Standardised model for ancillary network services

Final decision

Electricity distribution network service providers

March 2022

AUSTRALIAN ENERGY REGULATOR

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About us

We, the Australian Energy Regulator (AER), work to make all Australian energy consumers better off, now and in the future. We are the independent regulator of energy network service providers (NSPs) in all jurisdictions in Australia except for Western Australia. We set the revenue requirements these NSPs can recover from customers using their networks.

The National Electricity Law and Rules (NEL and NER) and the National Gas Law and Rules (NGL and NGR) provide the regulatory framework which govern the NSPs. Our role is guided by the National Electricity and Gas Objectives (NEO and NGO).

NEO:[1]

> …to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:
>
> (a) price, quality, safety, reliability and security of supply of electricity; and
>
> (b) the reliability, safety and security of the national electricity system.

NGO:[2]

> …to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.

The decisions we make and the actions we take affect a wide range of individuals, businesses and organisations. Effective and meaningful engagement with stakeholders across all our functions is essential to fulfilling our role, and it provides stakeholders with an opportunity to inform and influence what we do. Engaging with those affected by our work helps us make better decisions, provides greater transparency and predictability, and builds trust and confidence in the regulatory regime. This is reflected in our *Stakeholder engagement framework* and in the consultation process we are following.[3]

1 NEL, s. 7.

2 NGL, s. 23.

3 AER, *Revised stakeholder engagement framework*, September 2017.

1 Introduction

In August 2021, we initiated a consultation process to develop a standardised Ancillary Network Services (ANS) model for use in future electricity distribution determinations. The standardised model would replace the distribution network service provider (distributor)-specific ANS models they submit as part of their regulatory proposals.

Historically, the electricity distributors submitted their own models to support their ANS expenditure proposals for our assessment of their regulatory proposals every five years. Through our assessment we determine the prices that a distributor can charge having regard to the regulatory framework set out in the NEL and NER.

The intention of developing a standardised ANS model is to simplify and standardise the presentation of the distributors' ANS expenditure proposals for our assessment and provide greater transparency to stakeholders.

Following consultation with stakeholders, we developed the final standardised ANS model (final model). The model along with guidance material is published on our website for use by distributors.

The standardised models will streamline our assessments and provide greater transparency to stakeholders. The development and implementation of a standardised ANS model follows our commitment in the *AER Strategic Plan 2020–2025* to design our systems to work in ways that deliver efficient regulation of monopoly infrastructure.[4]

1.1 What are Ancillary Network Services?

ANS are non-routine services provided to individual customers as requested. While they are related, they do not form part of the common bundled distribution service because not all customers request or require these services. There is a wide range of ANS, but common examples customers can request include temporary disconnections and reconnections, meter tests and safety services such as tiger tails.

ANS are either charged on a fee or quotation basis, depending on the nature of the service.

As with other alternative control services, the regulatory framework for ANS is less prescriptive than for standard control services.[5]

We generally determine fee-based service price caps as part of our determination, based on the cost inputs and the average time taken to perform each service. These services tend to be homogenous in nature and scope and can be costed in advance of supply with reasonable certainty.

By comparison, prices for quoted services are based on quantities of labour and materials, with the quantities dependent on a particular task. Prices for quoted services are determined at the time of a customer's enquiry and reflect the individual requirements of the customer's request. For this reason, it is not possible to list prices for quoted services in our decisions.

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4 AER, *AER strategic plan 2020–2025*, December 2020, p. 9.

5 NER, cl. 6.2.6(c).

However, our final decisions set the labour rates to be applied to ANS provided on a quotation basis.

1.2 Why develop a standardised ANS model?

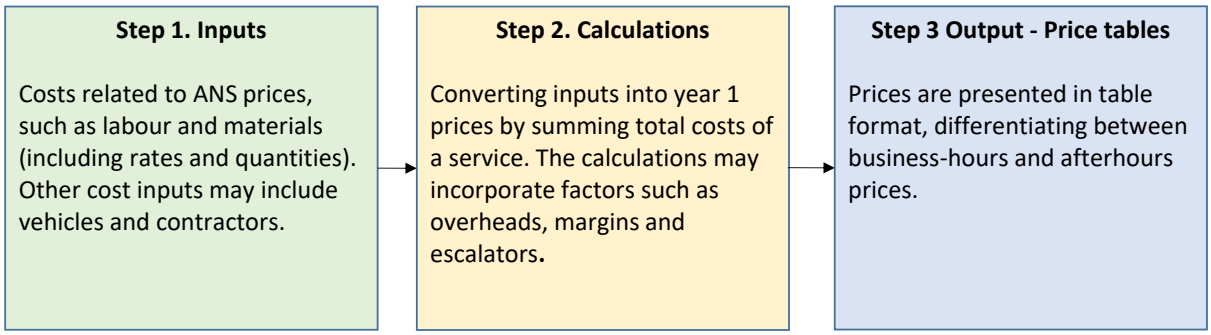
The development of standardised ANS model will streamline the resources and consultation required to assess ANS expenditure proposals and set ANS prices as well as increase consistency across proposals.

We expect the standardised model will assist stakeholders' understanding and engagement with ANS and improve the distribution determination process. It also provides greater assurance that we are setting ANS prices at efficient levels.

As part of their regulatory proposals, distributors historically submitted their own specific ANS model(s) that calculate prices for their fee based services and set the labour rates for their quoted services. These models differ in layout, presentation and formula specification.

Nevertheless, these different models largely use comparable approaches of a bottom-up build of similar typed costs such as labour, material and contractor costs. Figure 1 is a diagram summarising a typical ANS model.

Figure 1 – Diagram of a typical ANS bottom up model



Source: AER, *Issues paper: AER standardised model for ancillary network services*, August 2021, p. 7.

Although they use similar inputs, the models themselves can be complex and differ in layout, presentation and formula specification. Further, some distributors submit a single model containing all of their ANS price calculations, while others submit multiple models.

As a result, we and stakeholders can spend a significant amount of time in the initial phases of assessing regulatory proposals trying to understand how the ANS models work. This reduces the time to assess the proposed ancillary network services and prices. In turn, this can result in additional burden for the distributors as we issue information requests to better understanding the models and proposal. The complexity of the various models also impedes stakeholders' understanding and engagement with ANS proposals.

The standardised ANS model will address many of these issues. We expect a standardised model to deliver benefits to all stakeholders.

Benefits to distributors

The standardised ANS model will significantly reduce the need for distributors to "second guess" our information requirements for assessing ANS proposals. Distributors are able to prepare their ANS proposals in a more targeted manner, saving time and resources. The standardised ANS model signals to distributors the pertinent information we require to assess ANS proposals.

Benefits to retailers and consumers

The standardised ANS model provides stakeholders such as retailers and end customers (who request and ultimately pay for these services) greater scope to engage with distributors in developing their proposals and our distribution determinations.

Different models with varying levels of complexity and information content are a significant barrier for retailers and customers to engage with distributors' proposals. The standardised ANS model contains only the most relevant information in a simple and consistent format. We consider this provides stakeholders a greater opportunity to understand and, therefore engage with, ANS proposals.

As set out in the Better Resets Handbook, our expectations are that distributors will engage with their consumers and the outcomes of that engagement will be reflected in their proposals. Where distributors meet these expectations, they will benefit from a more efficient review. We consider a standardised ANS model will assist distributors and consumers in their engagement for this purpose.

Benefits to the AER

The standardised ANS model will streamline our assessment processes and improve the efficiency, accuracy and transparency of our determinations.

The standardised ANS model will enable us to focus time and resources on assessing the substance of a distributor's ANS proposal, rather than the ANS model itself. This provides greater assurance to all stakeholders that we are setting ANS prices at efficient levels. This is a more efficient regulatory outcome.

More generally, the standardised ANS model provides greater scope for all stakeholders to identify any errors in an ANS proposal. Similarly, the standardised ANS model provides greater scope for all stakeholders to identify parts of the model we can improve or amend for future distribution determinations, as required.

1.3 How was the standardised ANS model developed?

It was important that all stakeholders had the opportunity to contribute to the development of a standardised ANS model. This was pertinent as the intention of developing the standardised model is to simplify and standardise the presentation of the distributors' ANS proposals for greater engagement by all stakeholders. To do this, we sought and received stakeholder input into the development of the standardised model.

As a first step, we commenced the stakeholder consultation process by publishing:[6]

- A preliminary standardised ANS model (preliminary model)
- An issues paper requesting stakeholder feedback on the development of the standardised ANS model.[7]

We received ten written submissions from various stakeholders including distributors, retailers (Origin and Red Lumo), consumer representatives (the Public Interest Advocacy Centre, PIAC) and government bodies (the ACT Administrative Tribunal, ACAT).[8]

We also held an online forum on 20 October 2021 allowing stakeholders the opportunity to ask questions and provide further feedback on the preliminary models. The online forum was attended by distributors and retailers as well as Synergies Economic Consulting, Locality Planning Energy and All Round Supplies.

We received a further two written submissions following the online forum.

All submissions received are available on our website.[9]

We received encouraging stakeholder feedback on this development work program. All submissions supported the AER's initiative to develop a standardised ANS model, noting the efficiencies it would provide to the distribution determination process.

For example, ACAT, Origin Energy, PIAC and Red Lumo noted stakeholders found it challenging in the past to comment on distributors' proposed ANS prices because the underlying models had varying levels of complexity and information content. A standardised ANS model will remove barriers for retailers and interested stakeholders to engage with the regulatory process for assessing and approving ANS prices.

Stakeholder submissions also provided feedback to improve specific aspects of the preliminary model. In many instances, we took on this feedback to produce the final model. However, not all stakeholder feedback was incorporated into the final model.

The amendments and the stakeholder feedback are summarised in section 2.

1.4 Future directions

To ensure the standardised ANS model remains fit for purpose, we may review and amend it from time-to-time when necessary.

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6 Available at: https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/standardisation-of-ancillary-network-services-model/initiation.

7 AER, *Issues paper: AER standardised model for ancillary network services*, August 2021.

8 Submissions are available at: https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/standardisation-of-ancillary-network-services-model/aer-position.

9 Submissions are available at: https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/standardisation-of-ancillary-network-services-model/aer-position.

As noted by Essential Energy, issues may arise with the final model as distributors prepare their ANS proposal for their forthcoming regulatory control period. Essential Energy recommended the AER be flexible in making revisions to the standardised model.[10]

The first opportunity to utilise the standardised ANS model will be the upcoming distribution determinations for ACT, NSW, Northern Territory and Tasmania. Distributors in those jurisdictions are required to submit their regulatory proposals by 31 January 2023. We will use learnings from those distribution determinations to amend the standardised ANS model, where necessary.

1.4.1 Note on developing standardised definitions for ANS

We acknowledge stakeholder concerns that, even with a standardised model, there are large variations in the scope, number and definitions of individual ancillary network services. These can be barriers to comparing services and cost drivers between distributors which in turn can inhibit scrutiny and assessment of proposals of ANS pricing.

We note Origin Energy's and ACAT's views that the AER define ancillary network services at the outset (or in the standardised ANS model) to ensure comparability across distributors.

We will consider the development of standardised definitions for individual ANS as part of our future work program.

[10] Essential Energy, *Submission on the standardisation of the ancillary network services model*, 24 September 2021, p. 3.

2 Final standardised ANS model

The final model is based on the cost build up approach as set out in **Figure 1**. We consider the cost build up approach for ANS delivers efficient outcomes as well as provides regulatory certainty and transparency to stakeholders.

The details of the model parameters and functions are available in the model handbook released with the final model. The next section provides a summary of amendments to the preliminary models.

2.1 Amendments to preliminary models

For this final decision, we have amended the preliminary models to incorporate stakeholder feedback. The main changes to the preliminary model include the following:

- **Greater flexibility with additional input categories:** We have included additional input categories into the standardised model based on stakeholder submissions. We also included several "blank" tables in the 'Input|Setup' sheet to enable distributors to capture permutations specific to their situation.
- **Model handbook:** We have included a model handbook to provide guidance to distributors and other stakeholders on how to include inputs into the final model. In addition, we consider the model handbook will clarify some of the misunderstanding with the preliminary model (which did not include a handbook). In particular, the model handbook notes distributors are able to use formulas in the green input cells to refer to other parts of the model, as appropriate.
- **Formula corrections:** We have amended formulas where stakeholders have suggested improvements or identified errors.

Table 1 provides a summary of amendments to the final model.

Table 1 Summary of proposed amendments to preliminary model that were subsequently adopted in final model

Proponent	Proposed amendments and comments	AER response
Ausgrid; Energy Queensland; SA Power Networks	Confirm whether the X-factor will be calculated in the model. While the standardised model contains real cost escalation for labour, the model should retain flexibility for distributors to propose real cost escalations to non-labour inputs.	The final model calculates the X-factor (or real wage price escalator) as a weighted average of appropriate sources. We have included additional input fields in the 'Input|Escalations' sheet for separate escalation factors for non-labour inputs.
Energy Queensland	The standardised model should allow additional flexibility to accommodate further distributor specific service permutations (such as the feeder type, traffic control and the addition of a current transformer).	We have included addition "blank" tables in the 'Input|Setup' sheet. These blank tables feed into the 'Input|Fee Based' and 'Calc|Fee Based' sheets and are intended to capture distributor-specific permutations and methods.
Energy Queensland; SA Power Networks	A macro should be added to enable easy marking of confidential information.	We have added such a macro in the final model.
Essential Energy	Essential Energy's non-fixed fees are hourly rates, rather than quoted.	We have included addition "blank" tables in the 'Input|Setup' sheet. These blank tables feed into the 'Input|Fee Based' and 'Calc|Fee Based' sheets and are intended to capture

Proponent	Proposed amendments and comments	AER response
		distributor-specific permutations and methods.
Essential Energy; Evoenergy; Jemena; SA Power Networks	Additional labour category inputs required in 'Input|Fee Based'. Evoenergy suggested including at least three categories for non-field labour and four categories for field labour.	We have expanded the table to include information for 3 non-field labour and 4 field labour categories.
Evoenergy	The model should include an input for service codes to assist referencing of ANS across other models and documents.	We have included a columns for distributors to input service codes in the 'Input|Fee Based' and 'Input|Fee Based Mapping' sheets.
Jemena	Recommend adding a table in 'Input|Setup' to allow fee-based services to be classified by expense type – capex or opex.	We have included addition "blank" tables in the 'Input|Setup' sheet. These blank tables feed into the 'Input|Fee Based' and 'Calc|Fee Based' sheets and are intended to capture distributor-specific permutations and methods.
Jemena	Table 5.4 in the 'Input|Indirect Cost Rates' sheet should be relabelled as "Tax recovery rate". We understand table 5.4 is to be used to input margins to recover the timing difference of tax expenses from fee-based services that are capex in nature.	We confirm Jemena's understanding of the purpose of this table, and we have re-labelled it accordingly.
Jemena	Table 7.2 in the 'Input|Fee Based' sheet should include input columns on the number of full-time equivalent (FTE) employees required for each labour type category and add model validation and error checks to ensure that DNSPs have entered FTE inputs for non-field and field-based labour.	We have included columns for distributors to input FTE information in this table. We agree this is important information. We note distributors generally provided this information in previous ANS models.
Jemena	Suggested various improvements to formulas, formatting and validation checks throughout the model.	We incorporated many, if not most, of Jemena's suggested improvements.
Jemena	Recommend reduce model size by removing content or formatting in unused cells.	We reduced the size of the final model to approximately 500KB using Jemena's suggestions.

We did not make any amendments to the final model in response to the following stakeholder feedback. In many cases, such functionalities already existed in the preliminary model.

Along with this final decision, we have published a model handbook that addresses many of these concerns. Important is the clarification that distributors are able to use formulas in the input cells—that is, distributors are not restricted to inputting hard-coded values.

One suggestion from Jemena worth highlighting is to allow distributors the flexibility to add additional working sheets as required. For example, such sheets may demonstrate how a distributor calculated certain inputs such as tax recovery rates.

We did not incorporate this suggestion in the final model in order to preserve the layout and size of the final model as much as possible. As noted earlier, we consider the final model contains the pertinent information we consider is required to assess ANS proposals.

However, we note distributors are able to submit such additional calculation sheets in separate files as part of their ANS proposal package if they consider it required to support their proposal.

Table 2 Summary of proposed amendments to preliminary model that were not adopted in final model

Proponent	Proposed amendments and comments	AER response
Ausgrid; Jemena	Revise the colour coding for input and formula cells in order to clearly demarcate between them, noting that several cells indicated as inputs contain formulas or lookups.	We clarify in the model handbook that distributors can enter formulas in the input cells (coloured green).
Energy Queensland	The standardised model should allow a build-up of costs for services based on a weighted average blend of contractor services and internal labour. Suggest adding a column in 'Input|Fee Based' to indicate the percentage split between labour and contractor services.	We consider the final model is sufficiently flexible to allow such blended rates. We clarify in the model handbook that distributors can enter formulas in the input cells (coloured green). For example, a distributor may include an entry called "Blended rate 1" into the 'Input|Labour' sheet. The distributor can then calculate the applicable rate using a weighted average of internal and external labour rates sourced from the same sheet.
Energy Queensland; Essential Energy; TasNetworks	The standardised model assumes after hours rates are set at specific rates above the ordinary hours rates. The model should retain flexibility for distributors to propose maximum ordinary and after hours labour rates.	The after-hours rates in the preliminary model were for illustrative purposes only. We clarify in the model handbook that distributors can enter formulas in the input cells (coloured green).
Essential Energy	The rates table in 'Output|Quoted' should include materials and contractor percentage. Similarly, 'Calc|Labour Rates' should include materials and contractor percentage.	The rates table in the 'Output|Quoted' and 'Calc|Labour Rates' sheets displays the proposed labour rates to be applied to quoted services. This is consistent with the control mechanism for quoted services in recent decisions.
Essential Energy	On-costs vary between normal time and overtime. The 'Inpu|Indrect Cost Rates' sheet should include additional fields for on-costs.	The 'Inpu|Indrect Cost Rates' sheet includes several fields for on-costs. Distributors can use formulas in other input sheets—specifically, the 'Input|Labour Rates' sheet in this case—to refer to these on-cost fields.
Essential Energy	Essential Energy's previous ANS model also included historical operating costs, revenue and volumes.	We acknowledge distributors' own models may use different inputs in different formats. To increase transparency and improve the regulatory process, we encourage distributors to use the final model in future ANS proposals and provide inputs in the format requested.
Evoenergy	The standardised model should enable assignment of crews, which is a combined group of labour categories.	We consider the final model is sufficiently flexible to allow such blended rates. We clarify in the model handbook that distributors can enter formulas in the input cells (coloured green). For example, a distributor may include an entry called "Crews 1" into the 'Input|Labour' sheet. The distributor can then calculate the applicable rate using a weighted average of labour rates sourced from the same sheet.

Proponent	Proposed amendments and comments	AER response
Jemena	We assume the intention of table 5.1 is to provide the values of on-cost drivers for each labour category. Currently, the header of table 5.1 is labelled with numbers 1 to 4 and we assume that these labels are intended to represent the different labour categories.	We did not intend for distributors to set out separate on-costs rates for each labour category in table 5.1. We note distributors tended to use one or, at most, two different on-cost rates in previous ANS proposals; hence we included several input fields in table 5.1. We clarify in the model handbook that distributors can enter formulas in the input cells (coloured green). Distributors can use formulas to refer to these on-cost rates in the various input cells in the final model (such as the "On cost rate (%)" column in the 'Input|Labour Rates' sheet).
Jemena	Recommend removing the 'Input|Historical Fee Based' sheet.	We consider this sheet is important in mapping services across regulatory periods and observing price trends. We have also renamed this sheet 'Input|Fee Based Mapping' to be more in line with the intention of the sheet.
Jemena	Recommend the formula in the "hourly rate" column in table 2.2 of the 'Output|Quoted' sheet is linked directly to table 9.1 the 'Calc|Labour Rates' sheet using an index match formula. The number of rows in table 2.2 of the 'Output|Quoted' sheet should align with the number of labour type categories in table 3.7 of the 'Input|Setup' sheet.	We consider separating the fields for labour type and characteristics such as business hours/after hours, internal / external and so on provides greater flexibility for this information to be used to derive prices for both fee based and quoted services. We have amended some of the formulas and formatting in the model to better enable this flexibility.
SA Power Networks	The model should allow detailed description of services to assist stakeholder engagement.	To save space, we consider the model should be restricted to the calculation of prices as much as possible. Distributors can include detailed description of services as part of their regulatory proposal documentation
SA Power Networks	Final model should allow different on-cost rates to be applied to Stores/Materials.	We consider the final model is sufficiently flexible to develop prices for premium services. We clarify in the model handbook that distributors can enter formulas in the input cells (coloured green). For example, a distributor may use a formula in the "Materials" column in the 'Input|Fee Based' sheet that refers to the on-cost rates in the 'Input|Indirect Cost' sheet.
TasNetworks	Include capacity to develop prices for "premium services", such as those that utilise direct higher labour rates.	We consider the final model is sufficiently flexible to develop prices for premium services. We clarify in the model handbook that distributors can enter formulas in the input cells (coloured green). For example, a distributor may include an entry called "Premium field labour 1" into the 'Input|Labour' sheet. The distributor can then calculate the applicable rate by referring to labour rates sourced from the same sheet (if appropriate). The distributor

Proponent	Proposed amendments and comments	AER response
		can then choose this labour type in the 'Input|Fee Based' sheet for premium services.

2.2 Amendments to be consulted as part of the upcoming distribution determinations

We intend to consult further on the following stakeholder feedback as part of upcoming determination process. They reflect specific aspects of the final model only applicable to some or a small group of stakeholders or we consider that they need further consultation prior to be incorporated in the standardised models.

- CitiPower, Powercor, United Energy: allow distributors to use either
  - the final model for a bottom-up build approach, or
  - a simpler model that escalates existing charges if there have been no material changes in service provision or costs, or allows for a cost pass through of contracts where costs align with charges.
- SA Power Networks: allow the application of different X-factors for specific services (such as Security Lighting Services).

Appendices

The appendices include the final standardised ANS model and handbook.

Appendix A: Standardised ANS model

Appendix B: Standardised ANS model handbook

Shortened forms

Shortened form	Extended form
ACS	Alternative Control Service
AER	Australian Energy Regulator
ANS	Ancillary network services
CPU	CitiPower, Powercor and United Energy
distributor	Distribution network service provider
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National Electricity Objective
NER	National Electricity Rules
SAPN	SA Power Networks
SCS	Standard control services