Australian Government

AUSTRALIAN ENERGY REGULATOR

Consultation Paper

Review of the AER's standardised capital expenditure model

July 2026

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601
Email: capex@aer.gov.au
Tel: 1300 585 165

AER reference: AER26012729

Amendment record

Version	Date	Pages
1	29 July 2026	20

Contents

1 Introduction

In 2021, the Australian Energy Regulator (AER) developed a standardised Standard Control Service (SCS) capital expenditure (capex) model to use in electricity distribution revenue determinations.[1] The standardised SCS capex model replaced distribution network service provider (DNSP) specific capex models and has been used in all distribution revenue determinations since.

Given all DNSPs have undertaken a revenue determination using the capex model, we consider it is timely to review this in preparation for the revenue determinations that will commence in 2028. Further, given the success of the distribution capex model, we consider it a timely opportunity to develop a standardised transmission capex model. This process is intended to minimise the regulatory burden for both regulated networks and the AER.

This paper is split into two sections:

- section one covers the distribution model. We have identified a series of potential improvements to the model and modelling corrections
- section two presents the draft transmission model.

1.1 Background

The AER is the independent regulator for Australia's national energy market. 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 provide the regulatory framework governing electricity distribution networks. Our work under this framework is guided by the National Electricity Objective.[2] At a revenue determination, a network service provider proposes a total capex forecast that it considers is required in order to achieve the capex objectives.[3] Capex is added to a network service provider's Regulatory Asset Base, which is used to determine the return on capital and return of capital (regulatory depreciation) building block allowances.

Under the National Electricity Rules, the AER is required to prepare a Post-Tax Revenue Model (PTRM) that calculates the annual revenue requirement for each regulatory year of a regulatory period.[4] A network service provider's revenue proposal must be prepared using our PTRM.[5] Prior to the implementation of our standardised model, DNSPs used business-specific capex models in order to develop the inputs required for the PTRM.

Throughout the last cycle of distribution revenue determinations, we have seen processes improved and efficiencies achieved with DNSPs using a common capex model. We have

---

1 AER, *Issues paper – Standardised SCS capex model,* August 2021; AER, *Standardised SCS capex model,* December 2021; AER, *Standardised SCS capex model – Explanatory note*, December 2021.

2 NEL, s. 7.

3 NER cl. 6.5.7(a)

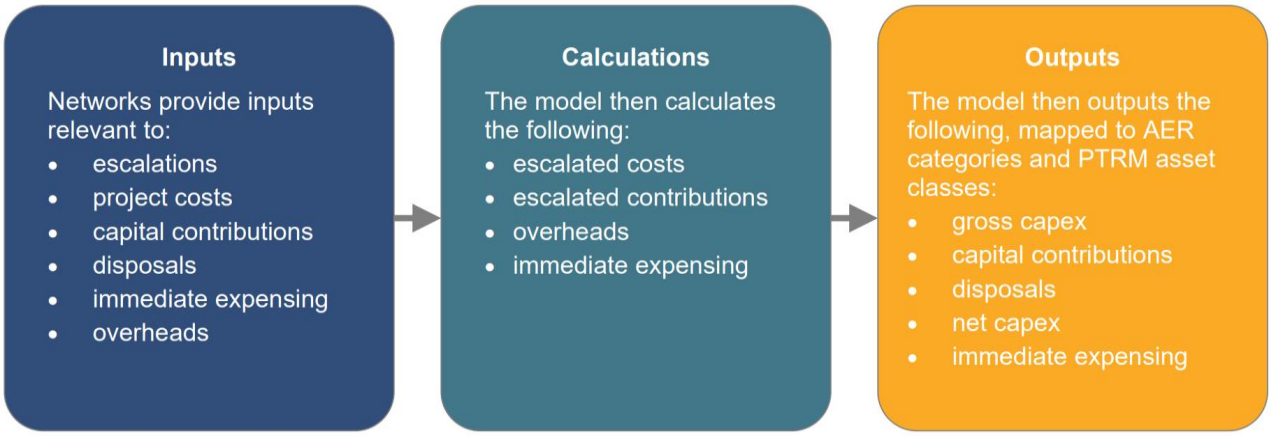
4 NER cl. 6.4.2

5 NER, cll. 6A.4.1(b)(1) and 6.3.1(c)(1)

also noticed some networks making modifications to the model. We have adopted some of these modifications that we consider improve the model and included further amendments to reduce regulatory burden while increasing transparency and accuracy. Further to this, we intend to develop an additional standardised model that meets the needs of transmission network service providers (TNSPs).

This review implements a commitment made as part of our response to the Treasurer's request on regulatory reform opportunities to streamline and simplify obligations in the energy sector and find ways to reduce regulatory burden for stakeholders.[6]

Figure 1 — Flow chart of the standardised capex model



1.2 Our process

This consultation paper is the first stage in our engagement on the review of this model. Submissions and views shared with us in this stage of consultation will help to inform the final version of the models. Following the finalisation of both models, we expect all electricity networks to use the applicable model from 2028 onwards.

An indicative timeline for this process is provided below.

Table 1 – Indicative timeline

Milestone	Timeline
Consultation paper and draft models published	29 July 2026
Submissions on consultation paper close	9 September 2026
Final models and explanatory note published	November 2026

1.3 Have your say

We invite interested parties to make written submissions or feedback to us on the matters discussed in this consultation paper by Wednesday, 9 September 2026.

6 AER, *Letter to the Treasurer - Regulatory reform opportunities*, August 2025.

Responses should be sent to capex@aer.gov.au in a text readable document format (such as Microsoft Word or PDF) and addressed to the General Manager Network Expenditure.

Alternatively, you can mail submissions to GPO Box 3131, Canberra ACT 2601.

We prefer that all submissions be publicly available to facilitate an informed and transparent consultative process. We will treat submissions as public documents unless otherwise requested.

Parties wishing to submit confidential information should:

- clearly identify the information that is the subject of the confidential claim
- provide a non-confidential version of the submission in a form suitable for publication.

All non-confidential submissions will be published on our website. For further information regarding the AER's use and disclosure of information provided to it, see the AER Information Policy available on the AER's website.

2 Distribution

Over the last five years, the implementation of a standardised capex model has demonstrated efficiencies and improved the consistency and accuracy of expenditure assessments. Every DNSP has now completed a revenue determination using the model, with some making small modifications to fit the specific needs of that network.

In this review we have looked to improve the model through updates to information, added functionality, streamlining and resolving identified errors. The changes that we are proposing to the distribution capex model are described below.

Through this consultation, we aim to ensure that our final amended capex model will meet the needs of all DNSPs, as well as the AER.

2.1 Removing Regulatory Information Notice categories

Since the introduction of our standardised model, some of the information that was required to undertake our functions has changed or become obsolete. We are proposing to remove or update these elements within the capex model to align with current requirements.

Our standardised model currently contains an output sheet designed to reconcile to the categories used in table 2.1.1 (SCS capex by purpose) of the Regulatory Information Notice (RIN). However, the newer Annual Information Orders align the capex categories with how they are assessed during a revenue determination process.[7] These categories are not only used to map project costs but are also used to forecast type 2 capital contributions.[8] For consistency, we propose to make several amendments to the standardised model including:

- removing the 'Output | RIN' tab
- updating type 2 contributions to be recorded and calculated in the Annual Information Order categories
- removing the RIN category selection in the 'Input | Projects' tab
- removing the list of RIN categories in the setup tab.

2.2 Adding capabilities

We have identified areas where we consider the current model can include further capabilities, including:

- introducing a DNSP category output tab
- introducing alternative forecast tables

---

7 AER, *Annual Information Orders – Electricity*, April 2024.

8 Type 1 capital contributions are any contribution where the tax payable is recovered through the corporate income tax allowance used to derive the annual revenue requirement. Type 2 capital contributions are any contribution that does not meet the definition of a type 1 contribution.

- providing options for forecasting overheads
- improving immediate expensing inputs
- improving asset disposal inputs.

The changes for each of these proposals are discussed below.

2.2.1 Introducing a DNSP category output tab

Although there is an optional input for DNSPs to set categories, this does not flow through to an output tab in the model. We consider that by providing an output tab with each network's preferred categories, we can improve consistency, transparency, and the ability to reconcile back to our preferred categories.

Our proposed model now contains a tab like the AER output tab, but instead it is populated with the DNSP's preferred categories. Capitalised overheads, capital contributions, and disposals will remain as separate line items. This table is dynamic and will increase in size for any further unique categories input by the DNSP, up to a limit of 90 categories. If no categories are input, the table will not appear and will be marked as unused.

2.2.2 Introducing alternative forecast tables

In our decisions, we currently adjust the direct costs and capital contributions tables in the input tab to reflect our alternative forecast where necessary.[9] This removes the original value included by the DNSP, which reduces transparency and prevents comparison between what was proposed and the AER's decision on the prudent and efficient level of capex. By allowing inputs for both alternative and proposed forecasts simultaneously we would improve clarity in our decision making.

The proposed updated model contains two new tables in the project input tab to allow for the AER to input an alternative forecast for both direct costs and type 1 capital contributions.

The tables downstream of the project input tables have been updated to use either the proposed table or the decision table, depending on the stage of the determination (proposal, draft decision, revised proposal, final decision) selected in the setup tab (section 2.3.3).

2.2.3 Providing options for forecasting overheads

Throughout recent revenue determinations, DNSPs have altered the standardised model to incorporate different inputs and variables used to forecast overheads. We consider that improving the flexibility of our model to allow for some of these inputs may benefit processes and reduce the chance of errors being introduced, regardless of whether it deviates from our preferred approach. For example, while our default approach assumes a 75% fixed and 25% variable split, we have also observed and assessed alternative approaches proposed by networks in some cases. The main alternatives we have observed are the addition of a productivity factor or the use of alternative ratios. We consider that including these options will improve the transparency of overheads forecasting and reduce regulatory burden by

[9] Tables 15 and 16 in the original model.

limiting the need for modifications. However, our view remains that any deviation from our standard approach will require explanation and justification.

As shown in Figure 2, the proposed updated model now contains the following inputs for both network and corporate overheads:

- alternative fixed to variable ratios
- optional productivity factors to be included in forecasting overheads.

We recognise that DNSPs have made modifications to overheads approaches using the alternative method table,[10] some of which are minor in nature. We consider that our proposed updates will make modifications more transparent and easier to assess.

Figure 2 – Options for forecasting overheads

34. Options to forecast capatilised overheads

Relevant option	Percentage
Productivity factor to be applied cumulatively from 2026-27 - network overheads	1.00%
Productivity factor to be applied cumulatively from 2026-27 - corporate overheads	0.50%
Portion of capitalised network overheads that are fixed - remainder as variable	75.00%
Portion of capitalised corporate overheads that are fixed - remainder as variable	75.00%

If a productivity factor is selected, it will be applied cumulatively from the first year of the regulatory control period. Further, if the DNSP chooses an alternative fixed to variable ratio, a note in the model will flag this as a deviation from our default approach and justification will be required in the proposal.

While we welcome comments on any aspect of our proposed model, we are particularly seeking stakeholder views on whether the added optionality could allow for the removal of the alternative method table.

2.2.4 Improving immediate expensing inputs

During recent revenue determinations, DNSPs have inserted additional worksheets or supplied supporting models to calculate inputs for immediate expensing.[11]

We consider using project level percentages would improve transparency and accuracy when forecasting expensing. We have included a new table in the project inputs tab for DNSPs to allocate the percentage of that project to be immediately expensed. For clarity, the input is not broken down on an annual basis and assumes that the project is consistently expensed across time. As set out in Figure 3, this table replaces the input table used in the previous expensing tab, meaning the expensing tab in our proposed model is now purely a calculation tab. We consider the new table will replace the need to add tabs or provide supporting models for immediate expensing, reducing the burden on DNSPs.

10 Table 31, in the original model, table 35 in the proposed model

11 Table 28 in the original model.

Figure 3 – Proposed expensing calculation table

63. Immediate expensing (% to be immediately expensed) - Standard Control Services					
		%	%	%	
	PTRM asset class	2024-25	2025-26	2026-27	20
1	Category 1	33.79%	53.57%	42.17%	
2	Category 2	-	-	-	
3	Category 3	31.29%	13.71%	7.90%	
4	Category 4	2.67%	10.36%	20.45%	
5	Category 5	3.71%	10.36%	9.74%	
6	Category 6	-	-	-	
7	Category 7	-	-	-	
8	Category 8	-	-	-	

We note that this approach calculates the percentage to be expensed by calculating the portion of total escalated costs that are expensed for each asset class. This assumes that direct costs, overheads, and escalations will all be expensed at the applied percentage. An alternative approach the model could take is to provide a separate input for the proportion of all overheads to be expensed, while applying the project specific percentage to escalated direct costs only.

While we welcome comments on any aspect of our proposed model, we are particularly seeking stakeholder views on which approach to immediate expensing inputs most accurately reflects current practice.

2.2.5 Improving asset disposal inputs

Like immediate expensing, asset disposal inputs often require supporting calculations that make it more difficult for networks to populate.[12] We propose itemising disposals to improve the input process for DNSPs and increase transparency.

To incorporate this, we propose to expand and modify the current table for asset disposals, by adding a line for each forecast disposal. As shown in Figure 4, each disposal will remain broken down by year and then can be assigned to a single asset class. This will allow DNSPs to include specific assets or asset types being sold, improving transparency.

Figure 4 – Proposed asset disposal input table

27. Forecast asset disposals ($'000s 2023-24 June)										
	Description	PTRM asset class	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Forecast period
1	Depot sale	Category 5	-	-	10,000.00	-	-	-	-	**10,000.00**
2	Heavy vehicles	Category 6	1,000.00	500.00	800.00	900.00	700.00	900.00	1,400.00	**4,700.00**
3	Equipment sale	Category 8	-	-	2,000.00	-	-	3,000.00	-	**5,000.00**
4	IT sale	Category 9	-	-	-	3,000.00	-	-	-	**3,000.00**
5										-

2.3 Improving processes

Since the publication of our current model, we have found areas where the model could be streamlined. These include:

- removing the forecast for the last two years of current period
- removing the type 2 customer contributions forecasts from the model

[12] Table 22 in the original model.

- updating the inputs setup tab
- simplifying cost escalations
- improving project costs presentation
- streamlining AER category allocation
- improving readability and data integrity.

These proposed changes are discussed below.

2.3.1 Last two years of current period

Following submissions on the original model in 2021, we included the final two years of the current period into the standardised capex model to maintain consistency with the roll forward model. However, since then we have not seen DNSPs make material use of this function as it would require all projects that have expenditure in those two years to be included. Although our proposed model retains these inputs, we consider removing them may reduce regulatory burden and streamline the model.

While we welcome comments on any aspect of our proposed model, we are particularly seeking stakeholder views on the removal of these two years from the current model.

2.3.2 Type 2 capital contributions

Our current model includes input and forecasting for type 2 capital contributions, which are not considered for the capex forecast used in the PTRM. This was intended to assist with reconciliation to the RINs and other historical data. However, we consider that this functionality is simplistic and is duplicative with processes undertaken in other supporting models.

While we welcome comments on any aspect of our proposed model, we are particularly seeking stakeholder views on the removal of the inputs, calculations, and outputs associated with this from the current model.

2.3.3 Input setup tab

As a result of other proposed amendments, we propose to update the setup worksheet to support the amendments discussed in this paper. This includes a new input to select the relevant stage of the revenue determination.[13] We also propose to exclude the tables that have been made unnecessary by our proposed amendments and move the first year of regulatory control period input to this worksheet.

To align with the Annual Information Orders, we have also replaced the 'Distribution or Transmission' option with a choice between either standard control services or dual function assets.

The proposed setup options are outlined in Figure 5 below.

[13] Table 2 in the proposed model.

Figure 5 – Proposed setup options

1. Business name	•	Enter DNSP name
2. Determination stage	•	Draft decision
3. First year of regulatory control period (YYYY-YY)	•	2026-27

4. Financial years
2020-21
2021-22
2022-23
2023-24

	12. PTRM asset classes	Type of service	
1	Category 1	SCS	
2	Category 2	DFA	
3	Category 3	SCS	
4	Category 4	SCS	

2.3.4 Real cost escalation

In the current model, the escalation table is spread over three sections with an additional area used to conditionally format the table.[14] As shown in Figure 6, our proposed model simplifies this table into two sections with updated formulas to incorporate the removed section.

Figure 6 – Updated escalation table

15. Forecast real price escalation

	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	•
Annual escalation								
Internal labour	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	•
Contract labour	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	•
Non-labour	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	•
Cumulative								
Internal labour	0.45%	1.35%	2.27%	3.19%	4.11%	5.05%	6.00%	
Contract labour	0.05%	0.15%	0.25%	0.35%	0.45%	0.55%	0.65%	
Non-labour	0.02%	0.08%	0.13%	0.18%	0.23%	0.28%	0.33%	

Further, when the base month selected is June the current model contains a note that requests only 6 months of real cost escalation inputs for the first year. We propose removing this note and instead building this effect into the cumulative escalation calculation when June is selected as the base for inputs. This update means escalation inputs should consistently be provided as a 12-month series.

2.3.5 Improving project costs presentation

To improve functionality and streamline the project costs calculation tab, we propose removing the direct unescalated costs[15] and making the real cost escalation rate tables collapsible.[16]

We also propose to condense the functions of the unescalated costs table into the formulas included in the escalated costs table. This simplifies the worksheet and allows for direct escalated costs to be the primary expenditure table, ensuring consistency between presentations of project level expenditure forecasts.

Further, the mapping of project categories is currently only visible in the inputs sheet. Given the project costs calculation sheet is used as an output more often, having the option to filter by category at this stage would provide additional functionality. To improve usability, our

14 Table 12 in the original model, table 15 in the proposed model.

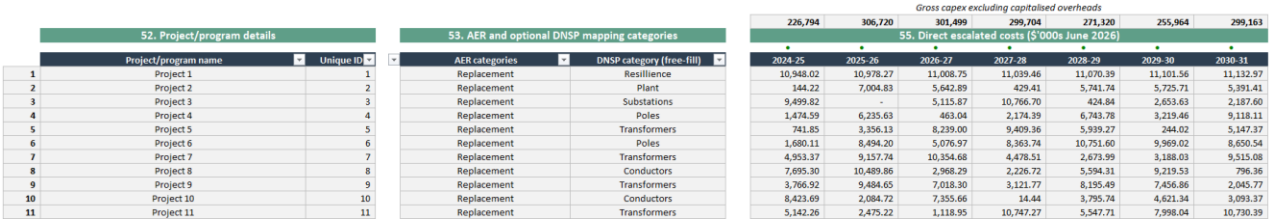
15 Table 46 in the original model.

16 Table 47 in the original model, table 54 in the proposed model.

proposed model includes a new table in the project cost calculation tab to reflect the categories mapped to each project as set out in Figure 7.[17]

We also propose replacing the sums at the top with subtotals to allow filtering and live calculations, with subtotals conditionally formatted to show as italics and totals to appear as bold. This provides the functionality to select specific projects or categories in the filters with a live total for each table.

Figure 7 – Proposed *'Calc| Project Costs'* presentation



	52. Project/program details		53. AER and optional DNSP mapping categories	
	Project/program name	Unique ID	AER categories	DNSP category (free-fill)
1	Project 1	1	Replacement	Resillience
2	Project 2	2	Replacement	Plant
3	Project 3	3	Replacement	Substations
4	Project 4	4	Replacement	Poles
5	Project 5	5	Replacement	Transformers
6	Project 6	6	Replacement	Poles
7	Project 7	7	Replacement	Transformers
8	Project 8	8	Replacement	Conductors
9	Project 9	9	Replacement	Transformers
10	Project 10	10	Replacement	Conductors
11	Project 11	11	Replacement	Transformers

Gross capex excluding capitalised overheads						
226,794	306,720	301,499	299,704	271,320	255,964	299,163
55. Direct escalated costs ($'000s June 2026)						
2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
10,948.02	10,978.27	11,008.75	11,039.46	11,070.39	11,101.56	11,132.97
144.22	7,004.83	5,642.89	429.41	5,741.74	5,725.71	5,391.41
9,499.82	-	5,115.87	10,766.70	424.84	2,653.63	2,187.60
1,474.59	6,235.63	463.04	2,174.39	6,743.78	3,219.46	9,118.11
741.85	3,356.13	8,239.00	9,409.36	5,939.27	244.02	5,147.37
1,680.11	8,494.20	5,076.97	8,363.74	10,751.60	9,969.02	8,650.54
4,953.37	9,157.74	10,354.68	4,478.51	2,673.99	3,188.03	9,515.08
7,695.30	10,489.86	2,968.29	2,226.72	5,594.31	9,219.53	796.36
3,766.92	9,484.65	7,018.30	3,121.77	8,195.49	7,456.86	2,045.77
8,423.69	2,084.72	7,355.66	14.44	3,795.74	4,621.34	3,093.37
5,142.26	2,475.22	1,118.95	10,747.27	5,547.71	7,998.04	10,730.39

Note: in this image, the real cost escalation table is hidden.

2.3.6 Streamlining AER category allocation

In the current model, AER categories are allocated through a large table that allows for projects to be split across multiple categories.[18] We have not seen DNSPs make use of this capability.

We propose to remove this table and instead allocate projects using one column that assigns an AER category to the project. In our proposed model, this column has replaced the RIN category column discussed in section 2.1 as shown in Figure 8 below.

Figure 8 – Proposed AER category allocation

16. Project Details		
	Project/Program Inputs	Unique ID
1	Project 1	1
2	Project 2	2
3	Project 3	3
4	Project 4	4
5	Project 5	5
6	Project 6	6

17. AER and optional DNSP mapping categories	
AER categories	DNSP category (free-fill)
Replacement	Resillience
ICT capex	Digital
Fleet capex	Innovation
Connections	Residential connections
Property capex	Buildings
Other non-network capex	Equipment

2.3.7 Improving readability and data integrity

To improve readability, we propose to update number formatting to include thousand separators (commas) for all relevant values in the model. We have also updated the output tables to automatically display values as millions to better reflect how they are used in revenue determinations and improve consistency across output sheets.

Further, some cells in the model displayed errors as blank values when they should display as a dash (-). We have updated these cells to correct this.

[17] Table 53 in the proposed model.

[18] Table 20 in the original model.

Our review also found that there is limited data validation applied to inputs. By incorporating data validation, we can reduce the risk of errors and invalid values being included in the model. Some of the proposed changes include:

- escalations must be a number greater than -100%
- allocations must be between 0 and 100%
- costs must be a numeric value
- first year of regulatory control period must be in the format YYYY-YY.

We also propose to update the formatting and colours used in the model to match the Annual Information Orders.

2.4 Identified modelling corrections

Our review of the model found errors in calculations and descriptions. We have identified the following errors to be updated, including:

- a double count in the overhead escalation calculation
- clarifying escalation inputs
- correcting financial year interpretation

Each of these proposed changes are discussed below.

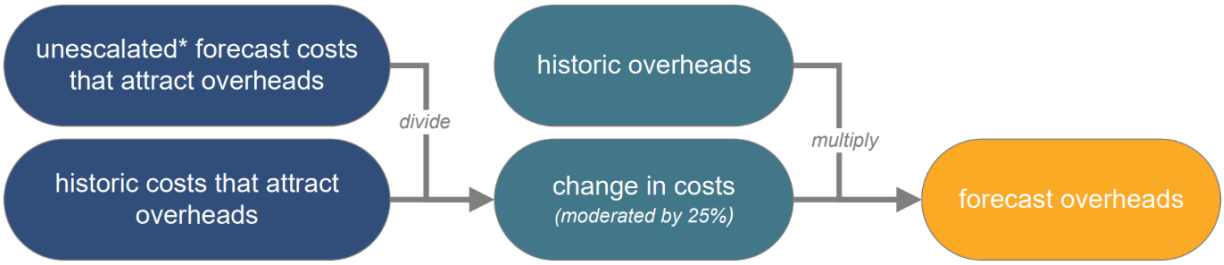
2.4.1 Overhead escalation error

We identified a modelling error in our overheads forecasting approach. To determine the change in overheads from actuals to forecast, the current calculation compares actual historic direct costs to forecast escalated direct costs. It then applies an escalation to the overhead costs separately. We consider that this approach is inaccurate as it captures the impacts of escalations twice, noting that the first calculation is moderated by our 75% fixed to 25% variable approach.

As demonstrated in Figure 9, our proposed model now compares actual historic direct costs to forecast unescalated direct costs to determine the change in overheads. Overheads will remain escalated by a real cost escalation factor specific to the relevant forecast cost components.[19] By comparing historic costs to unescalated forecast costs we are removing the impact of escalation in this step, only incorporating it in the later step. To reflect this approach, our proposed model now includes two further tables for unescalated costs that attract overheads (both direct and internal labour).

[19] Table 45 in the original model, table 49 in the proposed model.

Figure 9 – Flow chart of the proposed default overhead forecasting approach



*the current approach uses escalated forecast costs in the first step.

2.4.2 Inflation inaccuracies

The note assigned to inflation is fixed text and may not correctly articulate the required consumer price index (CPI) for specific DNSPs. Specifically, it calls for a 12-month lagged CPI series to be input regardless of jurisdiction. We propose to make the description dynamic to change based on the jurisdiction of the DNSP. This will select 'Lagged' if the network is in Victoria, while 'Actual' will be displayed for any other jurisdiction.[20]

Further, our proposed model now also includes a specific reference to the roll forward model as a source. This will help to ensure consistent CPI inputs from DNSPs. We also propose to remove forecast inflation from the model and restrict input years to those in the current regulatory period, as we do not consider that inputs should be based in forecast years. The proposed inflation inputs are set out in Figure 10.

Figure 10 – Proposed inflation inputs

13. Inflation table setup

	Year	Month
Base year for inputs	2023-24	June
Base year for outputs	2026	June

14. Inflation

	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	June 2026
CPI year on year change (%) - from RFM inputs	1.00%	2.00%	4.50%	0.50%	3.00%	6.00%	
Cumulative Inflation Index	1.0100	1.0302	1.0766	1.0819	1.1144	1.1813	
Nominal to Real 2026 June	1.1754	1.1580	1.1217	1.0945	1.0758	1.0296	
Real 2023-24 June to Real 2026 June							1.0918

Further, the nominal conversion multipliers were incorrectly dependent on the input month.[21] We consider this calculation should always assume the input is in December dollar terms, noting this is only used to convert historical overheads.[22] Our proposed model is amended to reflect this position.

2.4.3 Financial year interpretation errors

The current model may produce errors or blanks when certain input years are selected. To resolve these issues, we propose to:

- trim the financial year list

20 Table 15 in the proposed model.

21 Table 15 in the proposed model.

22 Tables 37 and 38 in the original model, tables 40 and 41 in the proposed model.

- update formulas to prevent blanks

2.5 Questions on the distribution capex model

1) Are there any elements that have not been discussed in this paper that stakeholders have concerns with in the existing model that we should consider?
2) What are stakeholder views on the proposed amendments outlined above?
3) Do the added options to alter the forecast methodology for overheads eliminate the need for the alternative method table (table 35 in the proposed model)? If not, what further options can be provided to allow for dynamic forecasting within the model?
4) What are stakeholder views on the proposed approach to immediate expensing, particularly the treatment of overheads?
5) What are stakeholder views on the proposed removal of the forecast for the final 2 years of the current regulatory period from the standardised capex model?
6) What are stakeholder views on the proposed removal of forecast type 2 capital contributions from the standardised capex model?

3 Transmission

We propose to introduce a standardised TNSP capex model for use in determinations. This is intended to minimise the regulatory burden for both regulated networks and the AER. A standardised model clearly states the information we require and the preferred format, reducing the amount of unnecessary data being fed into the model and limiting errors and ambiguities that arise from using a bespoke model. Overall, this reduces the burden on a TNSP, as it will not need to provide revised models when errors and ambiguities are identified.

Currently there is no standardised capex model for electricity transmission networks, leaving the burden on a TNSP to determine how to present its capex forecast and make a bespoke model. A standardised capex model means the responsibility would lie with the AER to communicate the data needs and manage formulas for TNSPs.

Bespoke capex models from TNSPs sometimes provide information in a format that is unclear, ambiguous, or lacking data that we routinely need for our assessments. Further, there have been instances where the bespoke models contain calculation errors. This imposes a burden on the AER and the TNSP to identify shortcomings and address them during the revenue determination process.

Additionally, as each TNSP's bespoke model is unique, it is difficult for us and stakeholders to compare proposals across TNSPs. If a TNSP significantly updates its own capex model, it is also difficult to compare a single TNSP's proposals over time.

The proposed model includes output pages that automate calculations and maintain equal baseline data requirements across the networks in a clear format. This will contribute to an overall reduction in reporting responsibilities for networks.

Introducing a standardised TNSP model is consistent with a commitment made in our letter to the Treasurer. In that letter, we committed to streamline and simplify obligations in the energy sector, finding ways to reduce regulatory burden for stakeholders. [23]

Through consultation with TNSPs, we aim to produce a model that fulfills our data requirements and is user friendly for all networks and stakeholders.

3.1 Approach

In developing our proposed transmission model, we assessed all capex models used by the transmission networks. We recorded each table used in every model and how it interacted. We looked at categories used by the network in its reporting to ensure the model could account for each category.

Our findings revealed many commonalities across the TNSPs' models, and we were able to use our distribution standardised capex model as a base to transpose all the consistently reported tables. We were able to include additional worksheets to cater to transmission-specific data requirements, such as reporting 'as commissioned' expenditure. We have also

[23] AER, *Letter to the Treasurer - Regulatory reform opportunities*, August 2025.

ensured that the proposed model is consistent with the needs of other AER models, such as the PTRM.

For tables and other data that was specific to a particular business, we assessed the impact of its inclusion or removal in our proposed standardised model. This assessment included considering how data would interact with models such as the roll forward model and the PTRM. Further, we considered what information could be provided in separate material, such as project specific business cases.

As a standardised capex model has not previously existed for TNSPs, we intend to engage with networks to ensure our model is fit for purpose and easy to understand.

3.2 Transmission specific requirements

We have used the distribution capex model as the basis for our proposed transmission capex model, as there is broad overlap in the information required for assessing TNSP and DNSP capex proposals. Features we identify as specific to TNSPs in our proposed transmission capex include forecasting on an 'as commissioned' basis.

We have made further adjustments to the model to align with transmission capex, that include:

- updating project categorisation
- removing unnecessary tables
- determining required tables for small networks, and
- adjusting for movement in provisions.

These are discussed below.

3.2.1 Forecasting on an as commissioned basis

Transmission networks report capex in their PTRMs on both an 'as incurred' and 'as commissioned' basis.[24] The current standardised capex model used for DNSP determinations only facilitates forecasting on an 'as incurred' basis.

Our proposed model includes both 'as incurred' and 'as commissioned' capex outputs to meet the requirements for a transmission revenue determination.

We maintain our view that capex assessments and alternative forecasts should be on an 'as incurred' basis. However, our capex model must produce an 'as commissioned' capex forecast for the PTRM to determine the return of capital building block (regulatory depreciation).

[24] For 'as incurred', capex for an asset is reported year by year as it is spent. For 'as commissioned', capex for an asset is recorded only when the asset is put into service. As illustration, consider an asset where $1 million is spent per year for 3 years. On an as incurred basis, the business reports $1 million each year for those 3 years. On an as commissioned basis, the business reports the entire $3 million in the final year of spending, or whichever year the asset goes into service.

3.2.1.1 Prior spending

An ‘as commissioned’ capex forecast sums up all prior spending on a project when it is put into service. Our proposed transmission capex model allows cost inputs for the five years of the forecast period and the final two years of the current period. We have also included an input table which allows for spending prior to the current seven years to be provided at a project level, shown in Figure 11.[25]

Figure 11 – Proposed prior spending inputs table

28. Pre-2024-25 actual costs ($'000s 2023-24 June)		
Unescalated direct costs	Capitalised network overheads	Capitalised corporate overheads
1,598.60	464.54	351.63
-	-	-
-	-	-
1,076.75	25.18	45.99

To improve transparency, we have also introduced further information requirements, namely that prior spending be broken down into direct costs and capitalised overheads.

We acknowledge that the inputs described above may require more information from businesses than they currently report. We are open to stakeholder feedback regarding the level and form of information necessary to be reported for an ‘as commissioned’ capex forecast.

3.2.1.2 Options for ‘as commissioned’ capitalisation timings

Not all projects are ‘commissioned’ when the final dollar is spent. Our proposed model accounts for this by allowing a choice of as commissioned capitalisation timings for each project. Figure 12 shows Table 27 of our proposed model, which allows businesses to choose from ‘project close’, ‘as incurred’, and ‘other’.

Figure 12 – Proposed commissioning timing inputs table

27. As commissioned timing	
Commission capitalisation timing	Project close year
As incurred	
Project close	2028-29
As incurred	
Project close	2025-26
Project close	2028-29
As incurred	

For ‘project close’, businesses must choose the singular year in the recorded period when the project is put in service, and all reported capex will be summed into that year. The ‘as

[25] Table 28 in the proposed model.

incurred' option is for projects capitalised annually, and it makes 'as commissioned' capex equal to 'as incurred' capex. The 'other' option allows businesses to identify what percentage of a project's capex is commissioned each year, via Table 29 of the proposed model. Figure 13 shows this proposed table.

Figure 13 – Proposed commissioning (%) inputs table

29. Project commissioned (%) by year						
2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
19.35%	43.16%	4.56%	17.80%	15.13%	-	-
-	-	11.36%	27.27%	27.27%	34.09%	-
6.82%	20.46%	72.72%	-	-	-	-

3.2.1.3 Asset disposals

Our proposed model assumes that asset disposals 'as de-commissioned' are equal to asset disposals 'as incurred'. A review of historical TNSP data provided to the AER did not identify any instance where asset disposals 'as de-commissioned' did not equal asset disposals 'as incurred'. While we welcome comments on any aspect of our proposed model, we are particularly seeking stakeholder feedback on any outlier case our approach to asset disposals may have overlooked.

3.2.2 Project categorisation

We note projects have primarily been categorised by TNSPs using business specific categories. For each project, we have included an input for networks to nominate a bespoke category. However, we have also included an input to select the applicable AER-preferred category from a list of options. These categories are consistent with the pre-existing reporting requirements in the annual information orders and will allow for easier reconciliation and transparency.

For some categories such as spares or refurbishments, these can be reported under replacement expenditure. If a network considers more context for a project is required, we recommend it is included in either the regulatory proposal document or a separate business case.

3.2.3 Unnecessary tables

While the requirements of the standardised capex model are generally appropriate for transmission networks, we have not included tables we consider unnecessary. For instance, we propose to not include the option to define asset classes as either distribution or transmission, so the model assumes all assets are transmission. We have also not included input and output tables for type 1 capital contributions, as no transmission business is required to report them in the PTRM.

We also have not included tables where there is a possibility of reporting information not relevant to our assessment of the capex forecast. Examples of this include breakdowns of

secondary allocations in replacement and augmentation expenditure and expenditure for contingent projects. This information can be sourced through individual information requests if needed and removing these data points will reduce the burden on networks.

While we welcome comments on any aspect of our proposed model, we are particularly seeking stakeholder views on whether networks require the tables we propose to omit.

3.2.4 Adjustments for smaller networks

We understand for smaller networks,[26] the proposed model may be more detailed than necessary for its proposal. We intend to engage with these networks and adjust reporting requirements where they are not relevant.

3.2.5 Adjusting for movement in provisions

Our proposed model has not included a table for forecast movement in provisions. However, we are open to stakeholder feedback on whether adjustments for movement in provisions should be included, and, if so, how they should be included.

We consider there are three options for the treatment of movement in provisions:

- **Option 1 – Not include movement in provisions in the capex model.**
  This approach is consistent with how it is treated for operational expenditure forecasts. It relies on the assumption that in the long-term provisions equal zero, and in the short term any movement is immaterial. We consider that movement in provisions should only be reported as actual or estimate data to reconcile with the roll forward model and reflect realised expenditure.
- **Option 2 – Divide movement in provisions proportionally among asset classes.**
  As a last step adjustment to PTRM capex inputs, a total yearly movement in provisions amount would be proportionally divided among PTRM asset classes. For example, if an asset class accounts for 4% of yearly capex, it will receive 4% of the yearly movement in provisions adjustment.[27] This method would require additional input and output tables and increase data requirements on TNSPs.
- **Option 3 – Include movement in provisions as a separate line item.**
  The movement in provisions adjustment could be included as a line item on the "Input| Projects – as Inc" page, alongside the TNSP's regular projects. To divide the adjustment between PTRM asset classes, the TNSP will need to nominate multiple PTRM asset classes for the movement in provision adjustment.[28] This method would not require additional input and output tables and would be based on actuals in the current period

---

26 This refers to interconnectors that provide prescribed transmission services.

27 For illustration, consider a year with negative $1.00 million movement in provisions. Assume the PTRM asset class "computer equipment" accounts for $5.00 million, or 4% of total yearly net capex. Therefore, 4% of the negative $1.00 million total yearly movement in provisions (negative $0.04 million) will be assigned to computer equipment. After adjustment, that year's capex for "computer equipment" will be $4.96 million.

28 To divide this amount across PTRM asset classes, the TNSP can use "Table 24. PTRM asset classes as % of direct costs". For most project line items, a TNSP selects a single PTRM asset class to receive 100% of costs. However, the table allows the business to divide spending across multiple asset classes.

and would be considered as a one period lag forecast. This approach would be similar to the superannuation adjustment done by SA Power Networks in its forecast capex.[29]

3.3 Questions on the transmission capex model

7) Are there tables that stakeholders consider unnecessary that are included in the proposed model?
8) What are stakeholder views on how 'as commissioned' forecasts are input and calculated in the model?
9) What are stakeholder views on presenting 'as commissioned' inputs at a project level?
10) Are there any cases where asset disposals 'as incurred' and 'as de-commissioned' will differ, which the model would need to account for?
11) Are there tables that are not included in the proposed model which stakeholders consider necessary? Specifically, is the exclusion of type 1 capital contributions reasonable?
12) Of the three options presented on movements in provisions, which one do stakeholders consider the most appropriate and why?

[29] See: AER, *Final Decision - SA Power Networks - 2025-30 Distribution determination revenue proposal - AER Standardised Capex model*, April 2025. Specifically see project "Superannuation", unique ID "OTH002".

Glossary

Term	Definition
AER	Australian Energy Regulator
capex	capital expenditure
CPI	consumer price index
DNSP	distribution network service provider
NEL	National Electricity Law
NER	National Electricity Rules
PTRM	post-tax revenue model
RIN	regulatory information notice
SCS	standard control services
TNSP	transmission network service provider