Explanatory Note

AER standardised model for Standard Control Services capital expenditure

December 2021

AUSTRALIAN ENERGY REGULATOR

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Contents

Shortened forms

Shortened form	Extended form
ACS	Alternative Control Service
AER	Australian Energy Regulator
CAM	Cost Allocation Methodology
capex	Capital expenditure
CPU	CitiPower, Powercor, United Energy
distributor	Distribution network service provider
ENA	Energy Networks Australia
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National Electricity Objective
NER	National Electricity Rules
PTRM	Post tax revenue model
RAB	Regulatory asset base
RFM	Roll Forward Model
RIN	Regulatory Information Notice
SCS	Standard control services

1 About this explanatory note

The Australian Energy Regulator (AER) has developed a standardised Standard Control Service (SCS) capital expenditure (capex) model to use in future electricity distribution determinations. The standardised SCS capex model is intended to replace the distribution network service provider (distributor)-specific capex models that are currently in use.

The development and implementation of a standardised SCS capex 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.[1]

Capex models map forecast capex into a format that is consistent with the post-tax revenue model (PTRM) to calculate the annual revenue requirement for each year of a regulatory control period. A standardised SCS capex model seeks to streamline the resources and consultation required to manage the SCS capex models and increase consistency across proposals.

This explanatory note summarises the issues paper, stakeholder submissions, and our position on key areas of consideration in developing the standardised SCS capex model. In coming to a position on key areas, we considered the benefits of additional transparency and detail against the model's useability and complexity. This was considered in the context of the model's key purpose; to standardise the process for capex projects/programs to be mapped into the PTRM.

At this stage, we are only addressing comments on these specific modelling aspects. Other aspects outside the scope of this explanatory note, particularly those that may require more intensive industry discussion, will be addressed in a later forum. For example, changes to the regulatory information notices (RIN) will be addressed in the forthcoming RIN review.

Concurrent processes are currently underway to develop the standardised Ancillary Network Services (ANS) model and the standardised Metering Services model.

[1] AER, *AER strategic plan 2020–2025*, December 2020, p.9.

2 Background

The AER is the independent regulator for Australia's national energy market (NEM). We regulate energy networks in all jurisdictions except Western Australia. We set the amount of revenue that network businesses can recover from customers for using these networks.

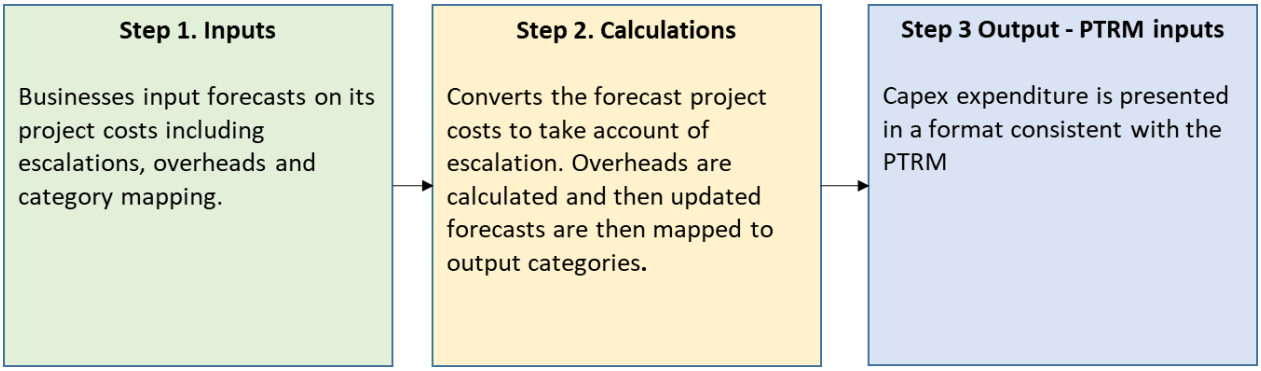
The National Electricity Law and Rules (NEL and NER) provide the regulatory framework governing electricity distribution networks. Our work under this framework is guided by the National Electricity Objective (NEO).[2]

At a revenue review, a distributor proposes a total capex forecast that it considers is required in order to achieve the capex objectives.[3] Capex is added to a distributor's Regulatory Asset Base, which is used to determine the return on capital and return of capital (regulatory depreciation) building block allowances.

Under the NER, the AER is required to prepare a PTRM that calculates the annual revenue requirement for each regulatory year of a regulatory period.[4] A distributor's revenue proposal must be prepared using our PTRM.[5]

The process of categorising and mapping proposed capex programs and projects into a PTRM is achieved using a capex model. While multiple distributor-specific capex models are currently in use, all capex models typically share common modelling processes including inputs, calculations, and outputs in order to categorise and map capex projects to PTRM input categories. Figure 1 is a diagram of a typical capex model.

Figure 1 – Diagram of a typical capex model



[2] NEL, s. 7.
[3] NER cl. 6.5.7(a)
[4] NER cl. 6.4.2
[5] NER, cll. 6A.4.1(b)(1) and 6.3.1(c)(1)

2.1 A standardised SCS capex model

The AER has developed a standardised SCS capex model that will reduce the resources required to review and manage these models by:

- streamlining the process of mapping proposed capex into PTRM categories;
- improving quality assurance processes
- reducing our need to send information requests to clarify aspects of bespoke models.

A standardised SCS capex model will also increase regulatory certainty through a consistent treatment of capex data across determinations. For these benefits to be fully realised, the standardised SCS capex model needs to be "fit-for-purpose".

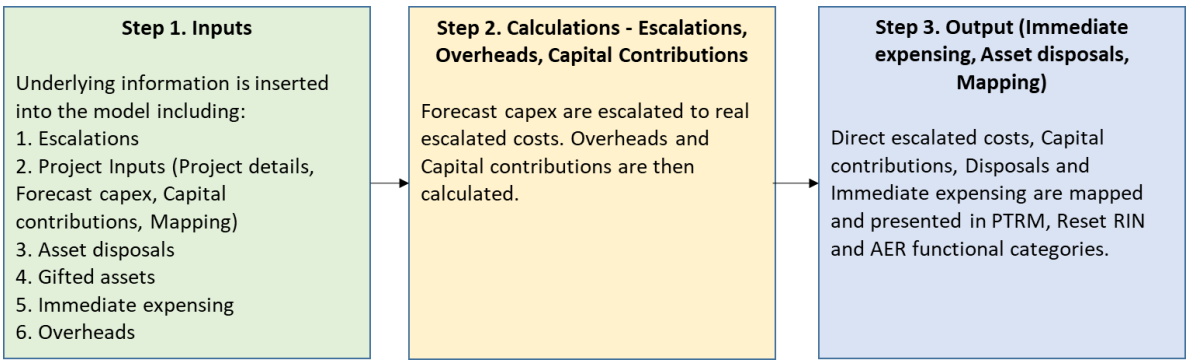
As a first step, we released a preliminary standardised SCS capex model (preliminary model) and issues paper in August 2021 for consultation. The preliminary model was intended to help us work through key areas of consideration. The preliminary model reflected the common core functions of the distributor-specific capex models. It also standardised selected high level (non-project specific) aspects of the SCS capex models such as overheads and CPI but also included a default methodology so businesses could override the standardisation if required.

We received submissions from six distributors and Energy Networks Australia (ENA) and met with several businesses to discuss their submissions in more detail.

3 Finalised standardised SCS capex model

Figure 2 shows the final standardised SCS capex model's layout and how it incorporates the core functions of a typical capex model.

Figure 2 - AER Standardised SCS capex model



Step 1 requires businesses to input the data used to derive its capex forecast.

Step 2 uses most of the input data to calculate escalated forecasts, capitalised overheads, and cash capital contributions. Overheads are forecast using historical data or directly entered by the business. They are then allocated based on either direct costs, direct labour, or a bespoke methodology determined by the distributor.

Step 3 maps the updated forecast capex to output categories consistent with the PTRM, Reset RIN and AER assessment. Immediate expensing is calculated from gross capex, and revenue from asset disposals are excluded along with capital contributions to obtain net capex.

Table 1 summarises the key changes to the model since the preliminary model. A summary of the key issues raised in response to the issues paper and our position is below.

Table 1 - Key changes to the preliminary model

Topic	Updates to model
Project inputs	• input for last two years of the current period required • expanded allocation functionality for AER categories
Escalations	• Contract labour and non-labour escalations added
Capital contributions	• Input changed from percentage to dollar amounts • Gifted assets removed from gross capex calculations and enumerated separately
Capitalised overheads	• More options for allocation method
Dual function assets and transmission assets	• New functionality as agreed with relevant stakeholders

3.1 Project inputs

The preliminary model's project input sheet required inputs for forecast capex for the forecast regulatory period, internal labour escalations and capital contributions. Inputs were also required to map projects to a single AER category and RIN category, and to indicate whether capitalised overheads should be allocated to each project.

Key issues raised in submissions

Stakeholder submissions on project inputs related to whether the model should be updated to allow for flexibility on the level of detail required.

Ausgrid and Jemena submitted that the forecast capex inputs should be extended to include the last two years of the current period to be consistent with the roll-forward model (RFM).[6]

Ausgrid further submitted that the model be updated to allow selection of multiple AER and RIN categories for each capex project as projects may have multiple regulatory drivers.[7]

Energy Queensland proposed the model provide flexibility on the provision of project level information, as it historically provided higher level information.[8]

Position

After considering stakeholder submissions, the model has been updated to require input for the last two years of the current period and to allow distributors to allocate multiple AER categories as drivers for capex projects.

In arriving at this position, we have weighted the benefits of updating the model against any negative impacts on the overall model complexity and useability. We note that there is likely benefit in consistency with the RFM for the majority of model users. Importantly, the required data is readily available, and the overall model complexity and useability is not materially impacted. Similarly, we note the option to allocate capex projects to multiple AER categories materially increases the transparency and accuracy of the model.

However, the model has not been updated to allocate multiple RIN categories. The AER is currently undertaking a RIN review where we will aim to align the high-level reset RIN categories with AER categories. In the interim, businesses can duplicate the project codes if multiple RIN categories are required.

Similarly, the model has not been updated for additional flexibility to allow for higher level inputs. Distributors can input higher levels of information into the model, which should flow through the model similar to if the inputs were at a more granular level.

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6 Ausgrid, *Comments on Standardised model for SCS capex,* August 2021, p.2; Jemena, *Submission on preliminary standardised capex model*, August 2021, p.2.

7 Ausgrid, *Comments on Standardised model for SCS capex*, August 2021, p.2.

8 Energy Queensland, *Comment on AER standardised SCS capex model*, August 2021, p.1.

3.2 Inflation and escalation

The preliminary model allowed users to select a base year for unescalated direct cost inputs to be escalated to the regulatory base year. We encourage distributors to use a 12-month lag, consistent with our RFM and decisions. Consistent with our recent decisions, the preliminary model allowed for labour cost escalations and did not include contract services or material escalation.

Key issues raised in submissions

TasNetworks, Ausgrid, AusNet Services, CPU, Energy Queensland, Jemena, and the ENA submitted that real price escalators should be expanded to include contract and material escalations to be allow for the option of contract services and material escalations to be addressed in individual distribution determinations rather than be predetermined through the standardised SCS capex model.[9]

Position

After considering stakeholder submissions, the model has been updated to allow for internal labour, contract labour and non-labour escalations.

In arriving at this position, we note that all submissions supported the inclusion of additional escalators to allow for real cost escalators to be assessed in individual distribution determinations rather than to be predetermined through the standardised SCS capex model.

3.3 Capital contributions

In October 2020, the Federal Court of Australia published a decision that confirmed that cash contributions should be treated as an assessable income for income tax purposes[10]. While gifted assets will not contribute to gross capex in our determination decision, the preliminary model included gifted assets to assist with reconciliation with the RINs and historical data and for error checking purposes. Gifted assets were inputted as a portion of direct costs and incorporated in the model's calculations.

Key issues raised in submissions

Stakeholders' submissions on capital contributions questioned how gifted assets should be treated in the model, particularly following the Federal Court decision.

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[9] TasNetworks, *Submission on standardised model for SCS capex*, August 2021, p.1; Ausgrid, *Comments on Standardised model for SCS capex*, August 2021, p.2; AusNet Services, *Response to AER issues paper – standardised SCS capex model*, August 2021, p.2; CitiPower, Powercor and United Energy, *Submission on standardised SCS capex model*, August 2021, p.2; Energy Queensland, *Comment on AER standardised SCS capex model*, August 2021, p.1; Jemena, *Submission on preliminary standardised capex model*, August 2021, p.2; Energy Networks Australia, *Submission on AER standardised model for SCS capex – issues paper*, August 2021, p.1.

[10] Victoria Power Networks Pty Ltd v Commissioner of Taxation [2020] FCAFC 169.

Ausgrid submitted that gifted assets should be separated from direct costs for increased transparency, and for capital contributions to be in direct dollars rather than a portion of direct costs.[11]

CPU submitted that gifted assets should be separated from direct costs for increased transparency and that the model be updated to include rebates.[12]

Jemena submitted that the model should allow businesses to select whether capitalised overheads are allocated to gifted assets.[13]

Position

After considering stakeholder submissions, the model has been updated to separate gifted assets inputs and calculations in a separate sheet. Further, gifted assets will be inputted based on direct dollars rather than a portion of direct costs and will not attract overheads. Gifted assets will form part of the calculation in the RIN output to maintain consistency with historical data.

In arriving at this position, we note that separating gifted assets and allowing the input to reflect direct dollars increases the model's transparency and reduces the model's overall complexity and size.

The model has not been updated to change how rebates are accounted for as the model assumes rebates form part of forecast connections capex.

3.4 Capitalised overheads

The preliminary model prescribed a methodology for forecasting capitalised overheads:

- Capitalised overheads were forecast by taking capitalised overheads for the current period as a starting point and adjusting them up or down in proportion to forecast direct costs. The proportionality factor was 25 per cent, which was the same as our standard approach for adjusting capitalised overheads in our recent decisions.[14]
- Capitalised overheads were then allocated to project codes that the distributor identified as incurring overheads, on a direct project cost to total direct capex basis.

Alternatively, distributors were free to directly input forecast capitalised overheads in the model. In this case, overheads were still allocated on a direct project cost to total direct capex basis as described above.

Key issues raised in submissions

[11] Ausgrid, *Comments on Standardised model for SCS capex*, August 2021, p.2-3.

[12] CitiPower, Powercor and United Energy, *Submission on standardised SCS capex model*, August 2021, p.2.

[13] Jemena, *Submission on preliminary standardised capex model*, August 2021, p.2.

[14] In our capex decisions, we typically assume that 75 per cent of forecast capitalised overheads are fixed and 25 per cent vary with changes to direct capex.

Stakeholder submissions on capitalised overheads requested the model be updated to allow for increased flexibility to how capitalised overheads are treated.

TasNetworks, AusNet Services, Energy Queensland, and Jemena submitted that the model should provide flexibility in relation to the allocation of overheads to better reflect a distributor's Cost Allocation Methodology (CAM).[15]

AusNet Services and Energy Queensland submitted that the model should allow for non-network overheads.[16]

AusNet Services requested clarification on whether calculated overhead rates will apply to total direct costs that are subject to overheads. [17]

Ausgrid and ENA submitted that the model should allow distributors to override the default overhead proportionality factor of 25 percent.[18]

Position

After considering stakeholder submissions, the model has been updated to include three overhead allocation methods. Distributors are able to select whether overheads are allocated based on direct costs, direct labour, or overwrite the methodology entirely.

In arriving at this position, we note that allowing the model to reflect a distributor's CAM materially increases the model's accuracy and transparency and contributes to the model's primary purpose of mapping capex projects to the PTRM. Our view is that these benefits outweigh the negative impact on increasing the model's overall complexity.

Relevant tables headings have been updated to clarify that the model allows for non-network overheads and that overheads may be allocated to "total costs that attract overheads" rather than direct costs. Similarly, the headings now clarify that distributors may override the default proportionality factor of 25 per cent by manually inputting an alternative capitalised overheads methodology.

3.5 Outputs

The preliminary model produced three separate outputs: PTRM categories, Reset RIN categories and AER functional categories.

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[15] TasNetworks, *Submission on standardised model for SCS capex*, August 2021, p.1; AusNet Services, *Response to AER issues paper – standardised SCS capex model*, August 2021, p.2; Energy Queensland, *Comment on AER standardised SCS capex model*, August 2021, p.1.

[16] AusNet Services, *Response to AER issues paper – standardised SCS capex model*, August 2021, p.3-4; Energy Queensland, *Comment on AER standardised SCS capex model*, August 2021, p.2-3.

[17] AusNet Services, *Response to AER issues paper – standardised SCS capex model*, August 2021, p.3-4.

[18] Ausgrid, *Comments on Standardised model for SCS capex*, August 2021, p.3; Energy Networks Australia, *Submission on AER standardised model for SCS capex – issues paper*, August 2021, p.1.

Mapping to the Reset RIN categories will ensure consistency and limit the need for information requests to rectify data reconciliation issues. Mapping to AER function categories will increase the efficiency and consistency of our assessments and processes. The AER function categories reflect the current way we assess capex proposals.

Key issues raised in submissions

Stakeholder submissions indicated varying views on whether the standardised model should include additional outputs.

AusNet Services, Ausgrid, and Jemena submitted that the model should include more output categories for additional flexibility in defining mapping categories.[19] Examples included allowing the model to generate the Reset RIN in more granular detail, inputs for other RIN tables, or additional output tables to align with individual DNSP's own internal cost drivers.

CPU submitted that the preliminary model delivers its intended purpose and should not include new purposes such as population of additional reset RIN templates as the model's original objective may be undermined.[20]

Position

After considering stakeholder submissions, the model has not been updated to include the additional outputs noted in the submissions.

In arriving at this position, we note the additional output tables requested in the submissions do not support the model's intended purpose of mapping capex projects to the PTRM and result in material increases in the model's overall complexity and size.

3.6 Dual function and transmission assets

The preliminary model did not include functionality for dual function and transmission assets. The issues paper noted our intention to work with distributors to ensure the final model incorporated this function if required.

Position

We have met with the distributors that own dual function and transmission assets, and the model has been updated to reflect these meetings.

The model now allows distributors with relevant assets to select whether a PTRM asset category is distribution or transmission. Distributors subsequently allocate what proportion of each capex project are able relevant to each PTRM asset category. Additional output tables

[19] AusNet Services, *Response to AER issues paper – standardised SCS capex model*, August 2021, p. 4-5; Ausgrid, *Comments on Standardised model for SCS capex*, August 2021, p.3; Jemena, *Submission on preliminary standardised capex model*, August 2021, p.2.

[20] CitiPower, Powercor and United Energy, *Submission on Standardised SCS capex model*, August 2021, p.3.

have been created to split transmission related expenditure from distribution related expenditure.

To minimise any impact on distributors without dual function and transmission assets, the model's default position is that all PTRM asset categories are related to distribution, and the transmission output tables will be hidden.

3.7 Other issues

We encouraged stakeholders to outline any other issues, including issues out of scope.

Key issues raise in submissions

ENA's submission included a request for clarity regarding how the finalised model will be updated to reflect associated regulatory updates.[21]

Jemena, AusNet Services, CPU have provided suggestions to improve the model and picked up minor errors.[22]

Position

While the standardised model will be published as a 'final version', we anticipate there will be a need to review and update the model in the future to ensure it remains fit for purpose. We will update distributors of any material changes at the early stages of a regulatory reset such as in the AER's framework and approach paper.

In response to stakeholder engagement, we made changes to amend errors, provide clarity, improve logical flow, and adopt additional modelling best practice processes.

[21] Energy Networks Australia, *Submission on AER standardised model for SCS capex – issues paper*, August 2021, p.1.

[22] Jemena, *Submission on preliminary standardised capex model*, August 2021, p. 2; AusNet Services, *Response to AER issues paper – standardised SCS capex model*, August 2021, p.3-4; CitiPower, Powercor and United Energy, *Submission on Standardised SCS capex model*, August 2021, p.3.