the event of an identified trigger event. They are a response to uncertainty over aggregate load curves in the 2024–29 period caused by the rapid pace of change in the energy sector, particularly from uncertain demand from EV charging.

Smart meters are essential for the application of most cost-reflective network tariffs. The percentage of residential customers with smart meters on Ausgrid's network has increased from 31% in 2018 to 42% in its latest reported data for 2022. It will accelerate further over the regulatory period given AEMC's report for its *Review of the regulatory framework for metering services* which recommends a target of 100% smart meter roll out by 2030. This level of smart meter penetration will see increased numbers of customers whose retailer is facing a cost reflective network tariff. We anticipate the accelerated smart meter roll out will encourage retail competition and innovation in retail tariffs and service products for consumers.

In its report, the AEMC observed that the sooner smart meters are installed across the NEM the greater the benefits to consumers. The AEMC recommended safeguards to support customers through the transition to an energy system that features smart meters. These are focussed on retailer decisions, including a decision around providing sufficient notification and information of changes to a customer's retail pricing structure. While the recommended safeguards focused on managing customer risks associated with retailer decisions, we also considered the distributor's arrangements for transitioning retailers to cost reflective network tariffs on customer receipt of a smart meter.

Retail pricing interactions with network tariffs

The network tariff price signals we approve may not be directly passed on to end-use customers (i.e. the retail customer). This is because distributors charge the relevant retailers for the transport of electricity to serve end-use customers connected to their networks. Network costs and price signals are charged directly to retailers who then pass these costs on to end-use customers in their retail offers. A retailer may choose to pass on the network price signals exactly or repackage them into their retail offers (including in insurance style flat rate retail offers).

Cost reflective network tariffs provide signals to retailers of the costs of using the network at different times and encourage retailers to design retail tariff offers that reflect network costs and signal to end-use customers when it is more or less costly to use the network. Ultimately cost reflective network tariffs encourage retailer competition and innovation in how they reflect these network costs in diverse retail offers. Importantly, customers can then choose the retail tariff structure that best suits their needs and preferences.

Our discussion in this report may talk about (retail) customers being assigned to a network tariff and these customers having choice in tariffs or the ability (or inability) to opt into or out of particular tariffs. We also talk about customer impacts under the distributor's assignment policies. These customer impacts assume the network price signals are directly passed on to the end-use customer by the retailer. We acknowledge that it is the retailer who may seek reassignment where choice is provided through network tariff opt-in or opt-out provisions, rather than the customer. Actual customer outcomes as a result of our approval of the proposed tariff structure statements, and the incentive for any customer behavioural change

associated with our approval of these tariffs, will also depend on the retailer, the retail tariff the customer chooses, and how the retailer chose to package or pass on the network tariff costs.

For ease of communicating particular issues, our language may not always accurately reflect the indirectness of the relationship between a customer and their network tariff. We occasionally refer explicitly to retail tariffs but any reference to tariffs generally refers to network tariffs.

The distributors' consumer consultation processes have improved over successive resets and the AER's Better Resets Handbook (Handbook) published in 2021 supports this improvement. The Handbook encourages network businesses to better engage with stakeholders and to have consumer preferences drive the development of their regulatory proposals.

The distributors have generally engaged well with stakeholders in developing their 2024–29 tariff structure statements. Customer input is important in developing tariffs since their ultimate objective is to influence consumer behaviour. We acknowledge it is challenging for distributors to engage consumers on network tariffs they will not see directly and that may be complex and not structured for consumer understanding.[2] When it comes to customers' real experience, it is the retailer's role to develop and communicate retail tariffs that are appealing and understandable, appropriate to their customers' circumstances and incentivise customer behaviour to support efficient use of the network (i.e. to reduce the network bill that the retailer is charged for their customers' use of the network).

There is no State-wide pricing order or legislation in NSW that influences how retailers can set prices. As such, retailers in NSW set their own retail prices. These cover the network costs of transporting electricity through the networks, as discussed above, as well as wholesale costs of electricity, their own retail costs and margin, and any environmental costs. The network component of a customer's retail bill makes up approximately 45% of the final bill.

Because there is no other retail price regulation, retailers' default standing offer contracts must adhere to the default market offer. This is the maximum price a retailer can charge for its standing offer contracts and is determined by the AER each year. The DMO price for each area also acts as a 'reference price' for residential and small business offers in that area. When advertising or promoting offer pricing, retailers must show the price of their offer in comparison to the DMO/reference price. This helps customers more simply compare the price of different offers.

NSW's Independent Pricing and Regulatory Tribunal (IPART) monitors the prices and competition in the electricity and gas markets but does not set them.

19.1 Draft decision

Our draft decision is to not approve Ausgrid's proposed 2024–29 tariff structure statement as we are not satisfied that all elements comply with the pricing principles for direct control

[2] The NER allows for tariffs that may not be understood by retail customers, if the tariffs instead are capable of being understood and incorporated by retailers in retail tariffs, NER, cl. 6.18.5(i).

services in the National Electricity Rules (NER) and other applicable requirements of the NER.

We are satisfied most elements of the proposed tariff structure statement comply with the pricing principles and contribute to the achievement of the network pricing objective. We consider that Ausgrid's proposal includes tariffs with strong cost reflective price signals and assignment policies that balance advancing reform against appropriate transitional mechanisms to manage adverse customer impacts.

Our draft decision is to approve the following elements of Ausgrid's 2024–29 proposed tariff structure statement:

- tariff assignment and tariff structures for residential and small business customers, including the proposed export rewards and export charges (two-way prices) for residential and small business customers
- tariff structures for low voltage (LV) and high voltage (HV) commercial customers, except for the proposed new embedded network tariffs
- the proposed change to the usage threshold at which capacity charges apply to medium sized business customers from 40MWh to 100MWh,[3] noting Ausgrid has indicated to AER staff it will include further changes in its revised tariff structure statement, detailed below
- the introduction of network tariffs for utility scale storage (grid-scale batteries) connected to the sub-transmission network and LV and HV distribution networks
- giving effect to the *Electricity Supply (General) Amendment (Green Hydrogen Limitation) Regulation* (network tariff exemptions for approved green hydrogen producers) through individually calculated tariffs
- the streamlining of network tariffs, including the withdrawal of 10 network tariffs
- the change in switching times for controlled load devices
- the change of the peak period window to later in the day for customers on time-of-use and demand/capacity network tariffs
- extension of the peak period window to weekends for residential customers.

We are not approving the following elements of Ausgrid's tariff structure statement, as we are not satisfied that these elements comply with or contribute to the pricing principles and other applicable requirements of the NER, based on the information available:

- the proposed new network tariffs for new and existing LV and HV embedded networks (embedded network tariffs)
- the approach to setting individually calculated tariffs and the charging parameters that apply to individually calculated tariffs.

[3] MWh = megawatt hour.

We also encourage Ausgrid to provide the following with its revised proposal to make further improvements to its tariff structure statement:

- fact sheets and worked examples of how the proposed export rewards and export charges (two-way prices) will apply in practice, including analysis of how customers with different sized solar PV systems could be impacted by two-way pricing
- the names of tariffs in the tariff structure statement and explanatory statement instead of, or in addition to, the tariff codes
- supporting information on the further change to the medium business assignment policy, which it communicated to AER staff after submission of the tariff structure statement (a change to the usage threshold at which demand and time-of-use tariffs apply to businesses that consume over 160MWh and with demand over 100 kVA)[4]
- in recognition of the potential rapid uptake in EV load, we encourage Ausgrid to consider tariffs for flexible loads with more targeted windows and sharper price signals, including through controlled load tariffs
- clarification that the 12-month transitional demand tariff will be available to any customers whose meters may be upgraded due to an acceleration rule change.

We note that the New South Wales Government has supported a recommendation in the *NSW Electricity Supply and Reliability Check Up* that it work together with NSW distributors and the AER on a common methodology to recover New South Wales Electricity Roadmap costs.[5] We will work with Ausgrid to include this common methodology in its revised tariff structure statement.

19.2 Ausgrid's proposal

Ausgrid's 2024–29 tariff structure statement seeks to continue the pricing reform it commenced in 2017 by:

- introducing opt-in two-way pricing (export rewards and charges) for residential and small business customers in July 2024, and making it the default assignment for new and existing residential and small business customers on time-of-use and demand network tariffs from July 2025
- withdrawing 10 network tariffs that are very similar to other tariffs, or that have few or no customers assigned to them, including:
  - transitional time-of-use tariffs for residential and small business customers
  - time-of-use demand tariffs for residential and small business customers
  - the transitional capacity tariff, LV and HV standby tariffs and 2 substation tariffs currently available for medium and large business customers

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4 Ausgrid informed us of further changes it is consulting on to the threshold at which capacity charges apply in *AGDIR35 Embedded network tariffs and 100MWh capacity threshold for electric vehicle charging stations* – 20230614.

5 NSW Government Response – *Electricity Supply and Reliability Check Up* – September 2023, available here: https://www.energy.nsw.gov.au/sites/default/files/2023-09/Electricity_Supply_and_Reliability_CheckUp_NSW_Government_Response_September_2023.pdf.

- improving the cost reflectivity of price signals in residential and small business tariffs by:
  - making the peak charging window consistent in summer and winter, and moving it later to the day, so that from 1 July 2024 peak pricing applies from 3pm – 9pm in both seasons (instead of 2pm – 8pm in summer and 5pm – 9pm in winter)
  - having the option (under a contingent tariff adjustment) to further move the peak charging window from 1 July 2027, so that peak pricing applies from 4pm – 10pm in both summer and winter
  - extending the number of days per week that the peak charging window applies from five to seven (i.e. to also include the peak charging window on weekends) for residential customers
  - combining the off-peak and shoulder charging windows for its tariffs with time-of-use pricing structures so that off-peak charges apply at all times in spring and autumn and outside of the peak charging window in summer and winter
  - removing the low season peak demand charge so that demand charges do not apply outside of the summer and winter periods.
- changing the switching times for controlled load devices to allow controlled electrical appliances to use energy during the daytime, when solar customers are exporting to the grid:
  - controlled load 1 (suitable for large hot water systems) – would be available for at least 6 hours in a 24-hour period from midnight to midnight (changed from its current 6 hours available during 10pm – 7am)
  - controlled load 2 (suitable for smaller hot water systems) – would be available for 16 hours in a 24-hour period from midnight to midnight, including more than 4 hours between 7am – 5pm (changed from its current 16 hours, with more than 4 hours between 7am – 5pm and more than 6 hours between 8pm – 7am)
- increasing the consumption threshold for transferring existing business customers from a demand tariff to a capacity tariff, from 40MWh pa to 100MWh pa, with a three-year transition period
  - this enables retailers of customers using between 40–100MWh to be assigned to the business demand tariff and to opt-out to a time-of-use tariff
- replacing the requirement that business customers with three-phase connections be assigned to capacity tariffs, with a requirement that business customers with a greater than 100amp connection be assigned to capacity tariffs
- extending the peak charging window from 2pm – 8pm on weekdays to 3pm – 9pm on weekdays and combining shoulder and off-peak periods for LV, HV and sub-transmission tariffs
- introducing 3 default embedded network tariffs with medium or large annual energy usage from 1 July 2024 with a five-year transition period
  - the embedded network tariffs have the same structures as Ausgrid's equivalent commercial capacity tariffs, but with a 20c/kW/day (50%) higher capacity charge[6]

[6] kW = kilowatt.

- introducing 3, two-way tariffs for utility scale storage facilities connected at the LV, HV, and sub-transmission networks
  - the tariff structures are based on locational critical peak load events and locational critical peak export events, i.e. reflecting the locational conditions of the storage asset.

19.3 Assessment approach

This section outlines our approach to assessing tariff structure statements.

The NER set out elements that an approved tariff structure statement must contain.[7] A tariff structure statement must also comply with the distribution pricing principles.[8]

19.3.1 What must a tariff structure statement contain?

The NER require a tariff structure statement to include:[9]

- the tariff classes into which retail customers for direct control services will be divided
- the policies and procedures the distributor will apply for assigning retail customers to tariffs or reassigning retail customers from one tariff to another
- a description of the strategy or strategies the distributor has adopted, taking into account the pricing principle in clause 6.18.5(h), for the introduction of export tariffs including where relevant the period of transition (export tariff transition strategy)
- structures for each proposed tariff
- charging parameters for each proposed tariff
- a description of the approach that the distributor will take in setting each tariff in each pricing proposal.

A distributor's tariff structure statement must be accompanied by an indicative pricing schedule.[10]

19.3.2 What must a tariff structure statement comply with?

The NER require distributors to demonstrate to us how their proposed tariff structure statement complies with the distribution pricing principles.[11]

Broadly the pricing principles require:

- for each tariff class, the revenue expected to be recovered must lie between the avoidable cost of not serving those customers and the standalone cost of serving those customers
- tariffs to be based on the long-run marginal cost (LRMC) of providing the service

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7 NER, cl. 6.18.1A(a).

8 NER, cl. 6.8.2 (d2) and cl. 6.18.1A(b).

9 NER, cl. 6.18.1A(a).

10 NER, cl. 6.8.2(d1) and cl. 6.18.1A(e).

11 NER, cl. 6.18.5 and cl. 6.8.2(c)(7).

- revenue collected from each tariff to reflect the total efficient costs of customers assigned to the tariff
- distortions to price signals to be minimised
- consideration of the impact of proposed changes to tariffs on customers
- each tariff to be reasonably capable of being understood by retail customers or incorporated into retail tariffs.

19.3.3 How we will assess tariff structure statement proposals

In reviewing tariff structure statement proposals we will assess compliance with the distribution pricing principles and other applicable requirements of the NER.

In line with the AER's Handbook, our expectation is that distributors have demonstrated the following elements in their proposed tariff structure statements:

- progression of tariff reform
- incorporation of their tariff strategy in their overall business plans
- significant stakeholder engagement and broad stakeholder support for their proposed tariff structures
- insight into and management of any adverse customer impacts.

For the 2024–29 period our engagement with Ausgrid to develop its tariff structure statement commenced 18 months prior to its formal submission. This included observing stakeholder engagement sessions and working closely with Ausgrid to support their development of a compliant tariff structure statement.

The AEMC's *Access, pricing and incentive arrangements for distributed energy resources* rule change in August 2021 allows for the introduction of two-way pricing for the first time.[12,13] We will assess any two-way pricing proposals with regard to the AEMC's new rule and the guidance provided in our *Export Tariff Guidelines*.[14]

19.3.4 How tariff structure statements relate to broader pricing process

The tariff structure statement is the first stage of a two-stage network pricing process. The second stage is for distributors to develop and submit an annual pricing proposal to the AER. The annual pricing proposals apply pricing levels to each of the tariff structures outlined in

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12 Distributed energy resources (DER) / consumer energy resources (CER) are renewable energy units or systems that are commonly located at houses or businesses to provide them with power. This also includes energy storage and energy management assets. This can also be referred to as 'behind the meter' because the electricity is generated or managed 'behind' the electricity meter in the home or business. Common examples include rooftop solar units, battery storage, thermal energy storage, EVs and chargers, smart meters and home energy management technologies.

13 Previously under the NER, distribution services involved one-way flows of electricity imported from the grid for consumption. The AEMC's rule change updated the NER to clarify that distribution services can be two-way. That is, they include both the 'import' of energy from the grid for consumption and 'export' of energy, such as rooftop solar, to the grid.

14 AER, *Export Tariff Guidelines,* May 2022.

the approved tariff structure statement. Distributor's proposed pricing levels must be consistent with the corresponding indicative pricing levels for the relevant regulatory year as set out in the relevant indicative pricing schedule, or the distributor must explain any material differences between them.[15]

19.4 Reasons for draft decision

Our draft decision is to accept most elements of Ausgrid's proposed tariff structure statement.

In line with the Handbook, we consider Ausgrid demonstrated:

- progress on tariff reform consistent with the network pricing objective and pricing principles by increasing the cost reflectivity of its tariffs through better alignment of peak charges to network peak loads and encouraging more efficient use of CER
- incorporation of its tariff strategy in its overall business plan by linking its proposed tariff structure statement to its network expenditure, and designing tariffs to manage customer network usage
- significant stakeholder engagement and broad stakeholder support by responding to customer feedback in developing its proposed tariff structure statement
- insight into and management of any adverse customer impacts.

We consider the following elements need further analysis and consultation before we can be satisfied they comply with the distribution pricing principles of the NER:

- the proposed embedded network tariffs for new and existing LV and HV embedded networks
- the approach to setting individually calculated tariffs and the charging parameters that apply to individually calculated tariffs.

Below we outline the reasoning for our decision for each customer group as well as discussing our assessment of some specific tariff issues. It is structured as follows:

- Residential and small business tariffs
- Medium and large business tariffs
- Grid-scale battery tariffs
- LRMC methodologies

Assignment to tariff class and statement structure and completeness are discussed separately in sections 19.5 and 19.6 respectively.

[15] NER, cl. 6.18.2(b)(7A).

19.4.1 Residential and small business tariffs

19.4.1.1 Ausgrid's engagement with stakeholders to develop its tariff strategy

Over the past two years we have observed much of Ausgrid's tariff related engagement with its customers and other stakeholders, including through pricing working group workshops and other forums. This has given us a deeper insight into how Ausgrid engages with its stakeholders, how it considered and responded to feedback and how it built stakeholder understanding and acceptance.

We consider Ausgrid conducted a commendable amount of stakeholder engagement on its tariff plans and that most of its tariff plans have broad stakeholder support.

Customer engagement in tariff structure development is an important consideration for our assessment. This is becoming increasingly important with the potential acceleration of the smart meter rollout and a rapidly changing energy sector.[16] More customers will face cost-reflective tariffs and utilise technology such as solar panels and batteries, which can shift the way customers use, store and understand their energy. Engagement is key to providing successful tariff reforms. We take customer and other stakeholder views into account when assessing whether each proposed tariff is reasonably capable of being understood by customers or incorporated into retail offerings.[17] We expect that distributors should demonstrate significant customer engagement, clear links between customer feedback and the tariff structure statement proposal and, where possible, broad stakeholder support for their tariff plans.

The Public Interest Advocacy Centre (PIAC) submission raised the broader question as to whether networks should be engaging with stakeholders on network tariffs at all.[18] It observed that, even with the best intent to engage in good faith shown by distributors, consultation on network tariffs can be complicated. An example PIAC used is contradictory views from customers on whether they support a faster transition to cost reflective tariffs.[19]

PIAC noted that all networks engaged in good faith on their tariff proposals and made meaningful efforts to navigate the complexities we have outlined. That is, issues with engagement on tariffs do not reflect insufficient or poor-quality engagement by the distributors, but rather the challenges of engaging stakeholders on complex regulatory issues.

While we recognise the difficulties PIAC raises we consider customer engagement and input critical to progressing tariff reform. Through engagement distributors can learn more about customer preferences and their likely response to price signals, influencing tariff design and transition policies. As such, we strongly encourage distributors to undertake continued

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16 AEMC, *Review of the regulatory framework for metering services, 2020*.

17 NER cl 6.18.5(i).

18 Public Interest Advocacy Centre, *Issues Paper 2024–29 Revenue Determinations: Ausgrid, Endeavour, and Essential Energy*, 1 June 2023, p 18.

19 Public Interest Advocacy Centre, *Issues Paper 2024–29 Revenue Determinations: Ausgrid, Endeavour, and Essential Energy*, 1 June 2023, p 18.

engagement to build stakeholder knowledge and improve their capacity to meaningfully contribute.

An example of how to build stakeholder capacity is the series of tariff reform training sessions we held for a range of stakeholder groups during the 2022 year. For stakeholders reading this paper, presentations used in those training sessions, along with other tariff reform explanatory materials, are available at:

> https://www.aer.gov.au/networks-pipelines/network-tariff-reform/implementing-tariff-reform

We note Ausgrid's engagement with its communities guided and informed it in developing its tariff strategy and tariff structure statement for the 2024–29 period. A key outcome of this engagement is Ausgrid's simplified suite of tariffs, with the goal that these simpler tariff structures will encourage more retailers to reflect Ausgrid's network tariff price signals in retail tariff offers. The 2024–29 period Ausgrid's proposed tariff strategy will see:

- all customers with a smart meter assigned to a cost reflective network tariff
- highly cost reflective network tariffs for grid-scale storage facilities (batteries) to encourage storage in areas where it can provide the most benefits to the network to help manage the need for future costly augmentation investment
- simpler tariff structures for all customers on time-of-use, demand or capacity tariffs with only two charging windows, peak and off-peak, so as to encourage better retailer and customer response to cost reflective price signals
- the introduction of export rewards for all residential and small business customers with CER (in addition to / and separate from current feed-in tariffs on offer) for those customers who export in the late afternoon and early evening (during peak load times) when more energy is required on the grid
- modest export charges for all residential and small business customers with CER to apply only to excess exports (above 6.85 kWh/day)[20] between 10am – 3pm when there is too much energy on the grid, and it is better for customers to use their own energy.

19.4.1.2 Ausgrid's streamlined suite of tariffs and tariff assignment policy

Our draft decision is to approve Ausgrid's tariff assignment policy for residential and small business customers, and its proposal to streamline its suite of tariffs by withdrawing some of its residential and small business tariffs from 1 July 2024. We also approve Ausgrid's proposed re-assignment of customers currently on these tariffs to its standard cost reflective tariffs. The proposed reassignment of affected customers is summarised in Table 19.1.

Under its assignment policy, customers with smart meters will be able to access Ausgrid's demand or time-of-use tariffs but will not be able to opt-out to flat tariffs. We consider this assignment policy will ensure more customers face cost-reflective tariffs, while allowing customers (through their retailers) choice.

[20] kWh = kilowatt hour.

Table 19.1: Proposed residential and small business tariffs to be withdrawn

Tariff to be withdrawn	The tariff affected customers would be transferred to
Transitional time-of-use (TOU) (EA011 and EA051)	Customers reassigned to a standard TOU tariff: • those on Type 4 meters would move to EA116 or EA256 • those on Type 5 meters would move to EA025 or EA225
Residential and small business TOU Demand (EA115 and EA255)	Customers reassigned to a standard TOU tariff (EA025 or EA225).

Source: Ausgrid - Att. 8.2 - *Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 26.

We consider cost reflective prices are consistent with the pricing principles to reflect efficient costs and provide customers with signals for efficient network use.[21] More cost reflective prices also provide greater flexibility for customers to manage their bills through responding to price signals. We further consider fewer tariffs are easier for retailers to include in their retail offerings.[22]

Withdrawal of transitional time-of-use tariffs

Ausgrid's transitional time-of-use tariffs (EA011 and EA051) were initially introduced in July 2018, but unlike standard time-of-use tariffs, the peak, shoulder, and off-peak rates within the tariff are all equal, i.e. these tariffs are effectively flat tariffs. This approach was adopted as a transition strategy before moving customers to fully cost reflective tariffs. It was intended to provide customers visibility of their consumption volumes within the time-of-use tariff structure, but without applying different time-of-use prices.

We support Ausgrid's proposal to withdraw these tariffs and reassign customers to its standard time-of-use tariffs. We understand that retailers have not adopted these transitional tariffs and are duplicating existing flat tariffs, without providing any material benefit to customers from their consumption at different times. Ausgrid's stakeholders also found the large number of available tariffs makes it difficult to understand the differences between charging components and retail pass through of signals.[23]

Ausgrid provided analysis of the customer impacts resulting from reassigning customers from its transitional time-of-use tariffs to standard time-of-use tariffs, which demonstrated that up to 37% of residential customers and up to 54% of business customers will be better off from moving off transitional time-of-use tariffs.[24] This analysis assumes no customer response to price signals. We consider if customers can shift some of their energy use to off-peak times

21 NER, cl. 6.18.5(g).

22 NER, cl.6.18.5(i).

23 Ausgrid - Att. 8.2 - *Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 26.

24 Ausgrid - Att. 8.2 - *Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 28.

in response to the more cost reflective price signals more customers will benefit. We also note the retailers of customers with adverse impacts will have had 5 years of energy use data to inform their considerations and support tariff selection.

Withdrawal of time-of-use demand tariffs

Ausgrid also proposed withdrawing its residential and small business time-of-use demand tariffs as they have very few customers (51 residential and 23 small business).[25] Ausgrid proposed that these affected customers will be moved to a standard time-of-use tariff. Ausgrid's customer impact analysis of the affected customers shows 15% of residential customers and 35% of business customers will be better off on the standard time-of-use tariff, with median annual bill impacts of $47 and $31 respectively.[26] Again, this analysis does not assume customer response to stronger price signals. If these price signals are passed on, and customers respond to them, we expect more customers will benefit. Customer response to price signals can provide benefits to the network and save on future augmentation costs.

Continuation of 12-month delay before reassigning customers with meter upgrades from flat tariffs to demand tariffs

In a discussion with AER staff, the AEMC requested that assignment policies for transitioning customers to cost reflective tariffs where the customer's meter is upgraded due to age, are also applicable where meters are upgraded due to an acceleration rule change. The request was intended to ensure customers receiving smart meters under the AEMC's recommended accelerated smart meter rollout, can access the same transitional mechanisms applying to any other customer receiving a smart meter not initiated by the customer (i.e. mechanisms intended to manage impacts to customers from assignment to cost reflective network tariffs).

We consider Ausgrid's proposal provides for this request since all customers with meter failures or replacements can access its 12-month introductory tariff. This should include any customers whose meters may be upgraded due to an acceleration rule change. However, we encourage Ausgrid to clarify this explicitly in its revised tariff structure statement.

19.4.1.3 Charging windows align with peak demand and minimum demand periods

Our draft decision is to approve Ausgrid's tariff structures for its residential and small business customers. We consider Ausgrid's proposed change to its peak charging windows are reasonable and are in response to its network circumstances and feedback from retailers.

Ausgrid proposed to make the following changes to its charging windows:

- make its peak charging window consistent in summer and winter, and to move it to later in the day
  - its peak pricing will apply from 3pm – 9pm in both seasons (a change from the current 2pm – 8pm in summer and 5pm – 9pm in winter)

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25 Ausgrid - Att. 8.2 - *Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 26.

26 Ausgrid - *Att. 8.2 - Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 28.

- extend the number of days that that the peak charging window applies from five to seven days (so it also applies on weekends) for its residential tariffs[27]
- combine off-peak and should charging windows
- remove the low season peak demand charge so that demand charges do not apply outside the summer and winter periods.

Ausgrid considered it is more efficient to increase the length of the winter peak charging period to last from 3pm – 9pm rather than to shorten the summer peak charging period because:

- the peak charging component is set to recover the LRMC of consumption services and residual revenue
  - allocating this cost over a 24-hour period instead of a 6-hour period would result in a higher unit price, and could exacerbate the adverse impacts to customers unable to shift load
- if the peak price were to become too high relative to other times of the day, it may lead to new demand peaks immediately after this charging window, as more customers delay using the network until the window closes
- analysis indicated that this change will significantly increase the number of peak events that fall within the peak window
  - over the last 5 years, 92% of system-wide peaks have occurred in the proposed window of 3pm – 9pm, compared to 83% in the current peak window
  - over the past 3 years, 82% of annual zone substation peaks have occurred in the proposed window, compared to 52% in the current peak window.[28]

We consider in proposing these changes to its peak charging window, Ausgrid reflected the changing nature of load on its network (i.e. its network circumstances) and feedback from retailers that administering the existing shoulder charging windows for small customers involves an additional degree of complexity. Ausgrid balanced the timing of peak demand against the costs of maintaining the difference in these charging windows (in terms of increased complexity).

We consider Ausgrid's proposed changes to remove the shoulder period, extend the peak window to weekends for residential customers and to remove the low season peak demand charge will strengthen price signals to customers between peak and off-peak times. We also consider these simpler tariff structures and stronger price signals are likely to elicit a greater response from retailers to incorporate these cost reflective price signals in their retail offers. Distinct peak and off-peak times will also be easier for customers to understand and to respond to.

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27 Ausgrid - *Att. 8.2 - Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 36. Ausgrid's proposed change to extend the peak period for residential customers reflected analysis which found that peaks on the weekend are most common in highly residential areas or holiday areas.

28 Ausgrid - *Att. 8.2 - Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 35.

Origin Energy submitted that consistency should be promoted across the distributors on elements such as peak and off-peak periods.[29] We note also that Red and Lumo Energy submitted that Ausgrid's proposal is still too complex, and should instead include a new seasonal peak tariff with a single set of cost reflective windows.[30] We understand the potential benefits of consistency and simplicity to retailers for developing and communicating products to their customers. We also note that charging windows are developed by distributors to reflect the specific constraints on their individual networks. However, we encourage distributors to look for opportunities for consistency across networks where it is consistent with network needs.

19.4.1.4 Controlled load tariffs

Controlled load tariffs are available on an opt-in basis and allow distributors to control supply of energy for certain technology connected to a controlled load circuit. Typically, hot water systems and pool systems are controlled via this circuit to charge overnight and avoid their contribution to the evening peak.

Ausgrid currently has almost half a million customers assigned to controlled load tariffs (mostly residential customers). Ausgrid submitted the number of customers on controlled load tariffs has been slowly decreasing by about 1% per year, as electric hot water systems are replaced with gas and solar thermal alternatives.[31] In response, Ausgrid proposed to update its controlled load tariffs to make them more attractive to customers, while continuing to maximise the benefits for the network. Ausgrid calculated that its controlled load tariffs currently reduce its system demand peaks by 300 MW in winter and 100 MW in summer.[32]

Ausgrid proposed to extend the controlled load availability as follows:

- for its controlled load 1 tariff (suitable for large hot water systems), to extend the availability of supply from usually available for up to 6 hours duration from 10pm – 7am to usually available for at least 6 hours in any 24-hour period, from midnight to midnight
- for its controlled load 2 (suitable for smaller hot water systems) to extend the availability of supply from usually available for 16 hours a day including more than 6 hours between 8pm – 7am and more than 4 hours between 7am – 5pm to supply usually available for at least 16 hours duration within any 24-hour period, from midnight to midnight, with more than 4 hours between 7am – 5pm.

We consider Ausgrid's proposal to extend the time periods of its controlled load tariffs to the middle of the day will better manage system demand peaks and help to 'soak up' some of the excess solar export energy and reduce the impact of minimum demand on the LV network. We also see further advantages associated with Ausgrid's proposed change to its controlled load tariffs with respect to addressing forecast EV load. This is discussed further below in the section titled *Tariffs and residential EV owners.*

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29 Origin Energy - *Submission - 2024–29 Electricity Determination - NSW and ACT - May 2023*.

30 Red Energy and Lumo - *Submission - 2024–29 Electricity Determination* - NSW - May 2023, p 3.

31 Ausgrid - *Att. 8.2 - Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 42.

32 Ausgrid - *Att. 8.2 - Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 42.

19.4.1.5 Tariff structures for energy sector developments

Tariffs and residential EV owners

The accelerating uptake of EVs and consequential need to manage EV charging on the grid is becoming integral to the design of network tariff structures and to the AER's decision-making. Consistent with most other distributors, Ausgrid anticipates EV uptake will accelerate noticeably from the end of the 2024–29 period.[33]

Our draft decision is to accept that Ausgrid's suite of tariffs adequately considers EV charging load at the residential and small business level. However, we encourage Ausgrid to explore refining its proposed control load tariffs, to better accommodate EV load growth in the 2024–29 period and beyond. Our draft decision on tariffs for charge point operators is explained below under the section labelled *Changes to tariff assignment for small and medium business tariffs*.

Ausgrid is managing this anticipated increase in EV load by progressing its tariff reform program broadly rather than by establishing specific tariffs for EV owners or charge point operators. We support this approach and consider it aligns with the NER's principle that customers with a similar connection and usage profile be treated equally.[34] It also recognises that distributors currently do not have visibility of customers with EVs. Consistent with the AER's determinations for the Victorian electricity distributors' 2021–26 tariff structure statements, we do not support the introduction of discounted tariffs for EV owners or EV charge point operators.[35] Rather, we support the continued implementation of cost reflective tariffs for these customers.

Modelling by HoustonKemp shows that Ausgrid's existing time-of-use tariff alone could lower EV-related network expenditure by approximately $4.5 million by 2029 and over $27 million each year by 2039.[36] Ausgrid expects that the implementation of its proposed pricing reforms over the 2024–29 period will have an even larger impact on reducing network investment. These reforms include the removal of shoulder charging windows in its cost reflective residential and small business tariffs. Ausgrid considers this change could encourage EV owners to charge their vehicles during the day and shift some of the charging load from the evening peak and promote efficient use of the network.

Additionally, Ausgrid has moved the timing of its peak window to later in the day from 2pm – 8pm to 3pm – 9pm (for both winter and summer months). Ausgrid proposed this will better reflect the impact of EV charging and peak demand timing.

Further, Ausgrid's proposed assignment policy, which removes the ability of customers on smart meters to opt-out of cost reflective tariffs, and the anticipated acceleration of smart meter roll out, will see the retailers of more EV owners face cost reflective tariffs in the 2024–29 period. We consider the combination of cost reflective tariffs, assignment policy, and

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33 Evoenergy is the exception and will see EV uptake accelerate earlier in the ACT than in Ausgrid's network since the ACT is leading other States on EV uptake rates.

34 NER, cl. 6.18.4(a)(2).

35 AER – *Final Decision – CitiPower distribution determination 2021-26 – Attachment 19 Tariff structure Statement* – Appendix C, p 40.

36 Ausgrid - HoustonKemp - *Att. 8.7 - Price and asset linkages* - 4 Nov 2022, p 1.

higher prevalence of smart meters will allow and encourage more customers to shift their EV charging outside of the evening peak demand period.

In the future, Ausgrid's new two-way tariff could support vehicle to grid (V2G) export of electricity whereby customers use their EVs as batteries, charging from solar or from the grid during low price periods, and exporting from their EV into the grid at times of high network demand. Ausgrid is currently running a flexible load tariff trial (sub-threshold tariffs) and intends to run other trials testing critical peak pricing and dynamic control for EV charging.

Controlled load tariffs as an additional mechanism to manage EV charging

As discussed above, we approve Ausgrid's controlled load tariffs. We consider Ausgrid's controlled load tariffs will continue to help manage demand peaks and help 'soak up' some of the excess solar energy available in the middle of the day. Ausgrid also confirmed that it allows EVs to connect to controlled load circuits.[37]

With the accelerated roll out of smart meters and increasing uptake of EVs, new network tariffs may be required to facilitate retail tariffs that incentivise customer charging behaviour change and network benefits. In recognition of the uncertainty surrounding forecast EV load, and to better manage this load, we also encourage Ausgrid to explore the feasibility of developing a new opt-in, more targeted controlled load tariff aimed at managing flexible load for inclusion in its revised proposal. Alternatively, it could provide further information on how its controlled load tariffs can help manage flexible load.

We also recognise the continued development of dynamic operating capabilities will increase the range of options available to distributors to manage load. Nonetheless, we consider well designed controlled load tariffs may be one option that could help manage EV charging load alongside cost reflective primary tariffs, and in parallel with the ongoing development of more advanced tariff options.

Our encouragement reflects our concern that the existing tariff structure statement framework lacks flexibility to respond to potential rapid growth in EV uptake during the upcoming 5-year regulatory period and its potential contribution to peak demand periods. Without these additional tariff considerations, the only option distributors have to respond to unexpectedly high demand from EV charging is to seek a tariff structure statement amendment under NER cl. 6.18.1B.[38]

While this risk may be lower in Ausgrid's distribution area than in Evoenergy's, reflecting slower EV uptake in NSW compared to the ACT, Ausgrid has an opportunity to get ahead of any such surge in EV demand by tailoring a controlled load tariff to better suit EV customers. We will continue to work collaboratively with Ausgrid and other distributors, including with input from their stakeholders, on these issues both before releasing our final decisions and within the upcoming 2024–29 period.

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37 Ausgrid – *Att. 8.2 – Our TSS Explanatory Statement for 2024–29* – 31 January 2023, p 43.

38 The AER will only approve a request by a distributor to amendment its tariff structure statement if an event has occurred that is beyond the reasonable control of the distributor and could not have been foreseen by the distributor at the time the tariff structure statement was approved. NER, cl. 6.18.1B(d)(1).

We also recognise the tariff trials in this space that Ausgrid is currently running and the trials it proposes to run, including a dynamic controlled load trial.[39]

Contingent tariff adjustments

Contingent tariff adjustments are a new feature of this round of tariff structure statements. The rapid pace of change makes it difficult for distributors to accurately forecast the rate of uptake of CER over the regulatory period, particularly EVs. To be flexible in response to the potential step changes in load that may result from rapid but unpredictable uptake, some distributors, including Ausgrid, proposed tariff adjustments they would only introduce if load profiles shift in ways that could induce network investments. We consider the incorporation of a contingent adjustment to tariff parameters is, when well defined and its trigger is made clear, a reasonable way of balancing certainty and flexibility.

Our draft decision is to approve Ausgrid's proposed contingent tariff adjustment and trigger event. Ausgrid proposed that the trigger to change its peak window will be the occurrence of a network system demand peak occurring after 9pm on any day prior to 1 March 2027. Ausgrid proposed the trigger will be determined using the half hour interval that the maximum raw coincident system demand occurred.[40] We consider Ausgrid's proposal to change its peak window to apply from 4pm – 10pm from 1 July 2027, if EV uptake and consumption profiles exceed expectations, is sufficiently clear and well-defined in its tariff structure explanatory statement.

Extending the window to 10pm would create an incentive for customers to move their EV charging activity to after this time, ensuring it does not coincide with other (non-EV-related) load, noting that existing loads decline rapidly after 10pm. Ausgrid also proposed that moving the start of the window to 4pm could increase grid imports between 3pm – 4pm, and could help moderate the impact on future minimum system load costs.[41]

Some stakeholders raised concerns over the concept of contingent tariff adjustments. Origin Energy submitted that contingent tariffs introduce unnecessary complexity.[42] Red Energy submitted that changing peak charging windows within a regulatory period would be confusing for consumers and difficult for retailers.[43] PIAC does not support moving the peak window past 9pm but considers that an EV-specific tariff would be a more appropriate measure to manage EV charging load.[44]

These are understandable concerns. We have balanced these concerns against the rate of change in the energy sector and consider a degree of flexibility in approved tariff structure statements is warranted. The alternative of rigid tariff structures through 5-year regulatory periods risks customers incurring greater network costs over the long term. We consider retailer concerns can largely be addressed through transparency around the triggers for changing tariff charging parameters and that Ausgrid's proposal provides this transparency.

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39 Ausgrid – *Att. 8.2 – Our TSS Explanatory Statement for 2024–29* – 31 January 2023, p 43.

40 Ausgrid, *Our TSS explanatory statement for 2024–*29, January 2023, p 36.

41 Ausgrid - *Att. 8.2 – Our TSS Explanatory Statement for 2024–29*, January 2023, p 36.

42 Origin Energy - *Submission - 2024–29 Electricity Determination* - NSW and ACT - May 2023, p 6.

43 Red Energy and Lumo - *Submission - 2024–29 Electricity Determination* - NSW - May 2023, p 3.

44 PIAC - *Submission - 2024–29 Electricity Determination* - NSW - June 2023, p 20.

19.4.2 Two-way tariffs

Our draft decision is to approve Ausgrid's proposed export reward tariff.[45] Ausgrid's proposed export reward tariff incorporates the customer protections required by the NER,[46] including:

- a basic export level– i.e. the amount of electricity that a customer can export to the grid at no cost and must apply for a 10-year period (two regulatory periods) (see section on the basic export level below)
- an export tariff transition strategy[47]
- provision that existing solar PV customers will not face export tariffs until 1 July 2025 unless they elect to participate earlier.[48]

Ausgrid demonstrated strong stakeholder engagement consistent with the AER's Handbook and demonstrated that it incorporated feedback provided by stakeholders through its engagement processes in designing its proposed export reward tariff. This includes by:

- proposing export rewards higher than export charges
- introducing two-way pricing on a uniform basis
- shifting its reward pricing from 1.85 to 2.19c/kWh in response to feedback on its Pricing Directions paper that the reward should be higher[49]
- shifting the export reward period to start at 4pm, instead of 3pm as initially proposed, with the intention that the reward becomes a stronger price signal and is more likely to be passed through by retailers.[50]

We consider Ausgrid has justified its need for two-way pricing and that its proposed export reward tariff is consistent with the guidance set out in our non-binding *Export Tariff Guidelines* and complies with the distribution pricing principles as required by the NER.[51,52]

Ausgrid's proposed export reward tariff will allow retailers and their customers to access payments from Ausgrid in return for their actions that enables greater solar generation. It also promotes equitable integration of CER into the electricity grid that will benefit all electricity users by:

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45 An export is the surplus electricity sent from a consumer's rooftop solar PV or on-site battery to supply other customers on the grid.

46 NER, cl. 11.141.12; NER, cl. 11.141.13; NER, cl. 6.18.1A(a)(2A); NER, cl. 11.141.11.

47 The export transition strategy should provide transparency about the distributors long-term intentions to introduce or not introduce export tariffs, to assist customers who are considering investing in CER, including rooftop solar.

48 Existing customers are customers who either are already connected to the grid and able to export or had an open or accepted connection offer at the time of the AEMC's final determination.

49 Ausgrid - *Att. 8.2 - Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 18.

50 Ausgrid - *Att. 8.2 - Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 18.

51 AER, *Export Tariff Guidelines*, May 2022 set out that in proposing two-way pricing distributors should clearly justify the need for two-way pricing, demonstrate analysis of customer impact and management of customer impact and undertake appropriate customer engagement.

52 See NER, cl. 6.18.5.

- protecting those customers who cannot invest in export-capable appliances, such as rooftop PV, from paying for export capacity – for example, Ausgrid, estimated that its proposed two-way pricing will result in $1.5 million less distribution revenue recovered from non-solar customers during the 2024–29 period than would be the case without its proposed two-way pricing[53]
- rewarding / reducing the bills of those customers who can respond to these price signals by changing how they use their own solar power and/or when they export it
- incentivising better use of existing network assets, which will help mitigate network augmentation investment pressures for both import and export capacity and keep future costs (future bills) lower (to the extent augmentation expenditure is avoided) for all electricity users.

We discuss the reasons for our draft decision on Ausgrid's proposed export tariff below, under *Reasons for decision on Ausgrid's export reward tariff*.

19.4.2.1 Ausgrid's proposed export reward tariff

Ausgrid proposed that its export reward tariff applies as a secondary tariff on an opt-in basis from 1 July 2024 for new and existing residential and small business customers whose retailer is assigned to a cost reflective network tariff. From 1 July 2025, Ausgrid proposed its export reward tariff becomes the default tariff for new and existing residential and small business customers on cost reflective tariffs. Ausgrid's proposed export reward tariff is summarised in the table below.

Ausgrid did not propose two-way pricing for its large commercial and industrial load customers, other than for grid-scale battery customers. Ausgrid's proposed two-way pricing for grid-scale battery customers is discussed below under *Grid-scale batteries* in our section on *Medium and Large Customers*.

Table 19.2: Summary of Ausgrid's proposed export reward tariff for residential and small business customers

Proposed tariff(s)	Assignment	Basic export level[54]	Export rewards	Export charge
Small customer secondary export tariff	Opt-in from 2024 Default from 1 July 2025 for all residential and small business customers with demand or time-of use tariffs	2500kWh / year Applied in retailer billing as 6.85 kWh per number of days in the billing period	Export reward 4pm – 9pm 2.19c/kWh.[55] No basic export level applies before the application of energy rewards	Export charge 10am – 3pm 1.18c/kWh[56]

53 Ausgrid, *Att. 8.2 – Our TSS explanatory statement*, 31 January 2023, p 17.

54 The basic export level is the free threshold level up to which customers can export to the grid for free during the export charging period (10am to 3pm). At all other times customers are not charged for their exports to the grid. During the export reward period (4pm to 9pm) customers will receive rewards for every kWh exported. These export rewards are separate from and in addition to the feed-in tariffs currently offered to customers by retailers.

55 Ausgrid, *Att. 8.2 - Our tariff structure explanatory statement*, 31, January 2023, p 16.

56 Ausgrid, *Att. 8.2 – Our tariff structure explanatory statement*, 31 January 2023 p 16.

Proposed tariff(s)	Assignment	Basic export level[54]	Export rewards	Export charge
	No opt-out applies			

We note that this draft decision, and our final decision to follow, are the result of a long reform process to enable, develop and assess two-way pricing proposals that support more effective utilisation of both the grid and CER, towards a 100% renewable energy system. As this is a significant reform and this round of tariff structure statements is the first time distributors may introduce two-way pricing, we also provide background information as to why this reform was made.

19.4.2.2 Background to the AEMC's rule change to allow two-way pricing

A long running and broad collaborative policy development process was led by the Australian Renewable Energy Agency (ARENA), as part of the Distributed Energy Integration Program with market bodies, Energy Consumers Australia and consumer advocates. This preceded consideration of a rule change by the Australian Energy Market Commission (AEMC).[57] On 12 August 2021, the AEMC published its *Access, pricing and incentive arrangements for distributed energy resources* final determination. Amongst other things, the rule change removed the historical prohibition on export tariffs and allowed distributors to propose two-way pricing to match two-way energy flows on electricity networks.

The AEMC's rule change followed requests from SA Power Networks (SAPN), St Vincent de Paul Society Victoria, and the Total Environmental Centre jointly with the Australian Council of Social Services to make changes to the NER to integrate CER into the electricity grid in a way that benefits all electricity users. These groups sought for the costs associated with supporting the energy transition and the growth of CER to be distributed equitably.

We note this rule change was contentious. Energy Consumers Australia, representing both solar and non-solar households supported reforms that were designed to benefit both groups of consumers. Many people, particularly supporters of Solar Citizens, expressed to the AEMC their opposition to the introduction of two-way pricing. In response to these concerns, a range of innovations were embedded within the rule change to protect customers with CER from adverse outcomes. These innovations included mandating 'basic export levels' - export capacity thresholds below which no export charges could be levied. The rule change also prevented distributors mandatorily assigning customers to export tariffs before 2025, enabling customers with CER with rooftop PV at the time of the rule change to realise much of the value of their investment before these new tariff arrangements came into effect.

57 https://arena.gov.au/knowledge-innovation/distributed-energy-integration-program/access-and-pricing-workstream/.

The rule change also required the AER to consult on and develop *Export Tariff Guidelines* to provide information and guidance to distributors and stakeholders about the process for development and approval of export tariffs. In developing our *Export Tariff Guidelines*, we worked collaboratively with stakeholders, including Energy Consumers Australia and Solar Citizens, to introduce additional protections for customers with CER. Published in May 2022, along with an explanatory statement, our *Export Tariff Guidelines* prevent distributors recovering through export charges any historical export related network costs incurred. We provided 2 potential dates as to when distributors may start to recover export service costs from export tariffs.[58] Our *Export Tariff Guidelines* also require distributors to justify the introduction of export tariffs, should they propose to do so.

Through the joint operation of the rule change and our *Export Tariff Guidelines*, subject to the customer protections touched on above and described in detail below, distributors may now introduce price signals which, if passed through to customers by retailers, encourage exporting customers to self-consume or store their own solar energy during the middle of the day when the costs to host excess solar on the grid are high and to export to the grid, or self-consume, during the evening consumption peak. As with any network tariff, retailers may or may not reflect network price signals, including export rewards, in their retail offers to customers.

19.4.2.3 Introducing two-way pricing in the 2024–29 period

Responding to the rule change and our *Export Tariff Guidelines*, Ausgrid, Endeavour Energy, Essential Energy and Evoenergy proposed to introduce two-way pricing during the 2024–29 regulatory period.

Over the 18 months prior to submitting their tariff structure statement proposals to the AER, each of the four distributors noted above engaged heavily with their stakeholders to develop their proposed two-way pricing proposals. These distributors also trialled two-way tariffs under real world conditions with retailers and customers and used learnings from these trials to further inform their two-way tariff development.

We consider feedback elicited by distributors from their individual stakeholder engagement processes, including feedback from AER staff, in addition to learnings from the tariff trials, are evident in the proposals submitted to us for assessment.

With respect to those proposals, all four distributors have incorporated export rewards, or rebates for exported electricity, which are higher than their proposed export charges. These export rewards reflect the value to electricity networks of electricity exported onto the grid by customers with CER during times of network congestion due to high consumption demand.

This focus on rewards instead of penalties is appropriate and represents a turning point in network pricing which historically has exclusively levied charges on retailers for their customers' network use, rarely rewards. For the first time, retailers and their customers may systematically and repeatedly access payments from their local network provider in return for their actions to support the grid.

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58 AER, *Export Tariff Guidelines*, May 2022, p 12.

Export rewards will be available to all exporting customers and will apply to every kWh exported during the reward period, typically between 4pm – 9pm. The proposed export rewards are in addition to the current feed-in tariffs on offer, meaning exporting customers will be offered more rewards for their exports than currently, during the export reward window. Because the export reward period begins relatively early in the day, customers with CER will have an incentive to install their rooftop PV arrays on west-facing roof panels. In this way even new customers installing solar PV without storage may access export rewards, particularly in summer months when many of the electricity networks typically experience their peak demand events.

To finance the export rewards, and to more equitably signal the cost of network investment to enhance export capacity, export charges are also proposed. The proposed export charges are modest and only apply to excess exports, those exports above the no cost basic export level, between 10am – 3pm.

The proposed export reward and export charge apply in addition to and separate from rewards from feed-in tariffs. This means customers will continue to be rewarded with feed-in tariffs for all exports to the grid. In the ACT the current feed-in tariffs on offer range from 5 c/kWh to 17 c/kWh and in NSW the current feed-in tariffs range from 6 c/kWh to 16 c/kWh depending on the retailer.[59,60] So, under Ausgrid's proposed export reward tariff, if customers export during the export reward period they will receive an even greater reward for their exports.

The basic export level is an additional protection introduced by the AEMC's rule change. It is the threshold up to which customers can export for free during the export charging period. This means, even during the export charging window, customers can still export some of their solar power for free.

Customer impact analysis provided by the distributors demonstrated most customers will benefit from the proposed export reward tariffs, especially during summer months when more solar is exported into the late afternoon.[61] Our own comparative modelling of the four export reward tariff proposals submitted to us verified the distributors' customer impact analysis. Customers with CER able to use more of their own exports in the middle of the day, and export to the grid later in the afternoon/early evening, will maximise their benefits.

We observe similarities between each distributors proposed export reward tariffs. These include export rewards greater than export charges and consistency in the timing of the export reward and charging windows. However, we also observe some differences in particular with regard to the threshold levels of the basic export levels, how the basic export levels are expressed (kW and kWh) and how export charges are applied (dollars per kW and dollars per kWh).[62]

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59 https://www.solarquotes.com.au/systems/feed-in-tariffs/act/.

60 https://www.solarchoice.net.au/research-solar/solar-feed-in-rewards/.

61 This is based on the assumption that retailers will pass these structures directly onto their retail customers.

62 Ausgrid's and Evoenergy's proposed basic export levels are expressed in kWh and Endeavour Energy's and Essential Energy's basic export levels are expressed in kW. We also note differences in how the export charges are applied and expressed (Ausgrid and Evoenergy export charge is expressed in dollars per kWh, whereas Endeavour Energy and Essential Energy express their export charges in dollars per kW.

Given these differences, the complexity of the export reward tariffs, and that this is the first time two-way pricing has been proposed, we encourage the distributors to include fact sheets and worked examples of how export reward tariffs work with their revised tariff structure statements.

We also recommend the distributors consider the possibility of expressing their basic export levels in kWh and applying the export charge on a dollar per kWh basis as this is simpler for customers to understand and retailers to incorporate into their retail offers. While our draft decision does not consider it necessary to stipulate, we are interested in stakeholder feedback on this issue.

19.4.2.4 Reasons for our draft decision on Ausgrid's export reward tariff

We consider Ausgrid demonstrated the need for two-way pricing. Ausgrid provided analysis which demonstrated some areas of Ausgrid's network require investment in the 2024–29 regulatory period to host exports while other parts of its network do not.[63] We consider this is consistent with the way network constraints emerge more generally, whereby some regions of the broad interconnected grid naturally experience greater congestion than others and levels of historical network investment vary geographically. While Ausgrid's analysis demonstrated only parts of its network require investment to host exports, we consider Ausgrid's proposal to establish its export reward tariff uniformly across its network is justified in the context of consistent stakeholder feedback that uniform pricing is appropriate for small customers.

We note locational export rewards and charges, while highly cost reflective, would result in uneven treatment of CER customers across geographic locations and lead to higher export charges than under uniform pricing.[64] This is because uniform pricing allows the costs associated with providing additional export capacity to be recovered from a larger customer cohort than locational pricing. Locational pricing would be inconsistent with general stakeholder preference for uniform pricing. We also consider locational pricing would be more difficult for customers to understand and for retailers to incorporate into retail offers.

We received submissions from stakeholders, including from Solar Citizens and 455 submissions from Solar Citizens' supporters, arguing that two-way pricing is not required, and distributors have not justified the need for two-way pricing in their proposals.[65] Further, PIAC submitted support for the proposed export reward tariffs but noted that justification of two-way pricing could be further developed.[66]

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63 Ausgrid's analysis shows that across 16 sampled locations in the LV network, half are expected to require investment by 2050 driven by CER. Ausgrid, Att. 8.2 *Tariff structure explanatory statement*, 31 January 2023, p 15.

64 This is because uniform pricing allows the costs associated with providing additional export capacity to be recovered from a larger customer cohort, not just from those customers in parts of the network which require augmentation.

65 Solar Citizens submitted that the need for export pricing is not demonstrated, flexible export limits has not been adequately explored, there is a lack of evidence of price responsiveness, and solar lowers costs for all consumers. The Solar Citizen members submissions generally made the same points, including export charges should not be introduced when costs of living are rising and that proposed two-way prices will diminish the uptake of solar.

66 PIAC - *Submission - 2024-29 Electricity Determination - NSW* - June 2023, p 9.

In response to those submissions, we consider Ausgrid has justified its need for two-way pricing. However, we also consider that distributors could include more information supporting two-way pricing in revised tariff structure statements. This could include case studies and worked examples that demonstrate how export rewards and charges may apply in practice and further justify introducing two-way pricing. We consider that it is important for the distributors to continue to engage with stakeholders on two-way pricing and incorporate feedback in revised tariff structure statements.

Ausgrid balanced analysis of its capacity to support exports across its network with feedback from stakeholders supporting uniform export charges and basic export levels. The proposed two-way tariff will help address the widening misalignment between peak network demand in the evening and peak solar generation during the middle of the day. Moreover, the more CER customers who are contributing to export charge cost recovery means export charges can be lower.

We note too that consumers are more likely to respond to price signals if those signals are consistent and apply for a reasonable period. The absence of price signals, if price signals are not set early enough, can lead over the longer term to price volatility, price shock and reduced customer ability to respond as they lock in investments under wrong assumptions about future costs. Earlier response by CER customers to price signals will help mitigate the need for future augmentation costs and associated higher charges, thereby keeping bills lower for all electricity consumers.

We consider Ausgrid's proposed export reward tariff complies with the pricing principles that tariffs must reflect efficient costs, minimise distortions to price signals and consider customer impact, as discussed below.[67] We also consider Ausgrid's proposed export reward tariff is consistent with the aim of the AEMC's rule change for the costs associated with the growth of CER to be distributed equitably.[68]

19.4.2.5 Ausgrid's export reward tariff reflects efficient costs

Ausgrid's proposed export charge recovers only Ausgrid's LRMC of providing additional (incremental) export capacity.[69] Ausgrid did not propose to recover any residual or historical costs through its export charge and only attributed costs to export charges commencing from the first day of the 2024–29 regulatory period. This approach reflects the guidance set out in our *Export Tariff Guidelines*, which sets out that the costs incurred by distributors to provide their network's intrinsic hosting capacity (historical costs) should not be recovered through export charges.[70] This additional intervention in our *Export Tariff Guidelines* protects exporting customers from paying for network costs incurred prior to the AEMC's rule change

67 NER, cl. 6.18.5(f),(g), (h) and NER, cl. 6.12.3(k).

68 AEMC, Rule determination – *National electricity amendment (access, pricing and incentive arrangements for distributed energy resources) rule 2021*.

69 That is: any augmentation capital expenditure (augex) linked to the export service potentially, some portion of replacement capital expenditure (repex), operating expenditure (opex) dedicated to providing additional export service capacity, or a proportion of this opex if it is incurred to provide both the export and consumption service.

70 AER, *Export Tariff Guidelines*, May 2022, p 12.

that facilitated two-way pricing, given customers have already invested in their own rooftop PV without expecting to be charged for their exports.

Ausgrid's export reward is based on its consumption LRMC. Ausgrid balanced the level of its export reward so that revenue expected to be recovered through the export charge is expected to be paid back to customers through the rewards. In other words, Ausgrid is setting up price signals to incentivise exporting customers to hold their exports back until the evening peak period, while also explicitly mitigating any costs of providing export hosting capacity being allocated to non-exporting customers. We consider the approach taken by Ausgrid to balance the reward (such that it does not recover costs from non-solar PV customers to finance payments of the reward) demonstrates compliance with the NER and our *Export Tariff Guidelines*.

Ausgrid's proposed export reward and charge windows reflect peak demand and peak export times when the costs to support demand and exports are highest. The export reward window of 4pm – 9pm aligns with peak system load periods in the later afternoon and early evening. The export charge window of 10am – 3pm aligns with periods of high solar exports to the grid contributing to voltage problems, and with low network consumption charges (i.e. the 'solar soak' periods) which, if passed through to customers by retailers, encourage customers to consume during the day.

19.4.2.6 Ausgrid's basic export level reflects its hosting capacity

Our *Export Tariff Guidelines* did not specify a particular methodology to set the basic export level. However, consistent with our *Export Tariff Guidelines*, Ausgrid considered the following key inputs:

- its network's intrinsic hosting capacity
- forecast uptake of CER.

Ausgrid balanced its intrinsic hosting capacity and associated need for investment against bill impacts for customers in areas without investment pressures. Ausgrid did this by analysing its LV distributors on its network and using forecast roof-top solar based on AEMO's forecasts and calculated how much additional export its network could handle before needing significant investment.[71] Ausgrid identified a significant majority of its customers with 3kW of export capacity export less than 625 kWh in any quarter. Based on this analysis Ausgrid considered 2,500 kWh per annum an appropriate energy measure for 3 kW of rooftop PV capacity.[72]

On this basis Ausgrid proposed a basic export level of 6.85kWh per day, which will apply over quarterly (~625 kWh per quarter) or monthly (~208 kWh per month) billing cycles. Ausgrid noted that under its basic export level customers that set their inverters to a maximum of 1.37 kW exports between 10am – 3pm can avoid all export charges.

We consider Ausgrid's methodology to determine its basic export level is consistent with the guidance provided in our *Export Tariff Guidelines*. We also consider Ausgrid's proposed energy based basic export level and energy-based export charge align well with existing

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71 Ausgrid - *Att. 8.1 - Tariff Structure Statement compliance paper* - 31 Jan 2023, p 13.

72 Ausgrid - *Att. 8.1 - Tariff Structure Statement compliance paper* - 31 Jan 2023, p 14.

solar feed-in tariffs, where in NSW, we understand, all solar feed-in tariffs are paid on a kWh basis.

Submissions from retailers in response to our publication of the distributors' tariff structure statements also supported an energy-based basic export level and export charge. Origin Energy and Energy Australia submitted that a standardised basic export level and basic export energy charge expressed in kWh rather than in kW is less complex, easier to implement and easier for customers to understand.[73] We note PIAC's alternate view, that demand-based charges are more cost reflective than energy-based charges.[74]

We acknowledge that demand-based charges are cost reflective. However, as two-way pricing is complex and new, we consider Ausgrid's proposal to apply an energy-based export charge and basic export level for reasons of simplicity and understandability appropriate for the 2024–29 regulatory control period. As two-way pricing matures, we may consider demand-based charges more appropriate.

19.4.2.7 Ausgrid's export reward tariff considers the impact on customers of changes in tariffs

Ausgrid's customer impact analysis demonstrated the price impacts of its proposed two-way pricing on end-use customers are moderate. Most CER customers will benefit from Ausgrid's proposed export reward tariff or will experience minimal bill impacts. We encourage Ausgrid to include further analysis in its revised tariff structure statement on how customers with different sized solar PV systems may be impacted by its new two-way tariff.

Assuming retailers pass on Ausgrid's export reward tariff as proposed to us, Ausgrid estimated that without any change in behaviour 74% of residential customers and 48% of small business customers will be better off on the export reward tariff.[75] The 18% of residential customers who will be worse off will see bills higher by $7 in 2025, the 39% of small business customers will be worse off by approximately $17.[76]

Under Ausgrid's assignment policy customers will not be able to opt-out of the new two-way tariffs on behalf of their customers post 1 July 2025. This approach differs to Endeavour Energy's and Essential Energy's proposed approaches which extend opt-out to later in the period. Ausgrid consulted on this in its Pricing Directions Paper in September 2022. In response to support from its Voice of Community Panel, Ausgrid decided not to include opt-out provisions.[77] We consider Ausgrid's tariff assignment policy to two-way pricing is acceptable. We consider Ausgrid's proposed approach treats all customers equally and will ensure that solar customers are making equitable network contributions as soon as possible. It also supports retailer preference for fewer transitions, and means customers are subject to fewer changes down the track.

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73 Origin Energy - *Submission - 2024-29 Electricity Determination* - NSW and ACT - May 2023, p 6; EnergyAustralia - *Submission - 2024-29 Electricity Determination* - NSW and ACT - May 2023, p 3.

74 Public Interest Advocacy Centre, *Issues Paper 2024–29 Revenue Determinations: Ausgrid, Endeavour, and Essential Energy,* 1 June 2023.

75 Ausgrid - *Att. 8.2 - Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 20.

76 Ausgrid - *Att. 8.2 - Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, pp 20-21.

77 Ausgrid - *Att. 8.2 - Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 20.

We note that two-way network tariffs, like consumption network tariffs, are not sent directly from the distributor to end customers. Rather, these price signals are sent to retailers who may package these price signals into retail offers as they choose.

19.4.2.8 Ausgrid's export reward tariff can be understood or easily incorporated into retail offers

We note retailers' preference for simple two-way tariffs. This is consistent with their preference for time-of-use consumption tariffs over demand tariffs. Our view is that Ausgrid's proposed export reward tariff is complex, but capable of being understood or incorporated into retail offers. The additional supporting material we have asked the distributors to provide in their revised proposals, fact sheets and case studies, will further assist both customers and retailers in understanding and incorporating these tariffs in retail offers.

Ausgrid proposed dollar per kWh unit rates for both its export reward and charges and expresses it basic export level in kWh. This is the preferred approach and consistent with feedback from retailers.

19.4.3 Medium and large business tariffs

Ausgrid's proposed several changes to its suite of tariffs for its medium and large business customers discussed below. These include to:

- streamline its tariff offerings for its medium and large business customers
- reform its customer assignment policy
- introduce 3 default tariffs for embedded network tariffs with medium or large annual energy usage from 1 July 2024 with a 5-year transition period
- introduce 3 tariffs for utility scale storage facilities connected at the LV, HV, and sub-transmission networks.

We note that Ausgrid proposed similar changes to its large business tariff structures as it did for its residential and small business tariff structures, namely:

- moving the peak window from 2pm – 8pm to 3pm – 9pm
- combining shoulder and off-peak periods, so that they apply at all other times.

Capacity charges will be applied to the customer's highest kW of demand during any half-hour period between 3pm – 9pm (currently they are applied between 2pm – 8pm) on working weekdays in the preceding 12 months.

For the same reasons given under section 19.4.1.3 *Charging windows align with peak demand and minimum demand periods,* we approve these proposed changes to align tariff charging windows with Ausgrid's peak and minimum network demand periods.

19.4.3.1 Streamlining of tariffs and tariff assignment

We accept Ausgrid's proposal to withdraw the following medium and large business LV and HV tariffs and to move customers currently on these tariffs to its offered cost reflective tariffs:

- EA325 (LV standby) (3 customers)
- EA360 (HV standby) (7 customers)

- EA380 (HV substation) (21 customers)
- EA391 (substation) (0 customers).

Ausgrid also proposed to withdraw transitional capacity tariffs (EA316 with 3150 customers and EA317 with 19 customers). These tariffs were introduced in 2018 as an interim measure to reduce bill impacts associated with the introduction of cost-reflective tariffs. Ausgrid is currently in the process of transitioning these customers, to meet its regulatory requirement to transfer customers on those tariffs to the cost-reflective equivalent tariff by 2024.

Ausgrid proposed that removing the above tariffs would make it easier for retailers to understand its tariffs. However, Ausgrid's customer impact analysis demonstrated that many customers moving from these tariffs will be worse off, particularly customers moving from EA360 and EA380.[78]

Ausgrid's bill impact analysis is based on historical load profiles and that these profiles reflect customers having optimised their energy use to avoid the current peak charging window. This optimisation included energy use in hours between 8pm – 9pm which are currently not peak times. Customers seeking to avoid this peak window typically have an increase in demand from 8pm. Ausgrid's proposed new peak charging windows will include the 8pm – 9pm hour. Therefore, the modelled bill impacts include energy use during hours that, under standard practice for these large energy users, they will avoid if these customers continue to practice optimising their energy use to avoid the proposed new peak charging window of 3pm – 9pm. That is, the modelled impact does not account for the future load shifting by customers which Ausgrid reasonably anticipates these customers will pursue.

We note that for customers with significant bill impacts, Ausgrid proposed to implement a capacity reset transition plan that resets the chargeable capacity value to zero for the first six months of the regulatory period.[79] Following our feedback after submission, Ausgrid informed potentially affected customers and retailers of its proposed changes. While some stakeholders expressed a preference for no change, there were no strong arguments or objections made against the proposal, and we consider it can be accepted.

We consider fewer tariffs are easier for retailers to understand and include in their retail offerings.[80] This will make it easier for retailers to respond to Ausgrid's proposed suite of tariffs in their tariff offerings and more likely for retailers to pass through price signals to end-use customers.

19.4.3.2 Changes to tariff assignment for small and medium business tariffs

An important feature of Ausgrid's tariff structure statement is changes to medium business customer tariff assignment. We consider Ausgrid's proposed assignment policy for small and medium business customers is capable of acceptance. However, we are aware that Ausgrid

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78 For example: Customers moving from FY24 EA360 to FY25 EA370 could face bill increases of up to 800% or ~$100K. Customers moving from FY24 EA380 to FY25 EA370 could face bill increases of up to 160% or ~ $350K. Ausgrid – *Att. 8.3 – Network bill impacts* – 31 January 2023.

79 Ausgrid*, Att. 8.2 – Our tariff structure explanatory statement*, 31 January 2023 p 30.

80 Pricing principle: network tariffs are understandable and easy for retailers to incorporate in their retail offering, NER, cl.6.18.5(i).

may make further changes to its revised tariff structure statement in response to concerns expressed by EV stakeholders.

Currently, businesses consuming over 40MWh per annum over a two-year period or those with three-phase supplies are assigned to a capacity tariff, with no option to opt-out to a different cost reflective tariff such as a time-of-use tariff. In response to feedback, particularly from the EV industry, Ausgrid's tariff structure statement proposed to shift the 40MWh per annum 'threshold' to 100MWh (over 3 years). This would mean businesses consuming up to 100MWh per annum would now be assigned to demand tariffs, with the option to opt-out to time-of-use tariffs.

The proposed approach treats customers with the same consumption profile equally and will result in 13,154 customers facing lower bills in 2025.[81] It also has support from a number of stakeholders, via submissions to us and submissions made to Ausgrid on its Pricing Directions Paper.[82]

However, Evie Networks and the Electric Vehicle Council submitted that the threshold should be raised further to 160MWh, in line with the other NSW distributors' 'large business' assignment thresholds and with the arrangements in Victoria.[83] The rationale behind this is that some EV charging stations have high demand connections but low usage as the EV industry is still in its infancy. Under Evie Networks' and the Electric Vehicle Council's proposal, EV charge point operators and other businesses with annual consumption up to 160 MWh would no longer be mandatorily assigned to capacity tariffs but would be able to opt into time-of-use tariffs.

Following further engagement with the AER, its Pricing Working Group and the Electric Vehicle Council, Ausgrid has indicated an additional change to its revised tariff structure statement to include a further qualification to allow customers consuming up to 160MWh with demand over 100 kVA to access small business tariffs.[84] That is, these customers with high demand but low utilisation, such as EV charge point operators and sports fields, would be able to access small business tariffs (demand and time-of-use tariffs) rather than capacity tariffs. Ausgrid estimates that the combined impact of this additional change, as well as the 100MWh threshold shift, would result in bill impacts of 2.3% for all other customers connected to the LV network.

Other businesses consuming over 100MWh annum would continue to be assigned to capacity tariffs. We note concerns from Frost Power, on behalf of Quarry Products Newcastle, that capacity tariffs (where the peak capacity charge applies to the highest kVA of demand in a 12-month period) are not cost reflective and unfair.[85] Our view is that capacity

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81 Ausgrid - *Att. 8.2 - Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 32.

82 Submissions from: NSW Energy and Water Ombudsman, Northern Beaches and Willoughby Council, City of Newcastle.

83 The Victorian Government's Order in Council mandates that customers of all Victorian distributors consuming up to 160MWh per annum can opt-out of default demand network tariffs and choose instead to be placed on a time-of-use network tariff.

84 Ausgrid – *AGDIR35 Embedded network tariffs and 100MWh capacity threshold for electric vehicle charging stations* – 20230614.

85 Frost energy on behalf of QPN - *Submission - 2024-29 Electricity Determination* - Ausgrid - May 2023.

charges are appropriate to signal to large businesses consuming over 100MWh to avoid spikes in their energy use which could contribute to network investment and drive up costs for other customers.

We consider that the changes foreshadowed by Ausgrid can support the EV industry without treating EV charge point load differently to other industries with similar demand and consumption profiles. We seek stakeholder feedback on whether this additional shift is appropriate. We will take this feedback and any other supporting information Ausgrid provides us in its revised tariff structure statement into consideration when we make our final decision. We are otherwise satisfied that the tariffs available for EV charge point operators (demand and time-of-use options for smaller operators, a capacity tariff for larger operators) are appropriate for managing public EV charging load in the 2024–29 period.

We note that Evie Networks' submission also supported an EV charging station-specific (discounted) tariff for EV charging stations in NSW. As noted above, the NER principles do not allow EV charging stations to be treated differently to other peaky load customers.[86] We consider the tariffs available to EV charge point operators are appropriate and consistent with the pricing principles in the NER. Our discussion on Evie Networks' submission on LRMC is set out under the heading '*LRMC Methodology.*'

19.4.3.3 We seek clarity on individually calculated tariffs

Our draft decision is to not approve Ausgrid's approach to individually calculated tariffs as we are not satisfied it contains all the elements required by the NER.[87] In its revised tariff structure statement, we require Ausgrid to outline its approach to setting individually calculated tariffs, in particular outlining how they will diverge from the otherwise applicable NUOS tariffs and the charging parameters that apply.

Ausgrid is maintaining its current tariff assignment policy for individually calculated tariffs that applies to customers in the HV, sub-transmission or transmission tariff classes. Under its approach:

- customers on a published NUOS tariff and with network usage greater than 10 MW, or 40 GWh per annum over a full year will be reassigned to an individually calculated tariff
- customers expected to satisfy the threshold criteria in the near future and/or customers requiring non-standard connection may also be offered an individually calculated tariff.

Ausgrid's tariff structure statement does not outline how Ausgrid will calculate these tariffs or describe the charging parameters it applies in these tariffs.

19.4.3.4 Compliance with the NSW hydrogen strategy

Our draft decision is to approve Ausgrid's proposed approach to the NSW Hydrogen Strategy. We consider Ausgrid's tariff structure statement and explanatory statement adequately reflect the hydrogen strategy, and we do not require Ausgrid to make any further changes to this area.

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86 NER cl. 6.18.4 (a)(2).

87 NER, cl. 6.18.1A(a).

The NSW distributors are statutorily obligated to give effect to the NSW Government's 90% network concessions for approved green hydrogen producers, under the *Electricity Supply (General) Amendment (Green Hydrogen Limitation) Regulation.* As part of the NSW Government's wider hydrogen strategy, green hydrogen producers can apply for a range of concessions, including a 90% network charge concession (that is, their contribution to the network costs is 10% of their full network bill). Green hydrogen producers can only be approved for the network tariff concession if they locate in areas of the network with spare capacity, and operate in ways that avoid driving network augmentation investment, or they contribute to any augmentation that is required by their business. This means other customers will, in principle, be better off because existing network costs will be recovered from one or more additional customers and these producers should technically not contribute to network costs, even if the contribution of those customers is limited to 10% of their full network bill.

While the NSW distributors have been aware of NSW's hydrogen strategy for some time, the regulation did not come into effect until after they submitted their initial tariff structure statements. As such, we would expect them to make adjustments to their revised proposals confirming that they will give effect to the network concessions for approved green hydrogen producers via individually calculated tariffs. Ausgrid already confirmed it will give effect to the network concessions for approved green hydrogen producers through individually calculated tariffs.[88]

19.4.3.5 Embedded network tariffs

Ausgrid, Endeavour Energy and TasNetworks proposed embedded network tariffs to recover residual costs that would have been recovered had an embedded network not existed. Embedded networks are private electricity networks that serve multiple premises, such as in apartment blocks, caravan parks and shopping centres.

Embedded network operators pay a single network tariff but bill each customer within the embedded network a tariff closer, or equal, to a network tariff paid by a stand-alone customer. An implicit cross subsidy arises because the distributor recovers residual costs in the form of daily, or "fixed", charges from only one customer (i.e. the embedded network operator), rather than all customers within the embedded network. A second consideration is that there is opportunity for the embedded network operator to arbitrage between the network tariff it pays and the tariffs it charges its customers, earning a margin for itself.

In principle, we support Ausgrid's embedded network tariff. We consider improved cost recovery from embedded network operators is appropriate given the proliferation of embedded networks across the grid and the resultant growing implicit cross subsidy funded by non-embedded network customers. However, we are concerned that increasing network costs for embedded network operators may undermine the embedded network business model overall (to the extent that embedded networks currently benefit from the existing cross subsidy), [89] with implications for customers within embedded networks.

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88 Ausgrid - *Att. 8.2 - Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 52.

89 NER, cl. 6.18.5(h).

Given our concerns and stakeholder views, detailed further below, we do not approve Ausgrid's (or Endeavour Energy's) embedded network tariffs at this stage. Rather, we will continue to work with distributors and stakeholders to further develop these tariffs for consideration in our final decision, so that they balance fair residual cost recovery with the needs of embedded networks and their customers. In particular, we see seek additional feedback from a broad range of stakeholders on:

- further supporting information and/or analysis Ausgrid should or could include in its revised tariff structure statement
- the level of charges and amount of residual costs Ausgrid is attempting to recover through its embedded network tariffs
- whether Ausgrid has adequately considered the benefits embedded networks provide in its proposed charges
- whether Ausgrid has adequately considered the impact of its embedded network tariff on embedded networks and customers within embedded networks.

We note that we have approved TasNetworks' embedded network tariffs.[90] TasNetworks has fewer existing embedded networks than Ausgrid and Endeavour Energy. Its tariffs are therefore aimed at new embedded networks, giving rise to fewer concerns about bill impact. While we consider grandfathering arrangements are appropriate for embedded networks in Tasmania, our view is that these arrangements would be inappropriate in areas where there are already many embedded networks, such as in Ausgrid's and Endeavour Energy's service areas.

Ausgrid identified over 800 embedded networks in its network. Its proposed embedded network tariffs have the same structures as Ausgrid's equivalent commercial capacity tariffs, but with an 20c/kW/day higher capacity charge (equating to a 50% higher demand charge). Because distributors cannot yet identify the number or types of customers within an embedded network (residential, mixed-use, or commercial), this additional capacity charge is based on the estimated average number of customers within an embedded network. The new tariff will apply to all embedded networks connected to the LV network and HV network consuming over 160MWh per annum.

We received several submissions on Ausgrid's proposed embedded network tariffs, largely from embedded network operators including electricity retailers who operate embedded networks, but also from Energy and Water Ombudsman NSW (EWON). Comments included:

- there is a policy and economic basis for introducing embedded network tariffs, but it might result in customers within embedded networks paying more, noting that these customers have fewer customer protections than stand-alone customers
- the benefits of embedded networks, such as aggregating demand for its customers and providing distributed energy resources, outweigh the need to introduce an embedded network tariff

[90] AER – *TasNetworks 2024–29 – Draft decision – Attachment 19* – Tariff structure statement.

- Ausgrid's load profile analysis misrepresents embedded network use and does not explore the diversity between embedded networks
- the connection at a single parent meter is consistent with other large customers so increased capacity charges are not appropriate
- increased demand / capacity charges may impact the viability of embedded networks
- an embedded network connection operator invests in (and maintains) all the infrastructure requirements within the embedded network, therefore it is like any other commercial connection, and should not face additional charges
- embedded networks cannot lower their capacity demand
- some customers, for instance short-term customers and landlease customers, within embedded networks that consume over 160MWh may be affected
- Ausgrid has not justified its embedded network tariffs
- Ausgrid should consider grandfathering so that only new embedded networks face an embedded network tariff
- Ausgrid has not considered alternative approaches.[91]

In response to the above, we consider Ausgrid undertook significant stakeholder engagement to develop its embedded network tariff, and that many issues raised in submissions are substantially addressed in its proposal as well as in responses to our information requests. In saying this, we acknowledge stakeholder concerns and the risks outlined in submissions.

We seek further feedback from stakeholders on Ausgrid's embedded network tariffs

19.4.3.5.1 Additional information to support the embedded network tariffs

Our view is that Ausgrid should include further supporting information in its revised tariff structure statement to give stakeholders certainty that its embedded network tariff has been justified. Much of this information has already been provided to the AER in response to our information requests. Specifically, we asked Ausgrid to:

- detail its engagement in developing its embedded network tariffs, including a timeline and the different stakeholders it consulted in developing its embedded network tariffs

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91 Submissions from: EWON - *Submission - 2024–29 Electricity Determination* - NSW - May 2023; Energy Intelligence - *Submission - 2024–29 Electricity Determination* - Ausgrid - May 2023; Caravan & Camping Industry Association NSW - *Submission - 2024–29 Electricity Determination* - Ausgrid - May 2023; Active Submission - *Submission - 2024–29 Electricity Determination* - Ausgrid - May 2023; Compliance Quarter - *Submission - 2024–29 Electricity Determination* - Ausgrid - May 2023; Energy Locals - *Submission - 2024–29 Electricity Determination* - Endeavour & Ausgrid - May 2023; PT Utilities - *Submission - 2024–29 Electricity Determination* - Ausgrid - May 2023; Shopping Centre Council of Australia - *Submission - 2024–29 Electricity Determination* - Ausgrid - May 2023; Origin Energy - *Submission - 2024–29 Electricity Determination* - NSW and ACT - May 2023; Network Energy Services - *Submission - 2024–29 Electricity Determination* - Ausgrid - May 2023; EnergyAustralia - *Submission - 2024-29 Electricity Determination* - NSW and ACT - May 2023.

- detail how it calculated the 50% additional demand charge and whether it considered alternative tariff structures for embedded networks
- detail the assumptions underpinning its calculations and proposal (for instance, whether it considered different tariffs for residential compared to commercial embedded networks)
- explain the cost on the network of *not* introducing an embedded network tariff.

We seek feedback from stakeholders on any additional analysis or information that Ausgrid should include in support of its embedded network tariffs.

We consider Ausgrid's load profile analysis of embedded networks in section 3.2 of its tariff structure explanatory statement does not support its proposed embedded network tariffs.[92] We note that stakeholders have found this Ausgrid analysis confusing.

We understand that the driver of Ausgrid's embedded network tariff proposal is the existing implicit cross subsidy benefiting embedded network operators and concern that this imposes inappropriate costs on non-embedded network customers. We were pleased to see Ausgrid staff make this point in a recent stakeholder workshop. We expect Ausgrid's revised tariff structure statement proposal will provide further clarification on this point.

19.4.3.5.2 The amount of residual cost recovery and the level of charges

Unlike Endeavour Energy, which is seeking to recover all the existing implicit cross subsidy through its embedded network tariff, Ausgrid is not seeking to recover the full amount of the cross subsidy. Ausgrid modelled the embedded network tariffs under high and low scenarios reflecting different assumptions on the number of customers within the embedded networks. It showed the tariffs recovered between 37%–86% of the cross subsidy (depending on scenario and tariff). By 2028–29 the network bill reductions for non-embedded network customers could be up to 1.0% for LV and 2.2% for HV connections.[93]

We seek stakeholder views on the level of cost recovery under Ausgrid's proposed embedded network tariff. In particular, we seek views on the potential flow on impacts to customers within embedded networks in the event that the embedded network operator business model is undermined. Stakeholders should note too that the NSW Independent Pricing and Regulatory Tribunal (IPART) is undertaking a review of prices charged by embedded network operators for services on-sold to their end customers. There is potential for new price caps to be imposed on those services provided by embedded network operators, which may limit their ability to recover the additional cost of a new embedded network tariff.

Some stakeholders have expressed concern that Ausgrid is trying to increase its overall revenue through its embedded network tariffs.[94] This concern is unfounded. The AER sets revenue caps on electricity distributors, limiting their overall revenue recovery to the

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92 Ausgrid - *Att. 8.2 - Our TSS Explanatory Statement for 2024–29* - 31 Jan 2023, pp 21 – 25.

93 Ausgrid – *AGDIR35 Embedded network tariffs and 100MWh capacity threshold for electric vehicle charging stations* – 20230614.

94 Active Submission - *Submission - 2024–29 Electricity Determination* - Ausgrid - May 2023, p 2; PT Utilities - *Submission - 2024–29 Electricity Determination* - Ausgrid - May 2023, p 2; Energy Intelligence - *Submission - 2024–29 Electricity Determination* - Ausgrid - May 2023, p 1.

approved revenues we determine. Rather, the additional revenue that would be recovered from embedded network operators via these tariffs would in effect be redistributed to other customers via their network tariffs in the form of lower network bills.

19.4.3.5.3 Managing customer impacts

Of the three distributors proposing embedded network tariffs in the 2024–29 period, Ausgrid has the highest number of embedded networks in its service area. The result is that the revenue it seeks to recover, and therefore the impact on existing embedded networks, is greater.

Ausgrid estimated that embedded network customers will face an average 30% bill increase from facing higher demand charges.[95] In response to feedback on its Pricing Directions paper, it will manage bill impacts by transitioning embedded networks to its proposed new tariff over 5 years.

We seek feedback on any other methods of managing customer impacts Ausgrid could consider in developing its revised tariff structure statement (other than lowering the proposed capacity charge to recover less revenue, as explained above).

19.4.3.5.4 There are workstreams on embedded networks occurring concurrently

Embedded networks are a point of focus across a number of jurisdictions and agencies at present. This includes:

- the Victorian Government banned new residential embedded networks unless energy consumed is met from renewables and will continue to enhance consumer protections for customers within existing embedded networks
- as noted above, IPART is currently reviewing appropriate price protections for customers supplied through an embedded network. The review is in response to evidence that customers within embedded networks receive unreasonably high bills and have limited access to retail competition.

19.4.4 Grid-scale battery tariffs

Our draft decision is to accept Ausgrid's proposal for grid-scale battery tariffs. We consider that the tariffs send appropriate price signals which improve network utilisation and support CER.

Ausgrid proposed three grid-scale battery tariffs, one each for its low-voltage, high-voltage, and sub-transmission networks. These tariffs are comprised of a primary import tariff and a secondary export tariff. The tariff structures are based on locational critical peak load events and locational critical peak export events. That is, Ausgrid proposed that the peak energy and peak export events reflect the locational conditions of the storage asset.

The LV grid-scale battery tariff includes a symmetric import reward and export charge during critical export peaks. The basic export level is 1kWh per hour during these events. Ausgrid did not propose export charges for its HV and sub-transmission secondary grid-scale battery tariffs. Ausgrid proposed only export rewards for these tariffs in addition to the primary import tariff. When Ausgrid declares a critical peak event for its LV and HV grid-scale batteries, it

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95 Ausgrid - *Att. 8.2 - Our TSS Explanatory Statement for 2024–29* - 31 Jan 2023, p 25.

provides notification to retailers and to customers at request for its sub-transmission customers.[96] These grid-scale battery tariffs will be available for customers that use the network to store electricity for export at a later time, from the same connection point. Storage connected with solar PV or with an additional load behind the same connection point is not eligible for this tariff.

Grid-scale batteries have come into focus for the 2024–29 period, in response to the Australian Government program to fund the deployment of 400 community batteries across the country. With the right network price signals to indicate when battery operation drives costs or benefits to the network, grid-scale batteries have the potential to reduce long-run network costs for all customers by improving network utilisation. Conversely, without such price signals, battery owners may not factor network costs into their decisions on battery operation and may operate batteries in ways that trigger network investment, increasing future network costs to all consumers. Therefore, there is benefit for distributors (and ultimately all consumers) in developing network tariffs to facilitate retail tariffs that encourage battery operators to import energy during periods of low network demand and export energy during periods of peak demand.

Ausgrid's proposal to introduce grid-scale battery tariffs is a response to the anticipated increase in grid-scale batteries. Endeavour Energy, Essential Energy and Evoenergy also responded to this anticipated increase in batteries and have also proposed grid-scale battery tariffs for the 2024–29 period. These proposed tariffs are the first to be offered by NEM distributors that are tailored to large-scale storage. We observe the three NSW distributors and Evoenergy have been preparing for these grid-scale battery tariff proposals with tariff trials conducted between 2021–22 and 2022–23.

The grid-scale battery tariffs proposed by Ausgrid align network price signals with network peak constraints. We consider the proposed tariff structures to be efficient and cost reflective because most charges are levied during the critical peak import and critical export peak period, when network capacity constraints emerge.

We consider Ausgrid has demonstrated that its proposed charges reflect the efficient costs of the network and will send locational price signals of where investment is needed. For its low voltage grid-scale battery tariff Ausgrid proposed to apply the low voltage export LRMC as a charge for imports and a reward for exports during peak energy events. For its HV grid-scale battery tariff (which does not have an export charge) the charge for imports and the reward for exports is based on the HV consumption LRMC. Likewise, the proposed charge for imports and reward for exports for the sub-transmission grid-scale battery tariff is based on a bespoke LRMC based on the N reliability measure that reflects bringing forward the replacement of sub-transmission assets.[97]

Ausgrid proposed a basic export level of 1kW for its LV grid-scale battery tariff. The basic export level is required under the NER for any tariff involving export pricing (charges). The basic export level is based on the network's intrinsic level of export hosting capacity such that

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96 Otherwise for these very large sub-transmission customers which have visibility of the network they do not need to be advised by Ausgrid of critical peak events unless requested. As default Ausgrid proposed virtual metering as these customers have visibility of the local networks use.

97 Ausgrid, *Att. 8.2 - Our TSS Explanatory Statement for 2024-29* - 31 Jan 2023, p 41.

exports up to the basic export level threshold do not attract an export charge. Ausgrid's export charge for its low volage grid-scale battery tariff only applies when voltages on the network are forecast to exceed Australian standards, a situation that indicates network hosting capacity is exhausted. In this context there should be no unused intrinsic hosting capacity available to the storage customer, hence we consider the proposed basic export level of 1kW reasonable.

We consider grid-scale battery tariffs will benefit all energy users because they encourage storage to charge during periods of low demand and HV, thereby providing voltage support to the network, helping reduce costs of voltage management. They also encourage export during periods of peak demand, thereby helping to avoid network augmentations. To the extent these costs are avoided we consider the proposed tariffs will benefit all users through lower future bills.

We also note that Ausgrid's proposed tariffs are based on learnings from Ausgrid's community battery tariff trial (1 July 2022 to 30 June 2024). Based on these learnings, Ausgrid simplified the structure of its proposed grid-scale battery tariffs. We consider Ausgrid's proposed grid-scale tariffs are reasonably capable of being understood by retail customers or being directly incorporated by retailers into retail offers.

Origin Energy submitted that distributors should review their proposed grid-scale battery tariffs to ensure that commercial incentives are appropriate and that the value proposition for large-scale batteries is comparable to behind-the-meter alternatives such as virtual power plants.[98] As noted above, we consider the grid-scale battery tariffs to be cost reflective and consistent with NER requirements and appropriate for their connection.

19.4.5 LRMC methodology

The NER requires network tariffs to be based on LRMC.[99] For consumption services this means a tariff for the import of electricity must be based on the LRMC of providing additional capacity to support the import of electricity from grid to customers assigned to the tariff. For export capacity, this means export charges must be based on the LRMC of providing additional capacity to support / host exports to the grid by the customers assigned to the tariff.

However, not all distributor's costs are forward-looking and responsive to changes in demand for its service. If tariffs only reflected LRMC, a distributor would not recover all of its total efficient costs. Costs not covered by a distributor's LRMC are called 'residual costs'. The NER requires network tariffs to recover a distributor's total efficient costs (i.e., both LRMC and residual costs) in a way that minimises distortions to price signals for efficient usage that would result from tariffs reflecting LRMC.[100]

Importantly, our *Export Tariff Guidelines* and the accompanying explanatory statement, which we published in May 2022, state that distributors should not recover any historical

98 Origin Energy, *Submission – 2024-29 Electricity Determination – NSW and ACT – May 2023*, pp 1–2.

99 NER, cl. 6.18.5(f).

100 NER, cl. 6.18.5(g)(3).

export related network costs incurred. We provided 2 potential dates as to when distributors may start to recover export service costs from export tariffs:

- the date of the access and pricing rule change taking effect
- the first day of a network's upcoming regulatory control period.[101]

This additional intervention protects exporting customers from paying network costs incurred prior to the rule change that facilitated two-way pricing, given customers invested in their own rooftop PV without expecting to be charged for their exports.

19.4.5.1 Assessment approach

Our assessment approach is focused on considering Ausgrid's overall approach and estimation of LRMC, including the justification of their estimation method and how its method changed compared to the previous tariff structure statement.

An important input into LRMC calculation is the distributor's forecast of long-run expenditure associated with incremental demand in the case of consumption services. For these services forecasts comprise estimates of:

- augmentation expenditure (augex) on new network assets to increase the capacity for import and/or export distribution services
- operating expenditure (opex) dedicated to providing additional capacity for distribution services
- replacement expenditure (repex) to replace existing network assets. Distributors may estimate a proportion of repex which occurs to incremental demand or estimate avoided repex in areas of the network with declining demand (in these areas, distributors may opt to use assets with lower capacity which reduces repex).

For export services, long-run expenditure forecasts are likely to comprise expenditure related to:

- voltage constraints
- thermal constraints
- LV visibility needs.

Distributors might also account for forecast growth in CER customers, including those with rooftop solar, home batteries and/or EVs.

With the introduction of export tariffs, we are also focusing on how distributors have estimated export LRMC in accordance with the expectations we set in the *Export Tariff Guidelines*. This includes demonstrating:

- how any double counting has been avoided in estimating and allocating LRMC between export and consumption services

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101 AER, *Export Tariff Guidelines*, May 2022, p 12.

- that historic costs associated with providing the network's intrinsic hosting capacity have not been included in export LRMC estimates
- how the export charging parameters reflect the efficient export LRMC.

19.4.5.2 Import LRMC

Ausgrid continued to implement the average incremental cost approach over a ten-year period to estimate forward looking costs for import services in areas of the network where demand is rising. For areas of the network where demand is falling, Ausgrid used a perturbation approach to estimate LRMC. This approach involved calculating the present value of the difference between two different expenditure programs for two levels of demand in a case study project.

We consider these approaches to be appropriate at this stage of tariff reform given its low cost of implementation and the continuation of postage stamp pricing across its network. However, we encourage Ausgrid to use the perturbation approach for multiple projects rather than using one case study project. In the event Ausgrid intends to introduce locational pricing for customers in its future proposals, it should consider linking its prices closely to LRMC estimates.

Evie Networks (with its consultant Marsden Jacob) submitted that the distributors were overestimating LRMC by incorrectly including augex incurred after the five-year regulatory period.[102] We consider that Ausgrid has appropriately estimated augex with a horizon of at least ten years to meet our definition of long-run.[103] As we note in our Victorian draft decision, the distributors' use of the average incremental cost approach and the Turvey perturbation approach to estimate LRMC has been endorsed for use by the AEMC in its review of the network pricing principles.[104]

19.4.5.3 Export LRMC

Setting the export charge

We consider Ausgrid's proposed approach to estimate export LRMC reflects the requirements of the NER and the guidance as set out in our *Export Tariff Guidelines*.

Ausgrid set its export charges based on LRMC for export services, these being typically voltage related costs and meaning that this marginal expenditure typically occurs only on LV distributors. Ausgrid attributed costs to export charges commencing only from the first day of the 2024–29 regulatory period. Ausgrid did not propose to recover any residual or historical costs from the export charge, consistent with the guidance set out in our *Export Tariff Guidelines*.

To estimate its LRMC for export services Ausgrid used both the average incremental cost approach and perturbation approach. The key inputs into determining the LRMC of the

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102 Evie Networks, *submission and attachment, 2024-29 Electricity Determination* - NSW - May 2023, p 4.

103 See for example, AER - *Ausgrid 2019-24 - Draft decision - Attachment 18 - Tariff structure statement* - November 2018, p 83.

104 AER, Draft decision - *CitiPower distribution determination 2021-26 - Attachment 19 - Tariff structure statement* - September 2020, pp 42-44.

export charge include the length of estimation period, commencement date of expenditure to support export services, forecast expenditure and the weighted average cost of capital.

These two approaches returned similar results. Ausgrid based its proposed export charge on the perturbation approach. Our sensitivity modelling shows that any further changes to proposed forecast expenditure, or changes to the weighted average cost of capital, may result in changes to LRMC estimates and therefore changes also to the level of the export charge.

Setting the export reward

The NER provide less guidance on setting the export reward. Ausgrid based its export rewards on its consumption LRMC but did not include any residual costs in the reward. Ausgrid then balanced the level of its export rewards so that revenue expected to be recovered through the export charge is expected to be paid back to customers through the rewards. We consider Ausgrid complied with the NER and reflected the guidance set out in our *Export Tariff Guidelines* in setting its proposed export rewards.

We note any changes made to export charges, such as may arise from updated LRMC estimates, may require rebalancing of the reward paid to customers to avoid cross subsidisation from non-solar PV customers.

19.5 Assignment to tariff classes

Our draft decision is to approve Ausgrid's policies and procedures governing assignment or reassignment of retail customers for direct control services.[105] The table below summarises how Ausgrid assigns installations to their respective tariff classes. Ausgrid defines its tariff classes on the basis of several attributes, principally, the nature of the customer's connection to our network and whether or not their supply is metered.

Tariff class	Customer type	Connection characteristics
Low voltage	Residential Small to medium businesses Larger commercial and light industrial	Any separately metered LV (230V or 400V) connection, as measured at the metering point
High voltage	Industrial	Any HV (typically 11kV) connection, as measured at the metering point
Sub-transmission	Industrial	Any sub-transmission 22kV, 66kV or 132kV) connection, as measured at the metering point
Unmetered	Unmetered e.g., public lighting	Any unmetered LV connected, as defined by Ausgrid in consultation with AEMO
Transmission connected	Industrial	Any transmission network connection.

[105] Linked to NER, cl. 6.12.1(17).

19.6 Statement structure and completeness

Ausgrid must include the following elements within its tariff structure statements:

- the tariff classes into which retail customers for direct control services will be divided
- the policies and procedures the distributor will apply for assigning retail customers to tariffs or reassigning retail customers from one tariff to another
- a description of the strategy or strategies the distributor has adopted, taking into account the pricing principle in clause 6.18.5(h), for the introduction of export tariffs including where relevant the period of transition (export tariff transition strategy)
- structures for each proposed tariff
- charging parameters for each proposed tariff
- a description of the approach that the distributor will take in setting each tariff in each pricing proposal.[106]

A distributor's tariff structure statement must be accompanied by an indicative pricing schedule.[107]

Ausgrid's proposed tariff structure statement incorporates each of the elements required under the NER. The key focus of our assessment for this draft decision is on whether these elements satisfy the pricing principles for direct control services in the NER. That assessment is covered in the sections above.

Ausgrid has adopted our preferred two document approach, intended to improve the clarity for the retailers, customers, and the AER:

- The first document should include only include the aspects of the tariff structure statement that will bind Ausgrid over the 2024–29 period.
- The second document should explain Ausgrid's reasons for what it has proposed.[108]

106 NER, cl. 6.18.1A(a).

107 NER, cl. 6.8.2(d1).

108 NER, cl. 6.18.5(i).

Shortened forms

Term	Definition
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
augex	augmentation expenditure
capex	capital expenditure
CER	consumer energy resources
CPI	consumer price index
HV	high voltage
LRMC	long-run marginal cost
LV	low voltage
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NER	national electricity rules
NSP	network service provider
opex	operating expenditure
PV	photovoltaic
RAB	regulatory asset base
RBA	Reserve Bank of Australia
repex	replacement expenditure
RIN	regulatory information notice