

29 October 2021



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Dear Dr Funston,

### **Ausgrid request for revised Framework and Approach Paper**

Ausgrid's current regulatory control period ends on 30 June 2024. Ausgrid requests that the Australian Energy Regulator (**AER**) revise its Framework and Approach Paper for Ausgrid's regulatory control period commencing on 1 July 2024 and ending 30 June 2029 (2024-29).

Please find the details of our request in the attached document. This document sets out our preliminary views for the AER's consideration.

As noted in the document, we have engaged with stakeholders to prepare this request and we will continue to do so as we work with the AER to develop Ausgrid's 2024-29 Regulatory Proposal.

We would welcome the opportunity to meet with AER staff to further discuss our request for a replacement Framework and Approach Paper. Please contact Alex McPherson, Head of Regulation at [REDACTED] with any questions.

Regards,

[REDACTED]  
Rob Amphlett Lewis  
Chief Customer Officer

Connecting communities,  
empowering lives



Request to replace  
the AER's Framework  
and Approach Paper

October 2021

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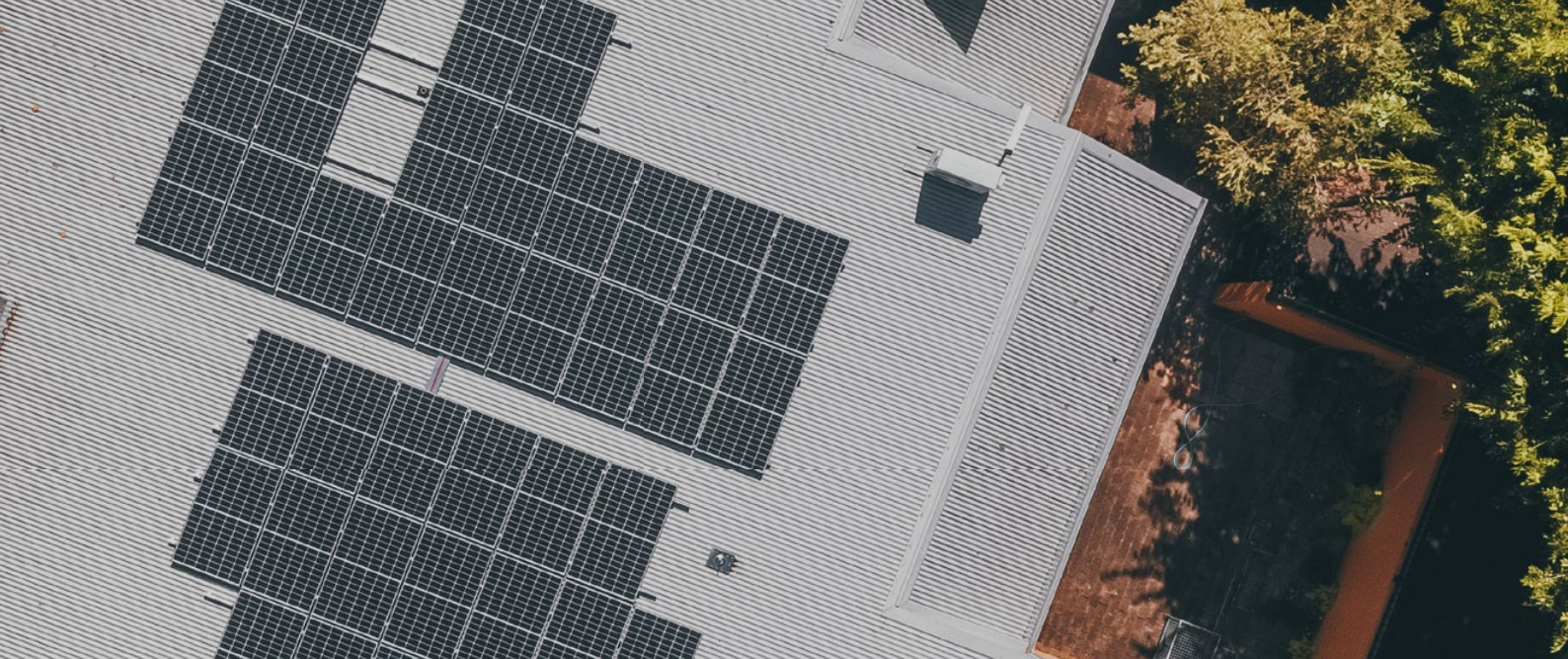
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# Ausgrid's Framework and Approach

## 1.1 Rapid energy market transition

Ausgrid is the distribution network service provider (**DNSP**) that operates a shared electricity network that powers the homes and businesses of more than 4 million Australians living and working in an area that covers over 22,000 square kilometres from the Sydney CBD to the Upper Hunter.

The rapid energy transition and associated State and Federal policy changes requires evolution in the regulatory frameworks applicable to energy networks.

The Australian Energy Market Operator (**AEMO**) forecasts that distributed solar PV capacity is expected to increase by more than 50 per cent in the next 4 years in the National Electricity Market (**NEM**).<sup>1</sup> This is on top of the current installed capacity of around 14GW in AEMO's Electricity Statement of Opportunities (**ESOO**) 'Current Scenario'. AEMO also notes that consumers continue to invest in solar PV at a faster rate than market bodies forecast. The Commonwealth Scientific and Industrial Research Organisation (**CSIRO**) projected in its *Electric Vehicle Projections 2021* that over 15 million electric vehicles would enter the NEM by 2050 under a net zero by 2050 scenario.<sup>2</sup> In an increasingly decentralised energy system network capacity will become a key energy system constraint.

1 AEMO, (2021), Electricity Statement of Opportunities. <https://aemo.com.au/en/energy-systems/electricity/national-electricity-market-nem/nem-forecasting-and-planning/forecasting-and-reliability/nem-electricity-statement-of-opportunities-esoo>.

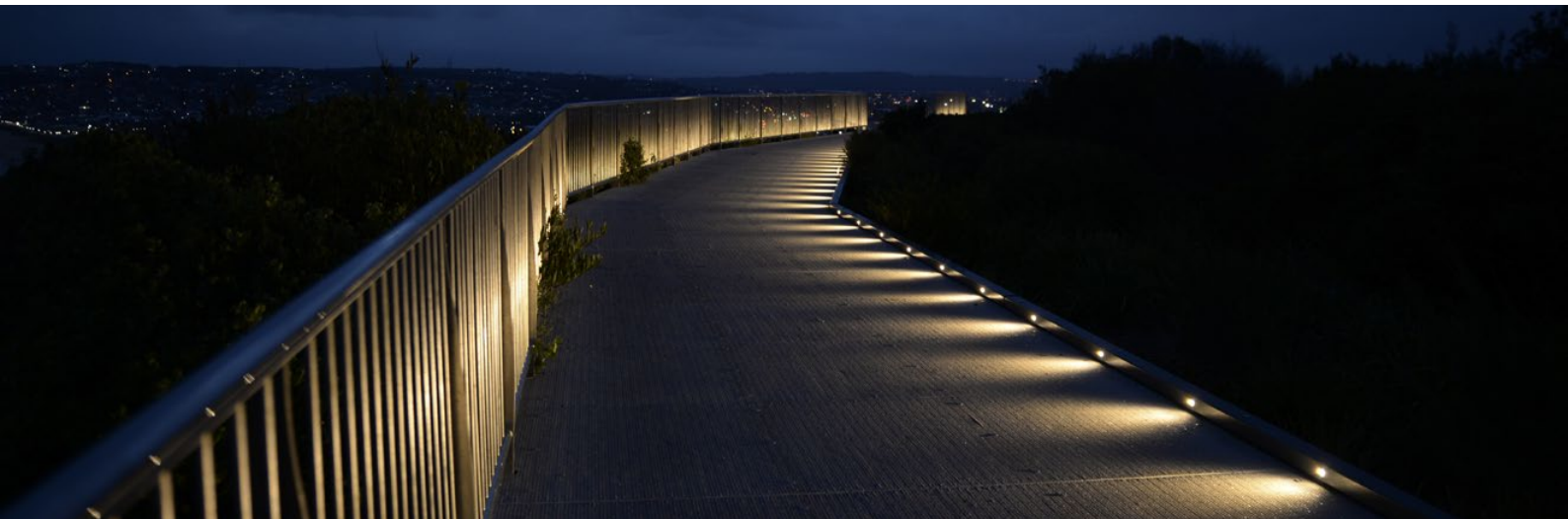
2 CSIRO, (2021), Electric Vehicle Projections 2021. [https://aemo.com.au/-/media/files/electricity/nem/planning\\_and\\_forecasting/inputs-assumptions-methodologies/2021/csiro-ev-forecast-report.pdf](https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/inputs-assumptions-methodologies/2021/csiro-ev-forecast-report.pdf).

The energy regulatory and policy landscape is continuing to evolve through various reforms. For example:

- The Australian Energy Regulator's (**AER**) 2018 Electricity Distribution Service Classification Guideline, including its baseline list of electricity distribution services;<sup>1</sup>
- The AER's 2019–2021 Electricity ring-fencing guideline review;<sup>2</sup>
- The AER's draft Better Resets Handbook;<sup>3</sup>
- The Energy Security Board's (**ESB**) Post 2025 Market Design Final Advice to Energy Ministers;<sup>4</sup>
- The Australian Energy Market Commission's (**AEMC**) Final Rule Determination on Access, Pricing and Incentive Arrangements for Distributed Energy Resources (**DER**);<sup>5</sup>
- The NSW Government's Electricity Infrastructure Roadmap;<sup>6</sup>
- The NSW Government's Net Zero Plan;<sup>7</sup>
- The NSW Government's Electric Vehicle (**EV**) Strategy;<sup>8</sup> and
- The NSW Government's Hydrogen Strategy.<sup>9</sup>

Our goal is to be a leading distribution system operator (**DSO**) in this transition that dynamically manages network capacity. This means we want to work with our customers to unlock flexibility in the distribution network, rather than simply building more network to manage capacity constraints. We are engaging with our customers to implement market-based approaches such as cost-reflective network pricing as well as investing in smart assets like community batteries.

We need to do this to efficiently support the rapid pace of energy transition expected by our customers. We want to enable customers to have options for connecting to renewable energy sources and enable Net Zero by 2050 (at the latest). Customers also tell us they want our network to become more resilient so that they are less impacted by the increasing frequency of extreme weather events. For example, Ausgrid is responsible for ensuring the network remains resilient against the risks of cyber security attacks and natural and human-caused hazards. Customers want us to be more affordable and productive while improving customer service, including providing strategic support for our largest customers. We want our customers to have access to an affordable, modern and decarbonised energy system.



1 AER (2018), Electricity Distribution Service Classification Guideline. <https://www.aer.gov.au/system/files/AER%20-%20Service%20Classification%20Guideline%20-%2028%20September%202018.pdf>.

2 AER (2021), Electricity ring-fencing guideline review. <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/electricity-ring-fencing-guideline-review>.

3 AER (2021), Draft Better Resets Handbook. <https://www.aer.gov.au/networks-pipelines/better-resets-handbook>.

4 ESB (2021), ESB Post 2025 market design final advice to energy ministers. <https://esb-post2025-market-design.aemc.gov.au/final-advice-july-2021>.

5 AEMC (2021), Access, pricing and incentive arrangements for DER final rule determination. <https://www.aemc.gov.au/rule-changes/access-pricing-and-incentive-arrangements-distributed-energy-resources>.

6 DPIE (2020), Electricity Infrastructure Roadmap. <https://www.energy.nsw.gov.au/government-and-regulation/electricity-infrastructure-roadmap#-latest-news-and-consultation->.

7 DPIE (2021), Net Zero Plan Stage 1: 2020–2030. <https://www.environment.nsw.gov.au/topics/climate-change/net-zero-plan>.

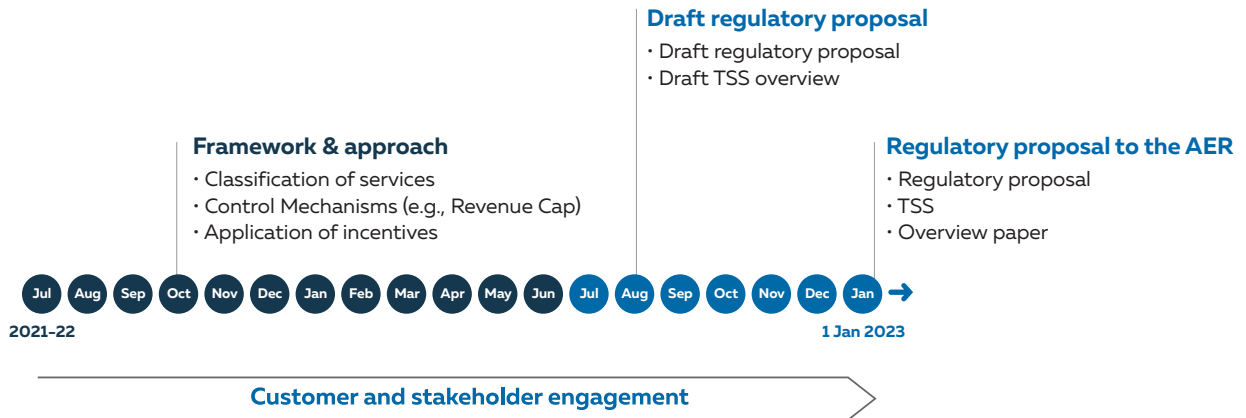
8 DPIE (2021), Electric Vehicle Strategy. <https://www.nsw.gov.au/initiative/nsw-governments-electric-vehicle-strategy>.

9 DPIE (2021), NSW Hydrogen Strategy. <https://www.energy.nsw.gov.au/renewables/renewable-generation/hydrogen>.

## 1.2 Ausgrid is requesting a revised Framework and Approach Paper

Due to this rapid rate of transition and evolving regulatory environment, Ausgrid requests that the AER replace its Framework and Approach Paper for Ausgrid's 1 July 2024 to 30 June 2029 (2024-29) regulatory control period.

The Framework and Approach is the first step in developing Ausgrid's 2024-29 regulatory proposal, which culminates in Ausgrid submitting its regulatory proposal to the AER by 31 January 2023. Ausgrid also intends to publish a draft of its regulatory proposal for public consultation by 31 August 2022.



Ausgrid requests a new Framework and Approach Paper to reflect what Ausgrid has achieved since its 2016 Framework and Approach Paper and to recognise the evolved regulatory landscape.

**Section 1** Provides context for why Ausgrid believes the AER should replace its Framework and Approach Paper

**Section 2** Outlines Ausgrid's customer engagement framework for its 2024-29 regulatory reset

**Section 3** Provides an initial view of Ausgrid's proposed approach to service classification for the 2024-29 regulatory control period

**Sections 4-6** Set out Ausgrid's proposed approach to forms of control, incentive schemes and dual function assets



### 1.3 Statement from the Reset Customer Panel

In developing this request for a revised Framework and Approach Paper Ausgrid consulted with our Reset Customer Panel (**RCP**) members who requested that the networks currently working on a coordinated service classification, organise service classification workshops with the AER participation for network businesses, AER staff and customer advocates to:



- Articulate the tangible customer benefit for each proposed classified service in **section 3**; and



- Clearly define each new proposed service including providing case studies with and without the proposed classification in **section 3**.

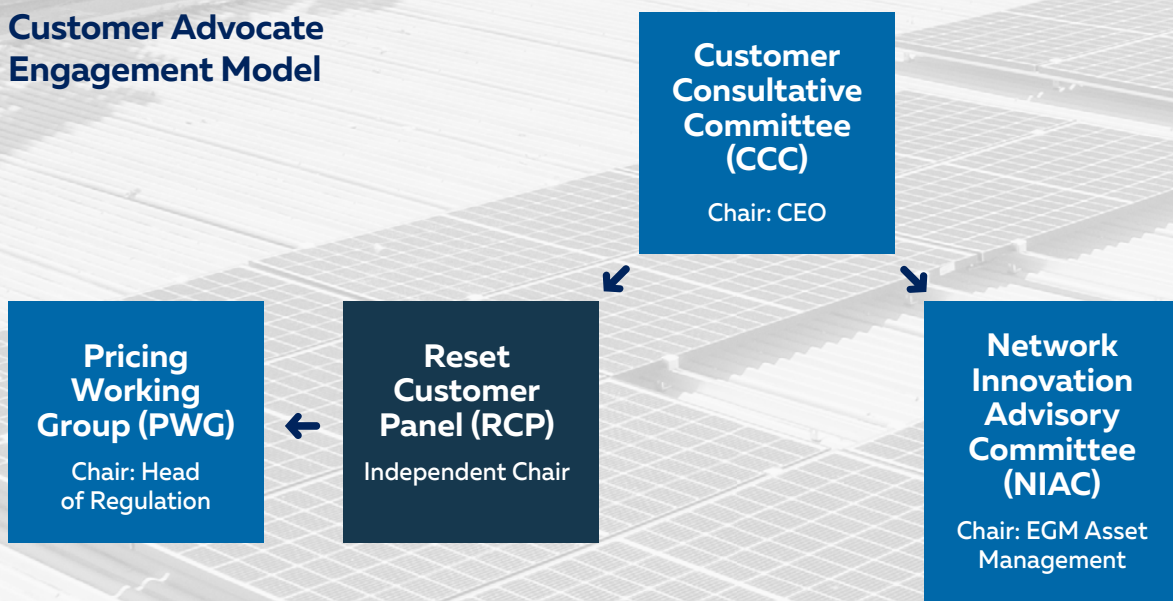
# Engaging our customers is fundamental to our long-term success

## 2.1 Sincere, impactful and independent customer engagement will underpin our regulatory reset

Ausgrid strives to embed stakeholder and community consultation in our decision making, including for our 2024-29 regulatory reset. We implement comprehensive engagement programs that deliver key insights to help us continually improve the customer experience and understand what matters to customers into the future.

Central to our engagement approach are our customer committees which include a diverse range of customer and stakeholder representatives. These committees provide us valuable insights into how customer priorities are changing and what this means for how we deliver services.

### Customer Advocate Engagement Model



- The Customer Consultative Committee (**CCC**) is our peak stakeholder engagement committee and provides broad customer advocate input to Ausgrid's business planning, customer and business strategy development and implementation;
- The Network Innovation Advisory Committee (**NIAC**) reviews Ausgrid's business cases for planned innovation projects and oversees a \$42 million capital funding envelope for approved innovation programs in the 2019-24 regulatory period; and
- The Pricing Working Group (**PWG**) enables Ausgrid and customer advocates to collaborate on tariff strategies and reforms that promote customer choice and reduce the long-term cost of electricity for customers.
- To inform our 2024-29 regulatory reset we also established the RCP. The RCP's role is to help ensure our regulatory proposal meets the long-term interests of consumers. The RCP is independent from Ausgrid, well resourced, and able to seek independent expert advice as it sees fit.



# Ausgrid's Regulatory Proposal Engagement Narrative developed with customer advocates

The engagement narrative acts as an invitation to join with us to develop our regulatory proposal.

An example of how Ausgrid works closely and co-designs with its customer advocates is in the development of Ausgrid's Regulatory Engagement Framework and associated Regulatory Proposal Engagement Narrative.



## Who is Ausgrid?

Ausgrid operates the poles, wires and streetlights delivering electricity to homes and businesses across Sydney, the Central Coast and the Hunter region. We strive to connect communities and empower lives through the services we provide.



## Why do we want to engage?

We are now reviewing our strategy for the future, including a plan for 2024 to 2029.

We have been listening to our customers, who told us to focus on being affordable while being safe, smart, sustainable and resilient. In responding to our customers need for affordability we delivered a 32 per cent reduction in our network charges since 2014.

But the energy industry is changing, and so are our customers.

Listening to you will help us understand the right balance to strike to meet the diverse needs and aspirations of our customers.



## Why is the time now?

The imperative for a low carbon future continues to increase, with more extreme weather including bushfires, flooding and storms.

The way we deliver energy has to change, as homes and businesses change the way they use energy by adopting new technologies such as solar. The pattern of energy use, reflecting the changes in the way we work and live, is evolving. The way we generate energy through renewable sources and our energy policies will drive change in the way we operate.

Customer needs are also changing, with expectations of services becoming more individualised and the acceptance of new technology varying greatly. Within this rapidly changing environment the focus on energy affordability and good customer service remains critical.



## What's our goal?

Your participation will help us strive towards a future energy network that works for everyone; a network that is safe, smart, sustainable and resilient for generations to come.



## Why should customers engage with us?

We are at a critical point, and we need to respond to ensure we continue to deliver for our customers and set ourselves up for long-term success. We also need to ensure we remain inclusive, leaving no-one behind and improving outcomes for the most vulnerable in our communities.

We need your help to shape our future priorities. Without understanding your views and your needs, Ausgrid cannot continue to evolve and improve. We don't have all the answers, yet we need to make the best decisions for future generations.

We commit to listening and reflecting your views and priorities in our long-term strategy, including our plan for 2024 to 2029.

## 2.2 Safer, smarter and more sustainable

Ausgrid is working hard to improve outcomes for its energy customers by making Ausgrid safer, smarter and more sustainable.

### 2019 Reducing customer costs:



Savings:  
**\$65**

Since 2019, we have reduced our annual network charges for **households** by an average of \$65.



Savings:  
**\$201**

Since 2019, we have reduced our annual network charges for **small businesses** by an average of \$201.



### 2020

#### Voice of the Community:

In 2020, we launched our 'Voice of the Community' engagement program to better understand our performance across 25 different services, channels and market segments.

### 2021



#### Supporting EV charging:

In 2021 we established our partnership with JOLT to provide electric vehicle charging from our electricity kiosks.



#### Cyber Security:

We are continuing to enhance our cyber security controls to keep our systems safe while more employees and customers work from home.



#### Emissions reductions:

Our emissions reduction target is 8% by 2023-24 and 17% by 2029-30.

So far we are ahead of our plan with a **13%** reduction achieved.



#### Network Resilience Plan:

We are rethinking our approach to network resilience and are implementing strategies to better respond as extreme weather events occur more often. For example, we have commenced developing a network resilience plan so our network can better withstand extreme weather events.

### 2020

#### Community battery trial:



Savings up to:  
**\$200** per year

In 2020, we commenced a trial of three community batteries to help customers maximise the value of their solar and support the grid; these batteries are expected to save participants up to \$200 per year off their electricity costs by enabling them to use more of their own solar.

#### Virtual Power Plant trial:



**750** sites

Over of  
**3MW** combined power

We increased our Virtual Power Plant trial participation to 750 sites, with combined power of over 3MW (about 10-15% of customer batteries in Ausgrid's area).



## Classification of services

Service classification stipulates which types of services network businesses can offer to their customers. Ausgrid can provide services to customers recognised by the AER as negotiated distribution services or direct control services (**DCS**).<sup>1</sup> The latter is comprised of standard control services (**SCS**) and alternative control services (**ACS**).<sup>2</sup>

Importantly, if Ausgrid does not seek a classification of services from the AER on any new proposed services, then they default to being unclassified services and Ausgrid cannot offer them to customers.

Due to the rapidly changing state of the electricity market, as highlighted in section 1, Ausgrid's service classification for the 2024-29 regulatory period is potentially more significant than it ever has been before. This involves reviewing Ausgrid's current classification of services to accommodate emerging energy services over 2024-29 that are transforming at a faster rate than anticipated.<sup>3</sup>

We have worked collaboratively with other network businesses and stakeholders to understand where it may be appropriate to diverge from our current service classification, align with the AER's baseline service classification or support emerging energy services. Additionally, the AER's soon to be released revised Ring-fencing Guideline will provide further clarity on the separation between network monopoly services and contestable market services. As such, we believe service classification is a key area that merits the replacement Framework and Approach Paper. **Appendix A** provides our initial views on proposed changes to the baseline service classifications. This includes proposing new services (that will require classification) for the AER's consideration.

1 National Electricity Rules (NER), clause 6.2.1(a).

2 NER, clause 6.2.2(a). SCS are the main network services delivered to customers which relate to the access and supply of electricity to customers. ACS are the other user specific and asset specific services that DNSPs charge separately to the bill.

3 We note that the AER's relatively new Service Classification Guidelines 'seeks to set out a framework for the classification of connections which provides clarity and consistency now and is flexible enough to allow for technological and other customer driven advances in the future'. See: AER (2018), Explanatory Statement: Electricity distribution service classification guideline. P 15: <https://www.aer.gov.au/system/files/AER%20-%20Explanatory%20Statement%20-%20Distribution%20Service%20Classification%20Guideline%20-%2028%20September%202018.pdf>.

### 3.1 Working collaboratively to inform service classification of emerging energy services

Industry leading customer engagement is critical to ensuring that our 2024-29 regulatory proposal meets the needs of customers. We also understand that the sector transformation means many of our stakeholders are time poor. Therefore, together with Endeavour Energy (NSW), Essential Energy (NSW), EvoEnergy (ACT), TasNetworks

(TAS) and Power and Water (NT), we undertook a joint consultation process with our stakeholders. These distributors are on the same regulatory cycle as Ausgrid with 2024-29 regulatory proposals due to the AER by 31 January 2023. Our aim was to mitigate the need for stakeholders to undergo multiple consultations on similar issues through a joint consultation process.

#### Key milestones for the 2024-29 Framework and Approach

The NSW/ACT/TAS/NT electricity distributors are due to submit their regulatory proposals in January 2023. We are engaging early to inform those proposals.



As part of this joint consultation on emerging energy services we jointly:

- Published the NSW/ACT/TAS/NT Electricity Distributors Consultation Paper (**Joint Consultation Paper**) at **Appendix B**.
- Held a public forum on 15 September 2021.
- Received written feedback from stakeholders on 30 September 2021. For a summary of stakeholder submissions see **Appendix C**.



Of participants indicated that they were happy with the way the forum was run.



Of participants indicated that there were other topics that could benefit from joint consultation, which is an opportunity we continue to explore with the other distribution networks.

### 3.2 Our initial views on service classification for the AER's consideration

For this request for a new Framework and Approach Paper, Ausgrid identified new services that may require classification summarised at **Table 1** and amendments to the AER's baseline list of services to accommodate the contestable arrangements for connections in NSW summarised at **Table 2**.<sup>1</sup> As indicated, several of our proposed amendments to the AER's baseline list of services are aligned to our current approved 2019-24 service classification.

1. See Appendix A AER (2018), Distribution Service Classification Guideline. <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/distribution-service-classification-guidelines-and-asset-exemption-guidelines>.

We also note that there are various reviews underway that could impact NSW network businesses' service classifications including:



The NSW Department of Planning, Industry and Environment's (**DPIE**) review the Accredited Service Provider (**ASP**) Scheme<sup>2</sup> This Scheme governs how contestable connection services are provided in NSW

2 NSW DPIE, ASP Scheme Review. <https://www.energy.nsw.gov.au/asp-scheme-review/>.



DPIE's forthcoming consultation on Standalone Power Systems (**SAPS**)



The AEMC's review of the regulatory framework for metering services<sup>3</sup>

3 AEMC, (2021). Review of the regulatory framework for metering services. <https://www.aemc.gov.au/market-reviews-advice/review-regulatory-framework-metering-services>.

**Table 1:** Proposed new services in addition to the AER's baseline

Description	Benefits to customer base	Proposed classification
<b>System support services</b>	More flexible network that can dynamically respond to changes in customer needs at a lower long run cost.	
<b>SAPS</b>	Lower cost solution for servicing remote customers, with the savings ultimately passed on to all customers.	
<b>Facilitating the leasing out of spare platform asset capacity</b>	Broader range of investment options will be available (e.g. community batteries) which can be selected if they unlock the most net economic benefits for customers.	SCS (general customer benefits)
<b>Customer export services</b>	More equitable price and cost recovery arrangements for all customers.	



**Table 2: Proposed amendments to the baseline list of services**

Description	Proposed classification
Ausgrid initiated asset relocations (currently classified)	
Demand management procurement (currently classified)	
Temporary SAPS after an emergency	
Training internal staff (currently classified)	SCS (general customer benefits)
Last resort services following embedded operator failure	
Rectification of simple customer fault (currently classified)	
Bulk supply point metering (currently classified)	
Contestable network commissioning (currently classified)	
Work undertaken to identify customer fault (currently classified)	
Rectification works to maintain network safety	
Inspection of privately owned infrastructure before the meter (currently classified)	ACS (specific customer benefits)
Recovery of type 5/6 metering capital (currently classified)	
Emergency metering maintenance (currently classified)	
Distributor outage for meter replacement (currently classified)	
Connection services	SCS and ACS depending on the connection
Unregulated distribution services – including asset rental, contestable metering support, 3rd party training and type 5/6 meter data management (currently classified)	Unregulated

### 3.2.1 System support services

Electricity networks are increasingly becoming a platform for DER, with this evolution having the potential to introduce a suite of new platform services in the 2024–29 regulatory period.

Platform technology introduces new ways for electricity distributors to manage network capacity. Traditionally this could only be done through ‘poles and wire’ solutions, whereas now it can be achieved by leveraging existing grid infrastructure as a ‘platform’ for DER. For electricity distributors this means that adding more network inputs (poles and wires) is not necessarily the only, or most efficient, option. Instead, platform enabling technology can be used as an input or service for managing capacity through smarter utilisation of existing assets. This was supported by stakeholders in their submissions to the Joint Consultation Paper.



#### Platform enabling technology

Through smarter utilisation of existing assets, platform enabling technologies can improve the management of import and export capacity and potentially avoid traditional ‘poles and wire’ solutions.

**“Further reform is required to ensure the AER’s network expenditure assessment framework supports the policy direction articulated in its Post-2025 Market Design, towards encouraging and enabling consumers to be rewarded for their flexible demand and generation.”**

*– AGL submission to the Joint Consultation Paper*

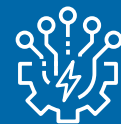
With the increasing reliance on distributed resources as an integral part of a two-sided market comes the need to consider the changing role of the distribution network to a distribution system operator. As recommended by the ESB, this includes working ‘with AEMO to co-ordinate local and whole of system issues.’<sup>1</sup> Accordingly our service classification proposal has put forward a new service group called ‘system support services’. It is intended to capture the emerging distribution network activities that will enable customers to participate in two sided markets and be rewarded for their flexible demand and generation, while maintaining overall system security. These activities are likely to include utilising dynamic network operating envelopes to signal system events or, in the medium term, direct load and/

or generation shedding. They could also include services that facilitate local market support arrangements that have the potential to unlock significant benefits for the local communities which share the electricity grid.

#### How will customers benefit from this approach?

All customers benefit when there are system security issues as load shedding may not be required. Instead, AEMO may request network business to curtail DER. Customers with DER benefit as they may experience less direct curtailment of their resources.

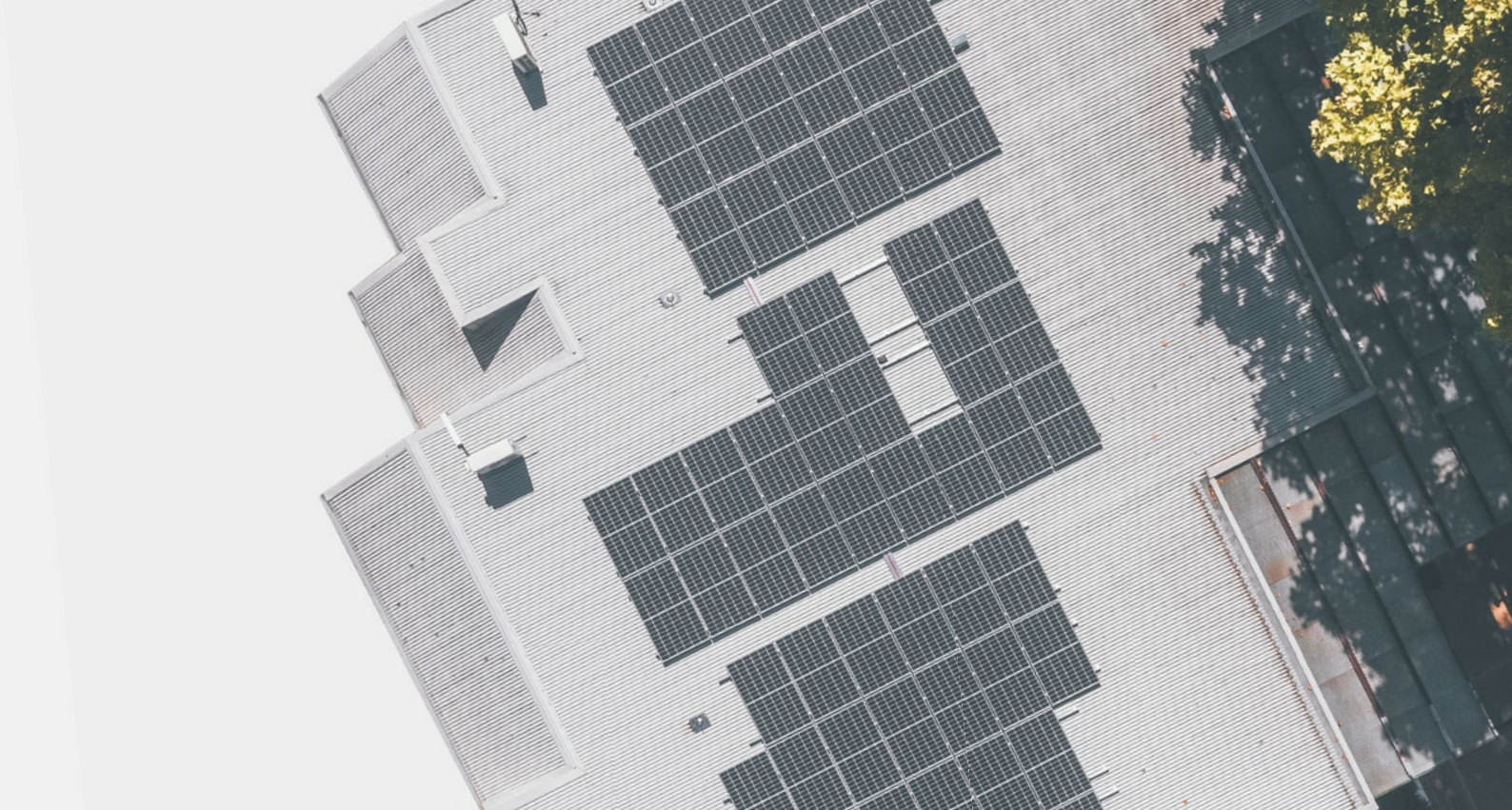
#### Proposed service classification change



We have put forward a new service group called system support services at **Appendix A** which captures the suite of emerging distribution network services which supports a two-sided market.

<sup>1</sup> ESB (2021), Post-2025 Market Design – Final advice to energy ministers (Part B), P 70: <https://www.datocms-assets.com/32572/1629945809-post-2025-market-design-final-advice-to-energy-ministers-part-b.pdf>.





### 3.2.2 Customer export services

Until recently energy flowed in only one direction – from large-scale generators to customers.

With the rapid customer take up of technology like solar panels and battery storage, this has changed. Customers can now generate, store, and export their own energy and networks are supporting two-way flows of electricity.

Electricity distributors have facilitated the export of electricity via our networks for many years, without this activity being explicitly noted as a distribution service. However, with a recent AEMC rule change networks can now introduce a customer export service, including a ‘basic export’ service and potentially an ‘additional’ export service (subject to customer and stakeholder engagement).<sup>1</sup>

### How will customers benefit from this approach?

The AEMC’s rule determination found that the rule change will benefit customers who have been prevented from exporting electricity due to export limits on all new connecting customers.<sup>2</sup> Additionally, it will lead to more equitable and efficient allocations of costs and benefits, particularly for customers who are unable to access DER (e.g. renters, strata buildings).<sup>3</sup>

#### Proposed service classification change



We propose adding the following activity to the definition of common distribution services:

- Customer export services back to the distribution network, including ‘basic’ and ‘additional’ export services.

Our view is that adding this activity to the common distribution services group aligns to the AEMC’s recent rule change recognising customer export services as a distribution service.

<sup>1</sup> AEMC (2021), Access, pricing and incentive arrangements for DER final rule determination.  
<https://www.aemc.gov.au/rule-changes/access-pricing-and-incentive-arrangements-distributed-energy-resources>.

<sup>2</sup> Ibid. p. iii.

<sup>3</sup> Ibid. p. 3.

### 3.2.3 Leasing spare platform asset capacity

Our position is that the facilitation work needed to lease out spare capacity in platform assets should be recognised as a distribution service. Platform assets are distribution assets, such as community batteries, which can be leased in whole or part to third parties. The facilitation work we are seeking to be recognised as a distribution service would predominately involve negotiating agreements with third party providers (i.e. retailers, aggregators). This is akin to an existing activity known as ‘shared asset facilitation’ which is currently recognised as a standard control service.

Grid-scale batteries are an emerging technology that can increase the grid’s renewables hosting capacity, support security of the overall energy system, and put downward pressure on electricity

prices by providing a flexible alternative to traditional network investments. We have not expressly referred to grid-scale batteries in our proposed classification to be technology neutral. This is in recognition that the AER’s role is to regulate services, not assets or inputs.

The full value stack associated with grid-scale batteries is set out in the figure below. In the 2024–29 regulatory period we expect to invest in this emerging technology to deliver network services **(the green circle in the diagram below)**. For example, rather than increase the capacity in a part of the network to accommodate greater customer load, the network might install a battery, charge the battery during periods of low demand, and discharge the battery during period of high demand. In this way, the battery as an asset is effectively an input into the operation of the distribution network which provides the distribution service.

#### Leasing spare battery capacity



#### Network

Alternative to network upgrade to relieve a constraint



#### Customer

Local customer energy storage service



#### Market

Dispatch for NEM energy and/or ancillary markets

There are also customer and market value streams that can be accessed through grid scale batteries. Ausgrid is not seeking to have these activities recognised as a distribution service. Instead, our proposal is that the ‘facilitation of leasing of platform asset capacity’ service classification obtains that recognition. This will facilitate Ausgrid leasing out spare platform asset capacity to third parties who in turn

provide that capacity to provide other services, for example a customer energy service **(grey circle above)** or a market service **(blue circle above)**. Importantly, the third party would be a legally separate entity. For example, it could be a retailer seeking to compete with larger retail firms in the provision of a local customer storage service.

We also acknowledge that some stakeholders have raised concerns about distribution networks providing storage services. In response to our consultation paper, AGL stated that it “supports the AER’s proposed prohibition on distribution networks from providing contestable services with a battery (whether the service consists of the supply excess capacity to third parties, or the provision of other contestable services themselves with the battery)”.<sup>1</sup> We welcome AGL’s submission and look forward to continuing to engage with retailers – some of whom, plus customer advocates, support our position on community batteries, such as Simply Energy and the Public Interest Advocacy Centre (PIAC).<sup>2</sup>

**“PIAC supports allowing DNSPs to lease excess battery capacity to a legally separate third party. Regulated networks have an important role in facilitating the transition to a more distributed energy system and a lower carbon economy. Distribution-level batteries can play an important role in this transition and help lower the overall costs of the supply chain. Distribution-level batteries can also offer consumers a lower-cost alternative to residential energy storage systems.”**

*– PIAC submission to the Joint Consultation Paper*

## What is Ausgrid asking the AER to recognise as a distribution service?

Our proposal is that the facilitation work performed to lease out spare capacity in a platform asset, such as community batteries, should be classified as a standard control service. This is distinct from allowing a third party to use spare capacity in an asset (e.g. community battery), which should be recognised as an unregulated activity. The below figure sets out this distinction which has formed part of our service classification proposal in **Appendix A**.



### Leasing spare platform asset capacity



#### Leasing spare capacity – SCS

Facilitating the leasing out of spare capacity in a platform asset that will be used to provide energy services by means of, or in connection with, the distribution system.



#### Using spare capacity – Unregulated

The use of spare capacity in a platform asset (e.g. community battery) leased out to a third party.

*Note: Part of the costs will be allocated to standard control services and cost reflective method that complies with the cost Allocation Principles in clause 6.15.2 of the NER and Ausgrid’s approved cost allocation method.*

1 AGL, Submission on joint network consultation on service classification, 30 September 2021.

2 Simply Energy, Electricity distribution ring-fencing draft guideline submission, 8 July 2021.

## How will customers benefit from this approach?

Our proposed approach would provide an additional investment option which, if permitted under the regulatory framework, has the potential to unlock more economic benefits for customers than other available solutions. This is by solving a network need using a flexible asset that can support the grid and, at times of spare capacity, provide a local customer storage service or be dispatched for NEM energy or ancillary markets. This will unlock benefits for customers by:

- Providing greater utilisation of new assets (e.g. community batteries) that have spare capacity from time-to-time;
- Allow customers to pay less since only a proportion of the full cost of an asset would be rolled into the regulatory asset base (**RAB**) e.g. 80% RAB, 20% unregulated depending on the estimated unregulated revenue that would be recovered;<sup>1</sup>
- The potential for further cost reductions to be passed on to customers if unregulated revenue is materially more than forecast e.g. a revenue true-up could be applied if unregulated;
- revenue is higher than initially forecast (noting other true-ups are already applied by the AER for the Capital Expenditure Sharing Scheme (**CESS**) and demand management innovation allowance); and
- Solar customers can store their energy and improved system support in low load events.

We have considered these customer benefits and National Electricity Rules (**NER**) framework which defines a “distribution service” as “a service that is provided by means of, or in connection with, a distribution system”. The AEMC has in turn observed that the phrase “in connection with” incorporates “those services that have a **clear functional nexus** with a distribution system, but which are **not necessarily** provided through equipment or facilities that are physically connected with a distribution system”.<sup>2</sup> We consider leasing out spare capacity in a platform asset, including a battery, has a clear functional nexus with our distribution system, supporting our view that the service should be recognised as a

<sup>1</sup> Part of the platform asset costs will be allocated to standard control services and the remainder allocated to unregulated, with this allocation to be based on a cost reflective method that complies with Cost Allocation Principles in clause 6.15.2 and Ausgrid’s approved cost allocation method.

<sup>2</sup> AEMC, (2017), Final determination: National electricity amendment (alternative to grid supplied network services) Rule 2017, p. 28. <https://www.aemc.gov.au/sites/default/files/content/9669d72d-070e-4aaf-9848-b30fd5ce29c3/ERC0215-Western-Power-final-determination-to-publish.pdf>.



## Proposed service classification change



We propose that the definition of a common distribution service includes the following activity:

- Leasing out spare capacity in a platform asset that will provide energy services by means of, or in connection with, the distribution system.

Our position is informed by stakeholder views, particularly PIAC’s submission. We have also put forward an approach that is technology neutral and aligned to the NER framework which aims to regulate services (leasing out spare capacity in a platform asset) rather than specific types of assets (community batteries).

### 3.2.4 Standalone Power Systems

Electricity distributor owned Standalone Power Systems (SAPS) are an 'off grid' economic alternative to 'poles and wires'. SAPS generally comprise solar PV, batteries and, sometimes, backup diesel generators. The term SAPS is used to encompass both microgrids (networked and non-networked e.g. isolated townships around the Hawkesbury River), which supply electricity to multiple customers, and individual power systems, which serve only a single customer.

**“The potential harm arising from DNSPs providing the generation component of SAPS is trivial compared to the potential harm (to both the quality of supply received by the customer to be transition to a SAPS and network costs for all customers) from not being able to efficiently transition to SAPS.”**

*– Public Interest Advocacy Centre's (PIAC) submission to the Joint Consultation Paper*

### How will customers benefit from this approach?

Customers benefit from SAPS as they can be an efficient alternative to traditional poles and wires that improves reliability and safety for customers, while lowering costs for these customers overtime.<sup>1</sup>

We agree with this characterisation of the potential benefits associated with distribution-led SAPS. Technological developments and the falling cost of renewable generation and batteries have made SAPS a viable solution for some high cost-to-serve customers whereas in the past this may not have been the case. These are typically customers at the end of long powerlines, especially in geographically remote, or hard to access, heavily vegetated areas, resulting in higher costs of supply for the network. We strongly support the AER considering these benefits, which are in the long-term interests of all customers, when forming its position on distribution-led SAPS. We note that service classification might also be informed by DPIE's forthcoming consultation on SAPS. SAPS will require further discussion with the AER to discuss the different models for SAPS and refine the definition, following the outcomes of DPIE's consultation.



### Proposed service classification change



We propose adding the following new activity for distributor-led SAPS within the common distribution services group:

- Work related to a DNSP-led SAPS deployment and customer conversion activities.

<sup>1</sup> AEMC (2019), Regulating Off-The-Grid, SAPS in Australia. <https://www.aemc.gov.au/sites/default/files/2019-09/AEMC%20-%20Regulating%20off-the-grid.pdf>.

### 3.2.5. Smart public lighting services

Public lighting is currently classified as a 'distribution service' given the placement of streetlights on power poles or on a standalone basis in parallel to network assets. It has then been classified and regulated as an alternative control service with a cap placed on the maximum prices we can charge.

In recent years old public lighting technology has been replaced via reactive or bulk replacement programs with LED luminaires. LED technology has provided several benefits to customers including reduced energy consumption and CO<sub>2</sub> emissions, superior lighting performance and uniformity and reduced failures and maintenance requirements.

In addition to LED technology, several networks and customers have trialed 'smart' enabled luminaires (via an attached node) combined with Control Management Systems (CMS) that allow for more remote monitoring and operation including:

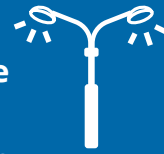
- Record of status (on / off status of luminaire);
- Fault triggers (including overcurrent and tilt);
- GPS locational services (GPS self-reporting and monitoring); and
- Energy usage / metering (currently unaccredited but testing is ongoing).

These functions will increase the benefits associated with LED technology. It is our understanding that these smart-enabled lights (and columns) will form part of smart communities that provide a range of enhanced services.

**"We note that when the current regulatory regime was conceived, street lighting was effectively a commodity product. But this situation has changed markedly with lighting having become much more like a fast-moving, end-use consumer appliance, and our view is that the regulatory approach has become a poor fit for this service."**

*– Southern Sydney Regional Organisation of Councils (SSROC) submission to the Joint Consultation Paper*

### Proposed service classification change



The AER's baseline list of services recognises public lighting as a distribution service, including:

- The provision, construction and maintenance of public lighting and emerging public lighting technology.

We propose to maintain this definition in our 2024-29 regulatory period and to continue public lighting's treatment as an alternative control service.

We thank SSROC for making its submission and articulating its concerns about the current regulatory framework applied to public lighting. At this stage, our proposal is to maintain the existing service classification in our 2024-29 regulatory period while continuing to engage with SSROC, other council representatives and councils generally, about service and technology expectations. We would like to explore the possibility of the regulatory framework being more flexible and able to respond to changes in markets and technology within the regulatory period. We note that if smart public lighting devices were classified as a distribution service, then these devices would be subject to the AER price controls.



### 3.2.6. Electric vehicle charging infrastructure

Electric vehicles (EVs) are an emerging technology across Australian and globally and are key to reducing carbon emissions from the transportation sector.

Ausgrid currently anticipates being an enabler of EV charging infrastructure. We do not expect to deploy EV charging for public use as this is a contestable service that will be delivered by the market.

However, we will still need to respond to changes in the needs of our customers and potentially new types of customer, such as the owners of public EV fast-charging infrastructure, in providing distribution services. Regulatory reform may therefore require electricity distributors to take a more active role in promoting the uptake of EVs through owning, providing or contributing to the cost of EV charging infrastructure.

**“With respect to the nature of the DNSP role in EV charging, however, upstream of the EV charging equipment that connects to the vehicle there will be a need to be DNSP-owned assets in virtually every case. The only exception will be standalone systems, which will often be cost prohibitive to deploy, and which will be exceptions to the general rule. This makes the role of the DNSP not just facilitatory, but crucial to the successful transition of the national road vehicle fleet to electric.”**

*– Electric Vehicle Council submission to the Joint Consultation Paper*

#### Proposed service classification change



**We are not proposing to amend the baseline list of services in the AER’s Service Classification Guideline to accommodate EV charging infrastructure.**

In our view, the facilitatory role that we expect to play in the rollout of EV charging equipment is already sufficiently captured in the baseline, as part of the definition for common distribution services. We will continue to engage with the Electric Vehicle Council and to ensure that Ausgrid supports the efficient rollout of EV charging infrastructure.



### 3.2.7. Connections

The classification of our connection services in the 2024-29 regulatory period must incorporate the contestable arrangements for connections which apply in NSW.

The *Electricity Supply Act 1995 (Act)* and the *Electricity Supply (Safety and Network Management) Regulation 2014* establish a framework for electricity customers to contract directly with third party service providers to do the work that is necessary to connect them to a distribution network (referred to in the Act as a "contestable network service" – s 31A). These third party providers can only do this work if they are accredited as an ASP and authorised under that accreditation to provide the particular contestable network service. A person cannot be accredited unless they are determined to be competent.

Customers engage ASPs to undertake their work directly and the relevant DNSP is then gifted any new connection assets to operate and maintain. NSW is unique in its approach as no other Australian jurisdiction allows a customer to engage a service provider of their choice to build connection assets that are then gifted to the DNSP to operate and maintain.

### Proposed service classification change



We have applied the baseline list of connection services in the AER's Service Classification Guideline, with updates that accommodate the contestable arrangements for new connections in NSW. These updates are outlined in more detail in **Appendix A**.







## Forms of control

Our initial positions on the forms of control to apply to different services, and the reason for our position, are shown in **Table 3**. We consider the forms of control and formulae adopted in the 2019-2024 regulatory control period remain appropriate as there have not been material changes in circumstance that affect the AER's previous rationale for determining these forms of control.

**Table 3:** Ausgrid's initial positions on forms of control

Classification	2019-24 period	2024-29 period	Reason
<b>Standard control services (SCS) – Common distribution services</b>	Revenue cap	Revenue cap	Continuation of the current arrangements will: <ul style="list-style-type: none"> <li>• Recover revenue efficiently;</li> <li>• Offer better incentives for demand side management;</li> <li>• Rely less on energy forecasts; and</li> <li>• Support the introduction of efficient prices.</li> </ul>
<b>Alternative control services (ACS)– Type 5 and 6 metering</b>	Price cap	Price cap	Continuation of current arrangements.
<b>Alternative control services – Public lighting</b>	Price cap	Price cap	Continuation of current arrangements.
<b>Alternative control services – Fee based</b>	Price cap	Price cap	Continuation of current arrangements.
<b>Alternative control services – Quoted</b>	Price cap	Price cap	Continuation of current arrangements.



## | Incentive schemes

Ausgrid supports the application of a balanced package of incentive schemes within the regulatory framework and generally considers the current schemes provide a reasonable balance of incentives for electricity distributors. A stable framework for incentive-based regulation would encourage Ausgrid to continue to identify cost and service level improvements for customers over the forthcoming years.

We note that the AER will shortly commence a review of its incentive schemes. With this review in mind we will be engaging with RCP members to discuss the various applicable incentive schemes. We propose that the incentive schemes referenced in **Table 4** apply in Ausgrid's 2024–29 regulatory control period.

**Table 4:** Incentive schemes proposed to apply in Ausgrid’s 2024–29 regulatory control period

<b>AER Incentive Scheme</b>	<b>Ausgrid’s request to apply the Incentive Scheme and comments</b>	<b>What customer benefits does this incentivise?</b>
<b>Service Target Performance Incentive Scheme (STPIS)</b>	We understand that the AER’s review of incentive schemes is unlikely to include the STPIS as the AER only recently concluded its review of the STPIS. Consistent with the 2019–24 period, we propose the STPIS applies in 2024–29.	Maintaining reliability of supply for Ausgrid’s customers while achieving efficiency gains via operation of the EBSS and CESS.
<b>Incentive scheme for export services</b>	We understand that the AER has been tasked by the AEMC to develop an incentive scheme for export services and that the AER’s Draft DER Expenditure Guideline referred to the Value of Distributed Energy Resources (VaDER) which is likely to form the basis of this scheme. Due to the uncertainty of the design of this scheme we do not currently have a view as to whether it should apply in 2024–29. However, we encourage the AER to consider a staged approach to implementation.	Improving Ausgrid’s export services quality as developed with customers.
<b>Efficiency Benefit Sharing Scheme (EBSS)</b>	Consistent with the 2019–24 period, we propose the EBSS applies in 2024–29, subject to the outcome of the incentive scheme review.	Lower bills via incentivising Ausgrid to lower its ongoing cost base.
<b>Capital Expenditure Sharing Scheme (CESS)</b>	Consistent with the 2019–24 period, we propose CESS applies in 2024–29 subject to the outcome of the incentive scheme review.	Lower bills via incentivising Ausgrid to invest more efficiently.
<b>Demand Management Innovation Allowance (DMIA)</b>	Consistent with the 2019–24 period, we propose DMIA applies in 2024–29.	Lower bills by identifying demand management programs that encourage efficient expenditure on non-network demand management options.
<b>Demand Management Incentive Scheme (DMIS)</b>	Consistent with the 2019–24 period, we propose the DMIS applies in 2024–29.	Lower bills by identifying demand management improvements, the benefits of which can be shared with Ausgrid’s customers and Ausgrid.
<b>Customer Service Incentive Scheme (CSIS)</b>	As a new scheme, Ausgrid proposes to work with the RCP and the AER to develop its CSIS.	Better customer service and an overall enhanced ‘Ausgrid experience’ for customers.

The incentive schemes in the table above apply to SCS. Ausgrid intends to consult with public lighting customers about the possibility of including some form of incentive for efficiency sharing in the provision of public lighting services and would welcome the AER’s involvement in these discussions.

We look forward to engaging with the AER and other stakeholders during its incentive scheme review and its interaction with our 2024–29 regulatory proposal.



## I Dual function assets

The NER requires Ausgrid to inform the AER of the value of its dual function assets (**DFA**) as at 1 July 2021 by the end of October 2021.<sup>1</sup> This is for the AER to assess how material the value of DFA is as a proportion of total RAB values of standard control services. Based on this materiality, the AER then decides whether the revenue attributed to DFA are to be recovered under the pricing rules in Chapter 6 (distribution) or Chapter 6A (transmission) of the NER.

Some of Ausgrid high voltage assets are DFA.<sup>2</sup> Also some of these high voltage assets are transmission exit assets. Ausgrid has calculated the value of DFA at 1 July 2021 as at \$1,966 million (nominal). The equivalent value for distribution assets is \$14,161 million (nominal), resulting in a DFA value of 12 per cent of the total RAB. Given the materiality of this value Ausgrid expects the AER to decide that the revenue associated with DFA will be priced under Part J of Chapter 6A, as it has been previously.

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1 NER, clause 6.25(a).

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2 See Chapter 10 and clause 6.24.2(a) of the NER.



# Appendices:

## **Appendix A**

Ausgrid's proposed 2024-29 service classification for the AER's initial consideration

## **Appendix B**

Joint Consultation Paper on Service Classification

## **Appendix C**

High level summary of stakeholder submissions to the Joint Consultation Paper

# **Appendix A: Ausgrid's proposed 2024-29 service classification for the AER's initial consideration.**

Note:

- The **blue coloured** text indicates Ausgrid’s proposed amendments and/or additions to the AER’s baseline service classification list.
- An **asterisks (\*)** signifies that the services are currently classified in Ausgrid’s 2019–24 determination and require continued classification.

Service grouping	Further description	Proposed classification 2024–29
<b>Common distribution service—use of the distribution network for the conveyance/flow of electricity (including services relating to network integrity)</b>		
<p><b>Common distribution services (formerly ‘network services’)</b></p>	<p>The suite of services that includes but is not limited to the following:</p> <ul style="list-style-type: none"> <li>• The planning, design, repair, maintenance, construction and operation of the distribution network.</li> <li>• The relocation of assets that form part of the distribution network, <b>as well as the exercise of powers under the <i>Electricity Supply Act (1995)</i> to rectify potential interference with or obstruction of distribution assets</b>, but not relocations requested by a third party (including a customer).*</li> <li>• Works to fix damage to the network (including <b>temporary standalone power systems (SAPS) after an emergency, and recoverable works to fix damage caused by a customer or third party</b>).</li> <li>• Support for another network during an emergency event.</li> <li>• Procurement and provision of network demand management activities for distribution purposes.*</li> <li>• Training internal staff, accredited service providers (<b>ASPs</b>) and contractors undertaking direct control services.*</li> <li>• Activities related to ‘shared asset facilitation’ of distributor assets.<sup>1</sup></li> <li>• <b>Provision of last resort services where a DNSP is required to take-over embedded networks or private networks.</b><sup>2</sup></li> </ul>	<p>Standard control</p>

1 Revenue for these services is charged to the relevant third party and is treated in accordance with the shared asset guideline. ‘Shared asset facilitation’ refers to administrative costs. It does not refer to the costs associated with providing the unregulated service itself.  
 2 NSW network businesses have previously had to provide last resort services to customers in circumstances where their embedded network operator has failed.

Service grouping	Further description	Proposed classification 2024–29
<p><b>Common distribution services (formerly 'network services') (cont.)</b></p>	<ul style="list-style-type: none"> <li>• Emergency disconnect for safety reasons and work conducted to restore a failed component of the distribution system to an operational state upon investigating a customer outage.</li> <li>• Rectification of simple customer fault where:*                             <ul style="list-style-type: none"> <li>– The need for rectification work is discovered in the course of the provision of distribution services;</li> <li>– The work performed is the minimum required to restore safe supply, and</li> <li>– The work can be performed in less than thirty minutes and does not normally require a second visit.</li> </ul> </li> <li>• Rectification of simple customer fault relating to a life support customer or other critical health and safety issues the distributor is able to address.</li> <li>• Establishment and maintenance of National Metering Identifiers (<b>NMIs</b>) in market and/or network metering systems, and other market and regulatory obligations.</li> <li>• Ongoing inspection of private electrical works (not part of the shared network) required under legislation for safety reasons.</li> <li>• Bulk supply point metering – activities relating to monitoring the flow of electricity through the distribution network.*</li> <li>• Customer export services back to the distribution network, including 'basic' and 'additional' exports.</li> <li>• Work related to a distributor-led SAPS deployment, operation and maintenance and customer conversion activities.</li> <li>• Facilitating use by third parties of spare capacity in a platform asset that will provide energy services by means of, or in connection with, the distribution system.<sup>3</sup></li> </ul>	<p>Standard control</p>

<sup>3</sup> Platform assets are distribution assets (e.g. community batteries) that can be leased to third parties. Part of the asset costs will be allocated to standard control services and the remainder allocated to unregulated, with this allocation to be based on a cost reflective method that complies with Cost Allocation Principles in clause 6.15.2 and Ausgrid's approved cost allocation method.



Service grouping	Further description	Proposed classification 2024–29
<p><b>System Support Services</b></p>	<p>A suite of system support services that includes:</p> <ul style="list-style-type: none"> <li>• Support to AEMO for market verification, compliance and forecasting for DER.</li> <li>• Support to AEMO during contingency events (e.g. lack of reserve (<b>LOR</b>) and minimum system load (<b>MSL</b>), including increases and/or decreases in dynamic network operating envelopes, direct load and/or generation shedding and under/over frequency protection.</li> <li>• Locational system strength services provided to transmission network service providers (<b>TNSP</b>) in support of system stability.</li> <li>• Local market support services, such as establishing 'Local Use of System' (<b>LUOS</b>) arrangements for communities.</li> </ul>	<p>Standard control</p>
<p><b>Network ancillary services—customer and third party initiated services related to the common distribution service</b></p>		
<p><b>Contestable network commissioning and decommissioning*</b></p>	<p>Includes the commissioning and decommissioning of network equipment associated with ASP Level 1 contestable works. Includes equipment checks, tests and activities associated with setting or resetting network protection systems and the updating of engineering systems.</p>	<p>Alternative control</p>
<p><b>Access permits, oversight and facilitation</b></p>	<p>Activities include:</p> <ul style="list-style-type: none"> <li>• A distributor issuing access permits or clearances to work to a person authorised to work on or near distribution systems including high and low voltage.</li> <li>• A distributor issuing confined space entry permits and associated safe entry equipment to a person authorised to enter a confined space.</li> <li>• A distributor providing access to switch rooms, substations and the like to a non-local network service provider party who is accompanied and supervised by a distributor's staff member. May also include a distributor providing safe entry equipment (fall-arrest) to enter difficult access areas.</li> <li>• Specialist services (which may involve design related activities and oversight/inspections of works) where the design or construction is non-standard, technically complex or environmentally sensitive and any enquiries related to distributor assets.</li> <li>• Facilitation of generator connection and operation of the network.</li> <li>• Facilitation of activities within clearances of distributor's assets, including physical and electrical isolation of assets.</li> </ul>	<p>Alternative control</p>

Service grouping	Further description	Proposed classification 2024–29
<b>Sale of approved materials or equipment</b>	Includes the sale of approved materials/equipment to third parties for connection assets that are gifted back to the DNSP to become part of the shared distribution network.	Alternative control
<b>Notices of arrangement and completion notices</b>	<p>Examples include:</p> <ul style="list-style-type: none"> <li>• Work of an administrative nature where a local council requires evidence in writing from the distributor that all necessary arrangements have been made to supply electricity to a development. This includes: receiving and checking subdivision plans, copying subdivision plans, checking and recording easement details, assessing supply availability, liaising with developers if errors or changes are required and preparing notifications of arrangement.</li> <li>• Provision of a completion notice (other than a notice of arrangement). This applies where the real estate developer requests the distributor to provide documentation confirming progress of work. Usually associated with discharging contractual arrangements (e.g. progress payments) to meet contractual undertakings.</li> </ul>	Alternative control
<b>Network related property services</b>	<p>Activities include:</p> <ul style="list-style-type: none"> <li>• Network related property services such as property tenure services relating to providing advice on, or obtaining: deeds of agreement, deeds of indemnity, leases, easements or other property tenure in relation to property rights associated with connection or relocation.</li> <li>• Conveyancing inquiry services relating to the provision of property conveyancing information at the request of a customer.</li> </ul>	Alternative control
<b>Network safety services</b>	<p>Examples include:</p> <ul style="list-style-type: none"> <li>• Provision of traffic control services and safety observer services by the distributor or third party where required.</li> <li>• Fitting of tiger tails and aerial markers.</li> <li>• Third party request for de-energising wires for safe approach.</li> <li>• High load escorts.</li> <li>• Work undertaken to determine the cause of a customer fault where there may be a safety impact on the network or related component.*<sup>4</sup></li> </ul>	Alternative control

4 An ACS charge is not applicable where it is determined the customer outage was caused by a fault on the network.

Service grouping	Further description	Proposed classification 2024–29
<p><b>Rectification works to maintain network safety*</b></p>	<p>Activities include identified by the distributor and work involved in managing and resolving pre-summer bush fire inspection customer vegetation defects or aerial mains where the customer has failed to do so. <i>Includes managing payment arrangements for vulnerable customers unable to carryout rectification works themselves not limited to pre-summer bush fire inspections.</i></p>	<p>Alternative control</p>
<p><b>Planned interruption – customer requested</b></p>	<p>Examples include:</p> <ul style="list-style-type: none"> <li>• Where the customer requests to move a planned interruption and agrees to fund the additional cost of performing this distribution service outside of normal business hours.</li> <li>• Customer initiated network outage (e.g. to allow customer and/or contractor to perform maintenance on the customer's assets, work close or for safe approach which impacts other networks users).</li> </ul>	<p>Alternative control</p>
<p><b>Attendance at customers' premises to perform a statutory right where access is prevented</b></p>	<p>A follow up attendance at a customer's premises to perform a statutory right where access was prevented or declined by the customer on the initial visit. This includes the costs of arranging, and the provision of, a security escort or police escort (where the cost is passed through to the distributor).</p>	<p>Alternative control</p>
<p><b>Inspection and auditing services</b></p>	<p>Activities include:</p> <ul style="list-style-type: none"> <li>• Inspection and reinspection by a distributor, of gifted assets or assets that have been installed or relocated by a third party.</li> <li>• Investigation, review and implementation of remedial actions that may lead to corrective and disciplinary action of a third party service provider due to unsafe practices or substandard workmanship.</li> <li>• Private inspection of privately owned low voltage or high voltage network infrastructure (i.e. privately owned distribution infrastructure before the meter).*</li> <li>• Auditing of a third party service provider's work practices in the field.</li> <li>• Re-test at a customer's installation, where the installation fails the initial test and cannot be connected.</li> </ul>	<p>Alternative control</p>

Service grouping	Further description	Proposed classification 2024–29
<b>Provision of training to third parties for network related access</b>	Training services provided to third parties that result in a set of learning outcomes that are required to obtain a distribution network access authorisation specific to a distributor's network. Such learning outcomes may include those necessary to demonstrate competency in the distributor's electrical safety rules, to hold an access authority on the distributor's network and to carry out switching on the distributor's network. Examples of training might include high voltage training, protection training or working near power lines training.	Alternative control
<b>Authorisation of and approval of third party service providers' design, work and materials</b>	<p>Activities include:</p> <ul style="list-style-type: none"> <li>• Authorisation or re-authorisation of individual employees and sub-contractors of third party service providers and additional authorisations at request of the third party service providers (excludes training services).</li> <li>• Acceptance of third party designs and works.</li> <li>• Assessing an application from a third party to consider approval of alternative material and equipment items that are not specified in the distributor's approved materials list.</li> </ul>	Alternative control
<b>Security lights</b>	<p>Provision, installation, operation, and maintenance of equipment mounted on distribution equipment used for security services, e.g. nightwatchman lights.</p> <p><b>Note:</b> excludes connection services.</p>	Alternative control
<b>Customer initiated network asset relocations/re-arrangements</b>	Relocation of assets that form part of the distribution network in circumstances where the relocation was initiated by a third party (including a customer). <sup>5</sup>	Alternative control
<b>Customer requested provision of electricity network data</b>	Data requests by customers or third parties including requests for the provision of electricity network data or consumption data outside of legislative obligations.	Alternative control
<b>Fault response</b>	Attendance at a customer's premises to restore supply or investigate power quality issues where it is determined that the fault was not retailed to the distributor's equipment or infrastructure (this excludes circumstances where the fault relates to the network).	Alternative control
<b>Third party funded network alterations or other improvements</b>	<p>Includes but is not limited to alterations or other improvements to the shared distribution network to enable third party infrastructure (e.g. NBN Co telecommunications assets) to be installed on the shared distribution network.</p> <p>This does not relate to upstream distribution network augmentation.</p>	Alternative control

<sup>5</sup> We note that DPIE is reviewing the Accredited Service Provider (ASP) Scheme, which could impact NSW network businesses' service classifications.

Service grouping	Further description	Proposed classification 2024–29
<b>Metering services – activities relating to the measurement of electricity supplied to and from customers through the distribution system (excluding network meters)</b>		
<b>Type 1 to 4 metering services</b>	Includes but is not limited to type 1 to 4 metering installation <sup>6</sup> and supporting services are competitively available.	Not classified
<b>Types 5 and 6 meter maintenance, reading and data services (legacy meters)</b>	<p>Activities include:</p> <ul style="list-style-type: none"> <li>• Recovery of the capital cost of type 5 and 6 metering equipment installed prior to 1 December 2017.*</li> <li>• Meter maintenance covers works to inspect, test and maintain metering installations.</li> <li>• Meter reading refers to quarterly or other regular reading of metering installations including field visits and remotely read meters.</li> <li>• Metering data services includes for example: services that involve the collection, processing, storage and delivery of metering data, the provision of metering data in accordance with regulatory obligations, remote or self-reading at difficult to access sites, and the management of relevant NMI Standing Data in accordance with the NER.</li> </ul>	Alternative control
<b>Auxiliary metering services (Type 5 to 7 metering installations)</b>	<p>Activities include:</p> <ul style="list-style-type: none"> <li>• Off-cycle meter reads for type 5 and 6 meters.</li> <li>• Requests to test, inspect and investigate, or alter an existing type 5 or 6 metering installation.</li> <li>• Testing and maintenance of instrument transformers for type 5 and 6 metering purposes.</li> <li>• Type 5 to 7 non-standard metering services.</li> <li>• Works to re-seal a type 5 or 6 meter due to customer or third party action (e.g. by having electrical work done on site).</li> <li>• Change distributor load control relay channel on request that is not a part of the initial load control installation, nor part of standard asset maintenance or replacement.</li> </ul>	Alternative control
<b>Meter recovery and disposal – type 5 and 6 (legacy meters)</b>	<p>Activities include the removal and disposal of a type 5 or 6 metering installation:</p> <ul style="list-style-type: none"> <li>• At the request of the customer or their agent, where an existing type 5 or 6 metering installation remains installed at the premises and a replacement meter is not required.</li> <li>• At the request of the customer or their agent, where a permanent disconnection has been requested where it has not been removed and disposed of by the incoming metering provider.</li> </ul>	Alternative control

<sup>6</sup> Includes instrument transformers, as per the definition of a 'metering installation' in Chapter 10 of the NER.

Service grouping	Further description	Proposed classification 2024–29
<b>Type 7 metering services</b>	Administration and management of type 7 metering installations in accordance with the NER and jurisdictional requirements. Includes the processing and delivery of calculated metering data for unmetered loads, and the population and maintenance of load tables, inventory tables and on/off tables.	Standard control
<b>Emergency maintenance of failed metering equipment not owned by the distributor (contestable meters)*</b>	The distributor is called out by the customer or their agent (e.g. retailer, metering coordinator or metering provider) due to a power outage where an external metering provider's metering equipment has failed or an outage has been caused by the metering provider and the distributor has had to restore power to the customer's premises. This may result in an unmetered supply arrangement at this site. This fee will also be levied where a metering provider has requested the distributor to check a potentially faulty network connection and when tested by the distributor, no fault is found.	Alternative control
<b>Distributor arranged outage for purposes of replacing meter*</b>	Means a retailer or metering coordinator's request to provide notification to affected customers and facilitate the disconnection/reconnection of customer metering installations where a retailer planned interruption cannot be conducted.	Alternative control
<b>Connection services – services relating to the electrical or physical connection of a customer to the network</b>		
<b>Basic connection services</b>	Means a connection service related to a connection (or a proposed connection) between a distribution system and a retail customer's premises (excluding a non-registered embedded generator's premises) in the following circumstances: (a) either: (1) the retail customer is typical of a significant class of retail customers who have sought, or are likely to seek, the service; or (2) the retail customer is, or proposes to become, a micro embedded generator; and (b) the provision of the service involves minimal or no augmentation of the distribution network; and (c) a model standing offer has been approved by the AER for providing that service as a basic connection service.	<b>Premise connections:</b> Unregulated <b>Extension and augmentations:</b> N/A

Service grouping	Further description	Proposed classification 2024–29
<p><b>Non-basic standard connection services</b></p>	<p>Means a connection service (other than a basic connection service) for a particular class (or sub-class) of connection applicant and for which a model standing offer has been approved by the AER.</p>	<p><b>Premise connections:</b> Unregulated</p> <p><b>Extension and augmentations:</b> Unregulated (where undertaken by customer); or SCS + customer contribution (where undertaken or funded by DNSP)</p>
<p><b>Non-basic negotiated connection</b></p>	<p>Means a connection service (other than a basic connection service) for which a DNSP provides a connection offer for a negotiated connection contract.</p>	<p><b>Premise connections:</b> Unregulated</p> <p><b>Extension and augmentations:</b> Unregulated (where undertaken by customer); or SCS + customer contribution (where undertaken or funded by DNSP)</p>

Service grouping	Further description	Proposed classification 2024–29
<p><b>Connection management services</b></p>	<p>Works initiated by a customer or retailer which are specific to the connection point. This includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>• De-energisation.</li> <li>• Re-energisation.</li> <li>• Temporary connections (of a size less than the shared network augmentation threshold) as a basic connection service e.g. builder's supply, fetes, etc.</li> <li>• Remove or reposition connection.</li> <li>• Overhead service line replacement – customer requests the existing overhead service to be replaced (e.g. as a result of a point of attachment relocation). No material change to load.</li> <li>• Protection and power quality assessment.</li> <li>• Supply enhancement (e.g. upgrade from single phase to three phase).</li> <li>• Customer requested change requiring primary and secondary plant studies for safe operation of the network (e.g. change protection settings).</li> <li>• Upgrade from overhead to underground service.</li> <li>• Rectification of illegal connections or damage to overhead or underground service cables.</li> <li>• Calculation of a site specific distribution loss factor on request in respect of a generating unit up to 10 MW or a connection point for an end-user with actual or forecast load up to 40 GWh per annum capacity, as per clause 3.6.3(b1) of the NER.</li> <li>• Power factor correction.</li> </ul>	<p>Alternative control</p>
<p><b>Enhanced connection services</b></p>	<p>Other or enhanced connection services provided at the request of a customer or third party that include those that are:</p> <ul style="list-style-type: none"> <li>• Provided with higher quality of reliability standards, or lower quality of reliability standards (where permissible) than required by the NER or any other applicable regulatory instruments.</li> <li>• In excess of levels of service or plant ratings required to be provided by the distributor.</li> <li>• For large embedded generators (30 kW 3 phase or above and 5 kW 1 phase or above).</li> </ul>	<p><b>Premise connections:</b> Unregulated</p> <p><b>Extension and augmentations:</b> Unregulated (where undertaken by customer); or SCS + customer contribution (where undertaken or funded by DNSP)</p>



Service grouping	Further description	Proposed classification 2024-29
Public lighting services – lighting services provided in connection with a distribution network		
<b>Public lighting</b>	Includes the provision, construction and maintenance of public lighting and emerging public lighting technology.	Alternative control
Unregulated distribution services		
<b>Distribution asset rental*</b>	Includes rental of distribution assets to third parties (e.g. office space rental, pole and duct rental for hanging telecommunication wires etc).	Not classified
<b>Platform asset usage</b>	Includes the use by third parties of spare capacity in platform assets (e.g. community battery storage).	Not classified
<b>Contestable metering support roles*</b>	Includes metering coordinator (except where the distributor is the initial metering coordinator), metering data provider and metering provider for meters installed or replaced after 1 December 2017.	Not classified
<b>Provision of training to third parties for non-network related access*</b>	Includes training programs provided to third parties which are not ASPs or contractors.	Not classified
<b>Type 5 and 6 meter data management to other electricity distributors*</b>	Includes the provision of type 5 and 6 meter data management to other electricity distributors.	Not classified

# Appendix B: Joint Classification Paper: Refer to separate PDF.

# **Appendix C: High level summary of stakeholder submissions to the Joint Consultation Paper.**

Stakeholder	Submission high level summary	How we are responding
<p><b>AGL</b></p>	<ul style="list-style-type: none"> <li>• “AGL supports the AER’s proposed prohibition on distribution networks from providing contestable services with a battery (whether the service consists of the supply excess capacity to third parties, or the provision of other contestable services themselves with the battery).”</li> <li>• “Further reform is required to ensure that the AER’s network expenditure assessment framework supports the policy direction articulated by the ESB in its Post-2025 Market Design, towards encouraging and enabling consumers to be rewarded for their flexible demand and generation.”</li> </ul>	<ul style="list-style-type: none"> <li>• We welcome AGL’s submission and look forward to continuing to engage with retailers – some of whom support our position on community batteries.<sup>1</sup> In responding to AGL’s submission, we have focused on the customer benefits that can be unlocked from our proposed position. This is by providing greater utilisation of new assets (e.g. community batteries) that have spare capacity from time-to-time. It will also allow customers to pay less since only a proportion of the full cost of an asset would be rolled into the RAB e.g. 80% RAB, 20% unregulated.</li> <li>• We have put forward a new service group for ‘system support services’ which we are proposing should be classified as a standard control service. This new service group includes activities that enable customers to be rewarded for their flexible demand and generation through, for example, dynamic network operating envelopes and direct load or generation shedding. Our proposal will also facilitate local market support arrangements for communities.</li> </ul>
<p><b>Electric Vehicle Council (EVC)</b></p>	<ul style="list-style-type: none"> <li>• “The EVC would agree that in the long run, it is unlikely to make sense for the DNSPs to deploy electric vehicles (EV) charging equipment for public use. This is presently being done across the country by non-DNSP players in an increasingly competitive marketplace, supported by multiple federal and state government grant programs. Were DNSPs to be permitted to deploy public EV charging equipment as part of their respective RABs, this would be likely to disrupt the business models of the organisations successfully deploying EV charging equipment today. There is no need or benefit in extending the natural monopoly of the DNSP to include EV charging equipment. With respect to the nature of the DNSP role in EV charging, however, upstream of the EV charging equipment that connects to the vehicle there will need to be DNSP-owned assets in virtually every case. The only exceptions will be standalone systems, which will often be cost prohibitive to deploy, and which will be exceptions to the general rule. This makes the role of the DNSP not just facilitatory, but crucial to the successful transition of the national road vehicle fleet to electric.”</li> </ul>	<ul style="list-style-type: none"> <li>• We are not proposing to amend the baseline list of services in the AER’s Service Classification Guideline to accommodate EV charging infrastructure. In our view, the facilitatory role that we expect to play in the rollout of EV charging equipment is already sufficiently captured in the baseline, as part of the definition for common distribution services. We will continue to engage with the EVC and take steps to ensuring that Ausgrid facilitates an efficient rollout of EV charging infrastructure.</li> </ul>

<sup>1</sup> Simply Energy, Electricity distribution ring-fencing draft guideline submission, 8 July 2021.

Stakeholder	Submission high level summary	How we are responding
<p><b>Public Interest Advocacy Centre (PIAC)</b></p>	<ul style="list-style-type: none"> <li>• <b>System support services:</b> “PIAC considers [system support services] will likely be a mix of input and services, for example, distribution system operator functions such as dynamic operation of the network and visibility are unlikely to be able to be provided to a customer individually and are therefore inputs, whereas dynamic connection agreements and associated export services are more likely to be services.”</li> <li>• <b>Standalone Power Systems (SAPS):</b> “The potential harm arising from DNSPs providing the generation component of a SAPS is trivial compared to the potential harm (to both the quality of supply received by the customer to be transitioned to a SAPS and network costs for all customers) from not being able to efficiently transition customers to SAPS.”</li> <li>• <b>Electric vehicles:</b> “Distributors should seek to encourage the efficient take-up of EVs while mitigating costs of EVs for consumers who do not benefit from them. Distributors should seek to develop specific EV charging station tariff that is cost-reflective and affordable for operators and customers while not forcing other customers to pay for services they do not benefit from.”</li> </ul>	<ul style="list-style-type: none"> <li>• We have put forward a new service group called “system support services” which is currently not captured in our existing service classification table or in the AER’s baseline list of services. This new service group includes dynamic connection agreements while we have also include a new “customer export” services group in line with the AEMC’s recent rule change.</li> <li>• We acknowledge that SAPS are multifaceted. DPIE will soon undertake a consultation on SAPS service provision in NSW and we expect that process will ultimately determine the role of DNSPs in SAPS.</li> <li>• We look forward to continued engagement with PIAC on the efficient rollout of EV charging stations, as well as tariffs that are cost reflective and affordable for operators and the general customer base.</li> </ul>
<p><b>Southern Sydney Regional Organisation of Councils (SSROC)</b></p>	<ul style="list-style-type: none"> <li>• “Re-framing the network as a platform for the provision of a range of service is fundamentally a move in the right direction. DNSPs are right to examine each of the services that can potentially be delivered using that platform, and where appropriate, those services should be contestable.”</li> <li>• “We note that the current regulatory regime was conceived, street lighting was effectively a commodity product. But this situation has changed markedly with lighting having become much more like a fast-moving, end-use consumer appliances, and our view is that the regulatory approach has become a poor fit for this service.”</li> </ul>	<ul style="list-style-type: none"> <li>• We have put forward a new service group for “system support services” which are proposing should be classified as a standard control service. This new service group recognises that our grid is transitioning to a platform and will facilitate that evolution in the 2024-29 period.</li> <li>• We thank SSROC for making its submission and articulating its concerns about the current regulatory framework applied to public lighting. At this stage, our position is to maintain the existing service classification in our 2024-29 regulatory period while continuing to engage with SSROC, other council representatives, and councils, about service and technology expectations. We would like to explore the possibility of the regulatory framework being more flexible and able to respond to changes in markets and technology within the regulatory period.</li> </ul>



## Contact us

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NSW/ACT/TAS/NT ELECTRICITY DISTRIBUTORS

# CONSULTATION PAPER



PAPER ONE: SERVICE CLASSIFICATION



# INTRODUCTION

Ausgrid, Endeavour Energy, Essential Energy, EvoEnergy, TasNetworks and Northern Territory (NT) PowerWater Corporation are pleased to provide you with the first of potentially several joint consultation papers.

This joint engagement follows feedback about the value of collaboration in the development of aspects of regulatory proposal that affect all networks. The focus of this consultation paper is 'emerging energy services'. To help inform our own views, we are seeking feedback from stakeholders on a key question:

**What role, if any, should electricity distributors play in providing the emerging energy services listed below.**



Platform services



Standalone power systems



Electric vehicle charging infrastructure



Leasing battery capacity



Smart public lighting

We are asking the above question in the lead up to the first official step in the 2024-29 regulatory determinations process. This is known as the Framework and Approach (F&A) paper, which commences in October 2021.

The F&A paper, among other things, sets out the Australian Energy Regulator's (AER) initial position on service classification. This is an important milestone in the 2024-29 determination process because it involves classifying which services are a 'distribution service' and determining their economic regulatory treatment. Under the AER's Ring-fencing Guideline, electricity distributors (outside of the NT) can only provide 'distribution services'.

The feedback we receive will be incorporated into a letter we are each required to submit to the AER in October 2021, when the F&A process begins. In doing so, we are seeking to incorporate customer and stakeholder feedback at the earliest opportunity when engaging with the AER.

## Why we are jointly consulting

Ausgrid, Endeavour Energy, Essential Energy, EvoEnergy, TasNetworks and NT PowerWater Corporation are all on the same AER regulatory cycle, with proposals for our upcoming 2024-29 regulatory control period due on 31 January 2023. In recognition of this, we have worked together to create this document to jointly engage with our stakeholders on a key regulatory issue known as the 'classification of distribution services'. While we may not have all the same stakeholders, joint consultation will provide us with an opportunity to hear a broader spectrum of views all at once.

Our ambition is to collaborate where we see opportunities that can benefit stakeholders, and ultimately our customers. Following the release of this consultation paper, we expect to run more joint engagements, starting with a public forum on 15 September 2021, to discuss the issues raised in this paper. We welcome feedback on the questions posed in this consultation paper and any suggestions on how we should approach joint engagement in the future.



**F&A process initiated**  
Oct 2021



**F&A paper published**  
Jul 2022



**Proposals submitted**  
Jan 2023



**Draft decision**  
Sep 2023



**Revised proposal**  
Dec 2023



**Final decision**  
Apr 2024



## How to participate

There are two opportunities to participate in this engagement: provide a written submission and/or attending an online public forum on 15 September 2021 hosted by the NSW/ACT/TAS/NT networks.

Written submission are open until September 2021. They can be sent via email to [shannon.moffitt@ausgrid.com.au](mailto:shannon.moffitt@ausgrid.com.au).

If you have any questions about this paper, or the joint consultation process, please contact your electricity distributor:

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### New South Wales



**ACT**



**Tasmania**



**Northern Territory**



**Note:**

The purpose of this joint consultation paper is to elicit stakeholder views on certain regulatory issues relating to provision of emerging energy services, including the appropriate classification and treatment of these services for regulatory purposes. These regulatory issues are likely to be common across the upcoming revenue determination processes for each electricity distributor.

The businesses that have contributed to this document are each aware of their obligations under the *Competition and Consumer Act 2010 (Cth)* and take these obligations very seriously. The sole purpose of the joint consultation is to inform the businesses' submissions to the AER regarding appropriate regulatory treatment of emerging energy services. The businesses will not exchange any information about customers, pricing or service offerings which may be competitively sensitive, and any commercial decisions about these matters will be made by each business independently.

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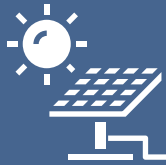
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# PART ONE: REGULATORY FRAMEWORK

# 1.1 OVERVIEW

Service classification determines the type of economic regulation, if any, that the AER applies. It has significant implications as, in conjunction with the AER's Ring-Fencing Guideline,<sup>1</sup> electricity distributors (outside the NT) can only provide services that the AER recognises as 'distribution services'.

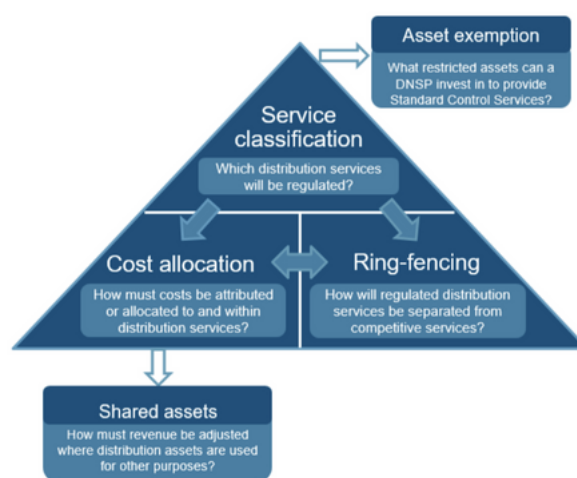
The upcoming F&A service classification process for our 2024-29 regulatory period is critical in the context of broader energy market reform and technological change. In the past the range of distribution services was stable and quite limited, whereas today the suite of services that networks offer is evolving at a rapid pace due to an unprecedented transformation of the electricity supply chain. How the regulatory framework, through the AER's service classification process, responds is an important consideration that has implications for the services that customers receive. This is outlined in more detail in section 1.2 below.

## 1.1.1 Inter-relationships with other regulatory arrangements

There are inter-relationships between service classification and other parts of the regulatory framework. Some of these interrelationships are illustrated in the figure to the side.

Notably, the classification of a particular service drives 'ring-fencing' outcomes.

Ring-fencing separates services that are deemed capable of delivery via a competitive market, from monopoly distribution services which are regulated. Electricity distributors can provide services that are distribution services, whereas services that are not a distribution service can only be offered by a legally separate affiliate (different arrangements exist in the NT).



Source: AER analysis<sup>1</sup>

## The AER's approach<sup>1</sup>

### Step 1: Is it a distribution service?

The AER must first be satisfied that a service is a 'distribution service'. The NER defines this term (see section 1.2 below for more information).

### Step 2: Should it be a direct control or negotiated distribution service?

Once a service is classified as a distribution service, the AER will consider whether economic regulation of the service is necessary. It will make this decision having regard to a range of factors set out in the NER. A principle consideration for the AER is whether the customer of the distribution service has enough bargaining power to negotiate the terms and price of the service independently with the network. As there are generally no other service providers that can provide a distribution service, this is rarely the case meaning the AER generally steps in to regulate the service, i.e. directly control it.

### Step 3: Standard control or alternative control service?

Finally, having determined that a service should be classified as direct control, the next step is to further classify it as either a standard control service or alternative control service. See section 1.2 below for more information.

## 1.2 KEY CONSIDERATIONS

We believe that our customers and other stakeholders should have a significant say on the services we offer as a regulated electricity distributor. We in particular want to hear from stakeholders about their expectations regarding the services that we should offer over the coming years.

In providing this feedback, it may be helpful to consider that Ausgrid, Endeavour Energy, Essential Energy, Evoenergy, TasNetworks<sup>1</sup> can generally only provide services that the AER recognises as a 'distribution service' (different arrangements apply in the NT). The term 'distribution service' is defined in the NER as:

*a service that is provided by means of, or in connection with, a distribution system.*

### 1.2.1 What is 'by means of' or 'in connection with' a distribution system

A distribution system relates to the assets and equipment owned and operated by network service providers which, together with connections to other networks and users, convey electricity to customers. The Australian Energy Market Commission (AEMC) further notes:<sup>2</sup>

- Services provided "by means of" a distribution system are services provided **wholly or substantially** by, or through, the network and connection assets that together form a distribution system.
- Services that are provided "in connection with" a distribution system are those services that have a **clear functional nexus with a distribution system**, but which are **not** necessarily provided through equipment or facilities that are physically connected with a distribution system.

#### Example of a distribution service

Street lighting, including standalone street lights, are recognised to be "by means of" or "in connection with" the distribution system.<sup>3</sup>



#### Example of a non-distribution service

Assets 'behind the meter' such as rooftop solar and small-scale batteries located on a customer's premises.



### 1.2.2 Is the item in question a service or an input into a service?

This is an important distinction because the AER classifies the 'service' in question rather than the 'input'. The AER's service classification guideline provides guidance on this distinction:

- **Service:** something usually offered to a customer on a stand-alone basis for a price.
- **Input:** the underlying capital or operating inputs a network utilises to provide a service.

#### Example of the input / service distinction

Tree trimming near network assets is not offered directly to customers for a price. Instead it is an 'input' into the safe and reliable supply of electricity - which is recognised as a (distribution) 'service'.



Note 1: Different arrangements apply in the Northern Territory

Note 2: AEMC, Final Determination: National Electricity Amendment (Alternatives to grid-supplied network services) Rule 2017, p. 28

Note 3: In some networks, these distribution services are classified by the AER as regulated 'direct control' where in other networks they are not

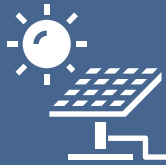
### 1.2.3 Classification as standard or alternative control services

Once the AER determines that a distribution service should be classified as direct control, it then further classifies it as either a standard control service or alternative control service.

- **Standard control services** are the basic network services relied on by all customers. The costs of these services are bundled together to form the AER allowed amount of revenue that networks can earn from the provision of standard control services. This revenue is then recovered from retailers, and through them, customers.
- **Alternative control services** are usually provided to individual customers on an ad hoc basis, typically on request, such as a customer requested electricity pole relocation. The cost is then recovered directly from the customer who is provided with the service, using a fee/charge which is regulated by the AER.

The NER requires the AER to take the following considerations into account when classifying a service as either 'standard' or 'alternative control':

Factor	What this means
The potential for development of competition in the relevant market and how the classification might influence that potential.	Where a service can (or will likely be able to) be provided by the competitive market, then it is more likely to be classified as an alternative control service. Where a service is unlikely to be able to be provided by anyone other than an electricity distributor, then it is likely to be classified as a standard control service.
The possible effects of the classification on administrative costs of the AER, the electricity distributor and users or potential users.	Whilst electricity distributors could theoretically set individual prices for every customer connected to the network and thereby price every individual service delivered to customers, in reality this would be an extremely cumbersome and time-consuming task. Instead the costs for standard control services can be grouped together and shared between broad groups of customers. Prices for alternative control services can be slightly more bespoke to consider the true cost of delivery, such as distance travelled or hours of work required.
The desirability of a consistent regulatory approach to similar services (both within and beyond the relevant jurisdiction).	Historically the AER would generally carry over the classification from the prior period.  Over the last few years, the AER has moved away from this approach to drive consistency between the classification of services across electricity distributors. There are still some nuances in classifications, though this is now mainly due to jurisdictional differences
The extent the costs of providing the relevant service are directly attributable to the person to whom the service is provided.	In circumstances where a service is provided to a small number of identifiable customers on a discretionary or infrequent basis, and costs can be directly attributed to those customers, it may be more appropriate to classify the service as an alternative control service than as a standard control service.



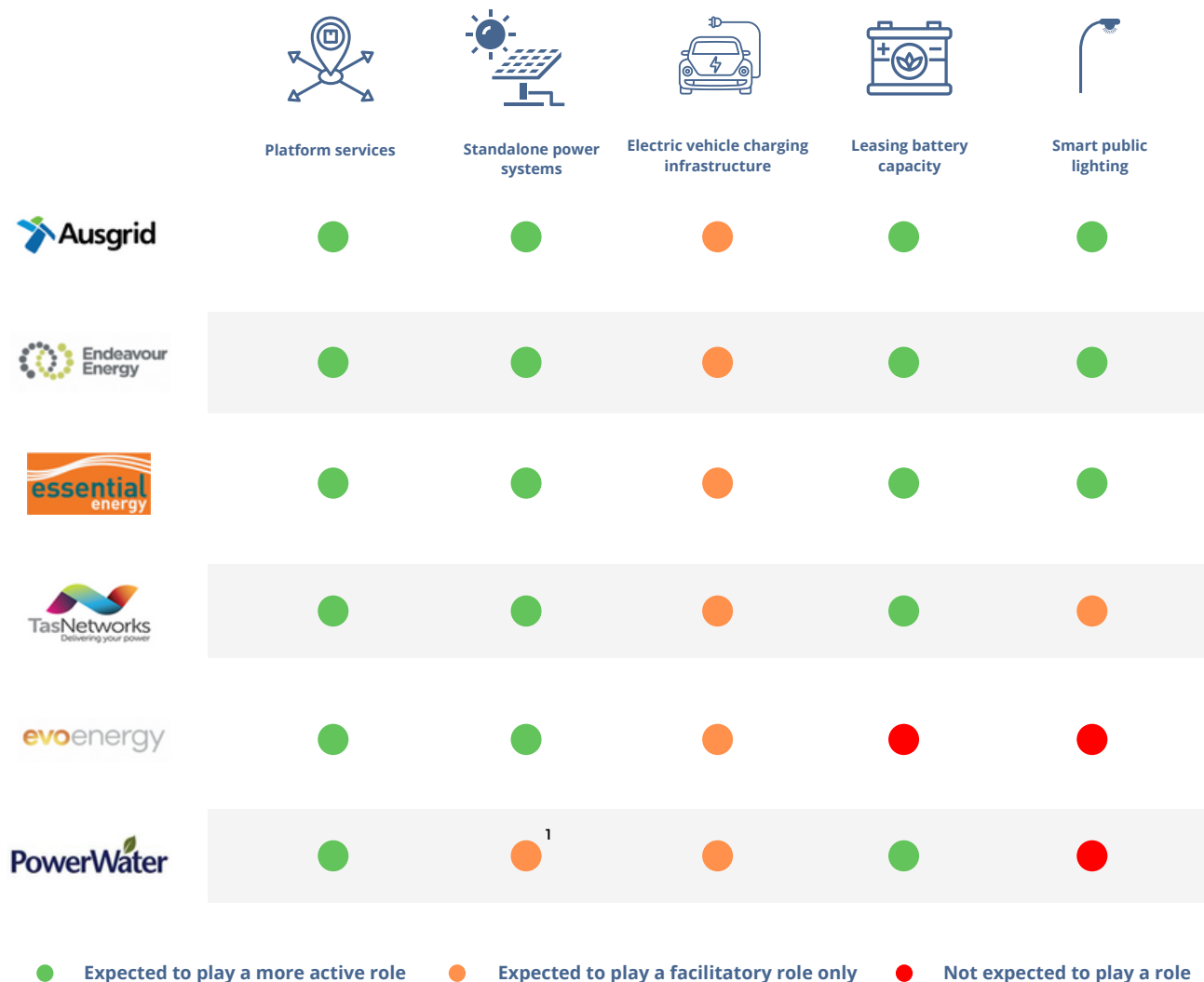
## PART TWO: EMERGING SERVICES

## 2.1 INTRODUCTION

Part 1 of this consultation paper sought to give stakeholders the necessary background on the regulatory framework for service classification. In part 2, we aim to lay the platform for engagement on specific 'emerging services', some of which are being made possible by new technologies, and pose a set of targeted questions for feedback.

Whilst we are engaging on a joint basis it is important to note that the degree to which each electricity distributor will be impacted by emerging technologies and will seek to provide new services varies. Some of these differences are summarised below. Evoenergy, for example, does not expect to provide a leasing battery capacity service and is not responsible for public lighting in the ACT. Different arrangements also apply in the NT, including a 'NT version' of the NER which applies to PowerWater Corporation. This affects what services are regulated in the NT.

### Expected role in providing emerging services in 2024-29 period



Note 1: PowerWater Corporation is responsible for a number of standalone power systems that are not subject to regulation by the AER.



## 2.2 PLATFORM SERVICES

Electricity networks are increasingly becoming a platform for distributed energy resources (DER), with this evolution having the potential to introduce a suite of new platform services in the 2024-29 regulatory period.

Platform technology introduces new ways for electricity distributors to manage network capacity. Traditionally this could only be done through 'poles and wire' solutions, whereas now it can be achieved by leveraging existing grid infrastructure as a 'platform' for DER. For electricity distributors this means that adding more network **inputs** (poles and wires) is not necessarily the only, or most efficient, option. Instead platform enabling technology can be used as an **input or service** for managing capacity through smarter utilisation of existing assets. The difference between 'inputs' and 'services' is outlined in section 1.2 above.

### Platform enabling technology

Through smarter utilisation of existing assets, platform enabling technologies can improve the management of import and export capacity and potentially avoid traditional 'poles and wire' solutions.



Expanding on existing platform services has the potential to lower costs and improve service outcomes for customers. The new services may facilitate peer-to-peer trading, provide network support or allow electricity distributors to offer system services to the market operator. Platform services are also likely to incorporate a recently made AEMC rule change recognising customer exports as a 'distribution service'.

### 2.2.1 Existing distribution system operator (DSO) activities are expanding

Becoming a platform for DER is closely related to the expansion of distribution system operator (DSO) functions.

Electricity distributors have always been the DSO responsible for managing and operating the distribution systems. However, this task is becoming increasingly important and more complex as more DER connects to the grid. Specifically, we envisage DSO functions to expand in the following ways:



#### Dynamic operation

- Continuing to safely and reliably operate and maintain a more dynamic distribution system.



#### Low voltage visibility

- Obtaining appropriate visibility of the low voltage network to facilitate DER integration and better network control, through investment in network assets and/or the purchase of customer-side data.



#### Expanded digital capabilities

- Undertaking spatial forecasting of network constraints.
- Collecting data on network and DER utilisation and constraints and providing it to competitive markets.
- Calculating appropriate pricing signals for the range of devices that can respond to specific locational constraints.



#### Dynamic connection agreements

- Connection agreements that can be tailored to a customer's supply arrangements for different prices. For example, a customer with a sizeable battery system may want firmer access (a higher guarantee that they will be able to use their battery when they want to) whereas a small solar customer may be willing to be curtailed (have their exports reduced by their electricity distributor) during peak times in exchange for lower network charges.

## 2.2.2 System strength services to the market operator

By leveraging platform technologies and expanding their DSO activities, electricity distributors have the ability to promote the stability of the electricity system. One of the key ways in which this can be done is by providing 'system strength services' to the market operator.<sup>1</sup>

Innovation in 'operating envelopes' are expanding DSO functions.

Operating envelopes limit the electricity that a customer can import and export as part of the customer connection or regulatory process. There can be 'static' and 'dynamic' operating envelopes (see breakout boxes to the right). Innovation in this space can provide 'system strength' services through:

- DSO functions evolving from establishing static limits at the time of connection to embracing dynamic export limits through real time operating envelopes
- DSO functions dynamically configuring the network and managing voltage to support a market operator with the regional supply and demand balancing
- DSO functions continuing to enact load (and generation) shedding directions from the Australian Energy Market Operator (AEMO).

In the NT, reforms are already being introduced which place responsibility on PowerWater Corporation to ensure the regulated systems have sufficient system strength capability to ensure voltage stability and sufficient fault current. Responsibilities extend to managing network voltage control and capacity shortfall across the system. These changes are in response to the growing uptake of utility-scale and behind-the-meter solar photovoltaic (PV) and require PowerWater Corporation to consider network augmentation along with the emergence of new technologies capable of providing system strength and voltage support services.

All regions in the national electricity market will need to expand their DSO functions to manage network voltage control and capacity shortfall. Leveraging existing distribution network capabilities means customers and communities across Australia will get the most value from the shared distribution networks that everyone has invested in. According to the AEMC, these services would be provided by electricity distributors; however, they may not fall under the banner of 'standard' or 'alternative control services' and so require consideration in the F&A service classification process.

### Static operating envelopes

Currently the operating envelopes for the import and export of electricity are 'static' and fixed at conservative levels to account for 'worst case' scenarios.

### Dynamic operating envelopes

Agreements that allow import and export limits to vary over time and by location, enabling higher (lower) export levels from customers' solar and battery systems when there is more (less) hosting capacity on the network.

## Stakeholder feedback

The DSO functions expected from electricity distributors are expanding as DER penetration increases and networks face the challenge of how to integrate these assets and technologies in a way that helps customers to maximise their investment, while supporting the transformed energy grid. We are therefore interested in engaging with stakeholders on this topic at an early stage in the 2024-29 regulatory determination process.

**Question 1:** Do you want to engage more with electricity distributors on how their DSO functions are changing?

**Question 2:** Do you think that the developing DSO functions listed in section 2.3.1 should be expressly recognised as a distribution service? This may involve considering whether the functions are an 'input' or a 'service' (see section 1.2 above).

**Question 3:** Besides service classification, are there any other regulatory processes that should be considered in relation to changing DSO functions? This may include, for example, connection policies/rules.

## 2.2.3 Customer export services

Until recently energy flowed in only one direction - from large-scale generators to customers.

With the rapid customer take up of technology like solar panels and battery storage, this has changed. Customers can now generate, store, and export their own energy and networks are supporting two-way flows of electricity.

While all electricity distributors have at least some inherent capacity to accept energy exports from customers, the distribution network was not designed to accommodate two-way flows. Electricity distributors have been responding to these challenges, yet in some locations power quality issues are arising and the capacity of networks to accept large amounts of energy exports is being challenged.

The impact that this can have on customers is prompting them to change their expectations of electricity distributors and their views on what constitutes a 'distribution service'.

### *Regulatory reforms*

Electricity distributors already facilitate the export of electricity via our networks, yet this activity is not currently subject to AER regulation and we have no service obligations.

This has changed with the recent AEMC rule change that allows networks to introduce a customer export service, including a 'basic export' service and a 'additional' export service (subject to customer and stakeholder engagement).

We want to engage with customers and other stakeholders about this development. This includes a discussion of the nature of a regulated export service and any tariff arrangements that will apply. The feedback we receive will directly inform our own views about the AER's service classification in relation to the hosting of DER by networks and the implementation of the AEMC's regulatory reforms.

### *How recognising exports as a service benefits customers*

Most residential and small business customers with solar PV systems currently export electricity into the grid. By recognising this activity in the NER as a distribution service, electricity distributors will be able to more efficiently and fairly respond to emerging challenges.

DER 'traffic jams' are occurring. They happen when many customers export their solar energy at the same time into a grid originally built for one-way energy flows. These traffic jams are becoming more prevalent and can stop solar PV customers realising the full value of their DER investment by curtailing (limiting) their exports. They can also impact non-solar customers, for example, through reduced electricity reliability.

More investment in DSO activities and platforms is required to address these challenges. As this takes place, the recognition of customer exports as a distribution service, together with the appropriate tariff arrangements, will benefit all customers and the electricity market more generally, as outlined below.

Who	Benefits
Solar customers	<ul style="list-style-type: none"> <li>• Will still be able to earn a feed-in tariff for exports to the grid</li> <li>• Opportunity to share in the benefits that their exports offer the grid e.g. being paid for exports into the network during peak load times</li> <li>• Improved equity for late adopters who may otherwise have been unable to export or even connect their DER to the network</li> </ul>
Non-solar customers	<ul style="list-style-type: none"> <li>• More equitable pricing and costs recovery arrangements</li> <li>• Investment undertaken to relieve solar export congestion can be more fairly funded by the customers who benefit from this service</li> </ul>
Electricity market	<ul style="list-style-type: none"> <li>• Facilitate the integration of more DER</li> <li>• Solar generated electricity can help lower the wholesale price of electricity, allowing retailers to pass on savings to all consumers.</li> </ul>

## Efficiency

Pricing export services can send efficient tariff signals to customers about the cost and benefits of exporting DER to the grid



## Fairness

Customers who export energy will pay a 'fair share' for DER enablement upgrades and receive a 'fair share' in the network benefits from their exports.



## Stakeholder feedback

We are interested in hearing from customers and other stakeholders about their different price and service level expectations for exporting energy, as this could influence how export services are recognised in our 2024-29 determinations.

Our initial view is that customers are likely to have different price and service level expectations depending on whether they are importing or exporting electricity:

- **Importing:** an essential 'always on' service which requires a high level of reliability
- **Exporting:** not required to meet essential needs and therefore can be turned 'on and off' in line with customer preferences and economic and technical considerations.

For example, many solar PV customers may prefer having their exports curtailed if there is a surplus of solar PV generation provided it leads to less network investment. Electricity distributors may, in addition, offer different grades of export services. For example:

- **Basic:** an export allowance with no charge up to a maximum threshold
- **Additional:** in exchange for a fee the ability to export more electricity to the grid than under the basic service.

**Question 4:** Do you have a view on electricity distributor's offering a 'basic' export service and a 'additional' export service, depending on network limitations?

**Question 5:** What are your expectations from an electricity distributor providing an export service? Do these expectations change depending on whether a customer is importing or exporting energy?

## 2.3 STANDALONE POWER SYSTEMS (SAPS)

Electricity distributor owned Stand-alone Power Systems (SAPS) are an 'off grid' economic alternative to 'poles and wires'. SAPS generally comprise solar PV, batteries and, sometimes, backup diesel generators. The term SAPS is used to encompass both microgrids, which supply electricity to multiple customers, and individual power systems, which serve only a single customer.

Technological developments and the falling cost of renewable generation and batteries have made SAPS viable solutions for some 'high cost to serve' customers whereas in the past this may not have been the case. These are typically customers at the end of long powerlines, especially in geographically remote, or hard to access, heavily vegetated areas, resulting in higher costs of supply for the network. These costs (such as vegetation management around infrastructure) are currently shared between all electricity customers. SAPS can provide customers with increased reliability, reduce bushfire risk and lower network prices for all customers.



### 2.3.1 Including SAPS services in the regulatory framework

Deploying SAPS, when efficient, is a mechanism for distribution networks to deliver efficiency benefits to all customers.

When the 'poles and wires' in remote parts of the distribution network are removed, and customers are supplied electricity via SAPS, there can be a significant reduction in network costs, which in turn delivers savings to all network and SAPS customers. These savings are driven by reduced operational costs, and the ability to remove poles and wires along long lines, often through difficult terrain, that serve very few customers. In addition, SAPS customers will likely benefit from improved reliability as their remote or rugged locations are typically prone to network outages. SAPS could also be preferable for new connections located in remote areas, avoiding the need to build new 'poles and wires'.

SAPS can also reduce bushfire risk as electricity infrastructure, that could potentially spark and ignite a bushfire, is either no longer energised or is completely removed. SAPS also have the potential to embed resilience in the network, enabling a customer or community to isolate itself and remain energised in an emergency. This is particularly important for keeping telecommunication towers and fire-fighting equipment (water pumps) operational.

As electricity distributor's experience more natural disasters such as bushfires, storm events and floods, SAPS can be utilised in emergency and asset replacement events, allowing electricity distributors to continue to provide power supplies for their customers but without automatically replacing assets on a like-for-like basis.

Electricity distributors require the flexibility to deploy SAPS that are fit-for-purpose and provide services (including pricing) in a way that encourages the efficient use of the SAPS. This will optimise the ability of all customers to realise efficiencies and savings. SAPS customers will benefit from this flexibility if they are engaged, informed and are provided with the opportunity to reduce their electricity costs based on changes they are able to make to their usage. Under SAPS solutions, the AER and various jurisdictional ombudsman schemes would retain their oversight and provide customer protection functions.

Increased flexibility will also promote innovation and increase customer choice of products and services. Under all future SAPS scenarios we are proposing the same (or improved) service that customers would have received if they were still served by 'poles and wires'. A robust framework for the deployment of SAPS can therefore deliver significant benefits while ensuring that SAPS customers experience the same service standards and protections afforded to other customers.

## Stakeholder feedback

The provision of SAPS services are in the process of being integrated within the service classification framework for the NSW, ACT, and Tasmanian electricity distributors. PowerWater Corporation in the Northern Territory is responsible for a number of standalone power systems that are not subject to regulation by the AER.

For the 2024-29 regulatory period, we are seeking feedback on the following questions:

- Question 6:** What practical considerations should be taken into account to ensure electricity distributor led SAPS effectively meet the needs of customers and communities?
- Question 7:** What types of customer engagement should take place to ensure prospective SAPS customers have been provided with sufficient information to understand the implications of moving to off-grid supply via SAPS? Note that the feedback we receive is likely to inform our tariff structure statement (TSS) proposals.
- Question 8:** Do you see a benefit in allowing electricity distributors to be able to offer customers innovative and flexible pricing arrangements / tariffs to maximise the value of SAPS investments for all customers?

## 2.5 ELECTRIC VEHICLE (EV) CHARGING

Electric vehicles (EVs) are an emerging technology across Australia and globally and are key to reducing carbon emissions from the transportation sector.

As the uptake of EVs increases over the coming years, EV charging infrastructure will become a critical service. Electricity distributors will have a central role to play in ensuring EV charging infrastructure is catered for through timely and efficient connection services and cost-reflective price signals.

### 2.5.1 The value proposition for EVs

There are a range of benefits associated with increased EV uptake, including lower running costs, reduced greenhouse gas emissions, reduced air and noise pollution and new economic opportunities.

Unlike the other technologies in this paper, EVs are one of the ways in which customers use a network service rather than a distinct service that networks provide to customers directly. This is similar to the uptake of air-conditioning across Australia during the early 2000s. Whilst electricity distributors did not install and provide air-conditioning units to customers the uptake of this technology had a significant impact on customer's demand for electricity. This required investment from networks to ensure that customers could connect and utilise air-conditioning units. Similarly, electricity distributors will not sell EVs or the energy required to charge them. Instead, we envisage we will have a role to play in ensuring the demand and consumption of electricity associated with EVs is met through the provision of existing or new electricity infrastructure.



### Stakeholder feedback

Electricity distributors currently anticipate being an enabler of EV charging infrastructure through the existing role of providing distribution services. This means no change would be required to the classification of services we may provide. However, networks will still need to respond to changes in the needs of our customers and potentially new types of customer, such as the owners of public EV fast-charging infrastructure, in providing distribution services. Regulatory reform would require electricity distributors to take a more active role in promoting the uptake of EVs through owning, providing or contributing to the cost of EV charging infrastructure.

**Question 9:** Other than facilitating charging infrastructure, is there anything else electricity distributors can or should do as EV take-up rates increase?

**Question 10:** Can the AER's service classification approach contribute to an efficient recovery of network costs associated with EV charging?

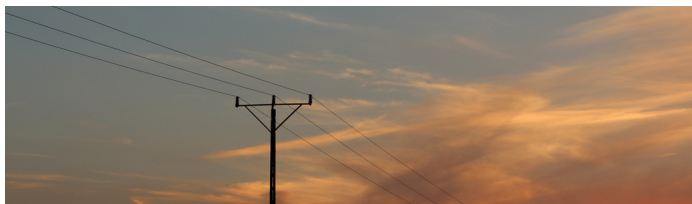
## 2.6 LEASING BATTERY CAPACITY

Grid-scale batteries are an emerging technology that can facilitate more renewables onto the grid, support security of the overall energy system, and put downward pressure on electricity prices by providing energy during peak demand periods.

Electricity distributors can purchase storage services from others or own and operate a grid scale battery themselves. Regardless, what is most important is efficiency. If this is maximised by an electricity distributor owning a grid-scale battery, then the regulatory framework should support this option subject to AER oversight via an appropriately calibrated ring-fencing waiver notification process. This waiver process could include an 'efficiency test'.

### 2.6.1 The 'value stack' for a network owned grid scale battery

From a service perspective electricity distribution networks might invest in grid-scale batteries to deliver network services (the green box in the diagram below). For example, rather than increase the capacity in a part of the network to accommodate greater customer load, the network might install a battery, charge the battery during periods of low demand, and discharge the battery during period of high demand. In this way, the battery is effectively an input into the operation of the distribution network which provides the distribution service. Electricity distributors can own and operate batteries for this purpose. More information about what is an 'input' versus a 'service' is set out in section 1.2.



#### Network

Alternative to network upgrade to relieve a constraint



#### Customer

Local customer energy storage service



#### Market

Dispatch for NEM energy and/or ancillary markets

### 2.6.2 Spare capacity in network batteries can be utilised by third parties

Batteries can support the network during times of peak demand. At other times, there is likely to be moments when a network owned battery is not fully utilised. These periods of lower utilisation provide scope to lease out some of this excess capacity to a third party. That third party might in turn use that capacity to provide other services, for example a community energy service (grey box above) or a market service (blue box above). Importantly, the third party would be a legally separate entity e.g. it could be a smaller retailer seeking to compete with larger retail firms in the provision of a local customer storage service.



We recognise that some stakeholders may have concerns about electricity distributors leasing out battery capacity. This has also been reflected in the AER's draft amendments to its Ring-Fencing Guidelines. We have heard these concerns and our positions are summarised below.

Concern	Response
<p>Networks have significant market power which could be exercised in a way that harms competition</p>	<p>Where a third party owned battery is the most efficient option, networks are required and incentivised to select this option.</p> <p>Where network ownership of a battery is the most efficient option, leasing spare battery capacity still supports competition by giving smaller retailers and other parties access to utility storage.</p>
<p>There are no clear advantages to networks leasing spare community battery capacity, or offering storage services to customers.</p>	<p>Networks are experienced infrastructure providers with widespread staff, available 24/7, to provide maintenance services and respond in a timely manner to faults and emergencies.</p> <p>Community batteries can be safely accommodated within existing network assets and easements.</p>
<p>Where spare capacity is leased, the battery will be larger than the network component of the value stack. Distribution network customers should not pay for 'over-sizing'.</p>	<p>We agree that there must be a robust method for determining the network share of the costs so that customers who do not benefit from the community battery are not subsidising those who do. It is also unlikely that a battery would be required to support the network 24/7, which means there may be seasons or times of the day that spare capacity is available. Being able to lease out this capacity would offset some of the costs of providing the network service.</p>

## Stakeholder feedback

Electricity distributors are currently not allowed to lease spare capacity in a grid-scale battery to third parties without a ring-fencing waiver. This is because the leasing of battery capacity is not currently regarded as a distribution service and is therefore not permitted under the AER's ring-fencing rules. The activity was not contemplated as a service at our last determinations, as the economic case for grid-scale batteries had yet to emerge. This demonstrates how quickly the industry is changing.

**Question 11:** Should the spare capacity of network-owned and operated batteries be offered to consumers and market participants in the 2024-29 regulatory period?

**Question 12:** If you consider that the leasing of battery spare capacity should be treated as a distribution service, should it be classified as a standard or alternative control service? See section 1.4 above for the factors the AER considers when making this determination (noting that these are the factors that drive the AER's decision making).

## 2.7 SMART PUBLIC LIGHTING

Electricity distributors currently provide public lighting services, with the exception of Evoenergy and PowerWater Corporation. This service involves the operation, maintenance, repair and replacement of public lights, the alteration and relocation of existing lights and the provision and construction of new and emerging public lighting technology.

Typically, this service has been classified as a 'distribution service' given the placement of streetlights on power poles or on a stand-alone basis in parallel to network assets. It is then usually classified and regulated as an alternative control service with a cap placed on the maximum prices we can charge. This is because the costs associated with this service are attributable to an identifiable subset of customers, mostly local Councils. Whilst Councils can install private lights it has generally been more efficient for distribution networks to provide this service making use of their existing network infrastructure, technical capabilities, access rights and ability to provide 24/7 operation and maintenance services across an entire network area.

In addition to the AER's price regulation there are also State-based codes and regulations that require electricity distributors to provide public lighting services and specify the service standards a network must meet.

Public lighting services are priced on a component basis with separate tariffs available to cover the capital cost and ongoing maintenance costs associated with each available luminaire type. Where a customer funds the capital cost of lighting assets upfront, a maintenance charge is only applied.



### The value proposition for smart public lighting

Over the last several years old public lighting technology has been replaced via reactive or bulk replacement programs with LED luminaries. LED technology has provided several benefits to customers including reduced energy consumption and CO<sub>2</sub> emissions, superior lighting performance and uniformity and reduced failures and maintenance requirements.

In addition to LED technology, several networks and customers have trialled 'smart' enabled luminaries (via an attached node) combined with Control Management Systems (CMS) that allow for addition remote monitoring and operation including:

- Record of status (on / off status of luminaire)
- Fault triggers (including overcurrent and tilt)
- GPS locational services (GPS self-reporting and monitoring)
- Energy usage / metering (currently unaccredited but testing is ongoing)
- Dimming and trimming of luminaires.

These functions will increase the benefits associated with LED luminaries. It is our understanding that these smart enabled lights (and columns) will form part of smart communities that provide a range of enhanced services.

## Stakeholder feedback

Currently, the provision of emerging public lighting technology forms part of the public lighting service that networks provide. Electricity distributors often engage with customers and the AER to incorporate new luminaire types and technologies as they emerge within a regulatory period. We want to ensure we meet the expectations of customers within the current period but also ensure our service classification for the 2024-29 period reflects these expectations as well.

**Question 13** What role should networks play in the provision of emerging public lighting technology?

**Question 14:** Are electricity distributors and/or the regulatory framework sufficiently flexible and adaptive in supporting emerging public lighting technology?

**Question 14:** How should electricity distributors engage with public lighting customers in order to meet their needs and expectations?