30 August 2021

Sebastian Roberts
General Manager - Expenditure
Australian Energy Regulator
by email: standardSCScapexmodel@aer.gov.au

Dear Sebastian

Re: Standardised standard control services capital expenditure model

CitiPower, Powercor and United Energy appreciate the opportunity to respond to the Australian Energy Regulator's (AER) issues paper and draft standardised standard control services (SCS) capital expenditure (capex) model.

We support the AER's objective of standardising capex models across networks to streamline the preparation and review of the consolidated capex models for input into the post-tax revenue model (PTRM). We also broadly support the draft SCS capex model structure. Our submission therefore focusses on some technical feedback on the model, including:

- ensuring flexibility for non-labour price escalators to be proposed in the regulatory determination process
- providing clarity regarding the treatment of gifted assets
- ensuring the model is transparent, flexible and simple, consistent with best practice modelling principles.

Additionally, we encourage the AER to review the Regulatory Information Notices (RINs) to ensure the data collected is relevant to the AER's assessment process. We would also appreciate the AER consolidating its RINs to reduce the administrative processes and audit costs which are ultimately borne by our customers.

We would be happy to meet to discuss this letter or should you have any queries you're welcome to contact Megan Willcox on ████████████████████████

Yours sincerely

Mark de Villers
Head of Regulatory Finance, Modelling and Pricing
CitiPower, Powercor and United Energy

40 Market Street
Melbourne VIC Australia
T (03) 9683 4444
F (03) 9683 4499

CitiPower Pty Ltd
ABN 76 064 651 056
General Enquiries 1300 301 101
www.citipower.com.au

Powercor Australia Ltd
ABN 89 064 651 109
General Enquiries 13 22 06
www.powercor.com.au

United Energy Distribution Pty Ltd
ABN 70 064 651 029
General Enquiries 13 22 09
www.ue.com.au

1. The model should allow flexibility for networks to proposed non-labour price escalation

We do not agree with the AER's preliminary position to prevent networks from proposing non-labour price escalators in the SCS capex model. We understand the AER has tended not to allow non-labour price escalators in recent regulatory determinations and changing the AER's position would require substantive evidence to be presented. Nonetheless, we consider the value of non-labour price escalation should remain subject to the regulatory determination process, with networks having the option to propose non-labour price escalators.

We note that over time market conditions for non-labour inputs can, and have, substantially changed and networks should be afforded the opportunity to present evidence in support of non-labour price escalation reflecting efficient forecast costs.

Allowing flexibility in the SCS capex model for networks to propose a value for non-labour escalation is more consistent with the propose-respond framework in the National Electricity Rules and clause 6.5.7(3)(c) which requires the AER to accept a total capital expenditure forecast which reasonably reflect a realistic expectation of cost inputs required to achieve the capital expenditure objectives.

2. Clarity regarding the treatment of gifted assets

In Victoria, networks pay a cash rebate to a connection customer that gifts assets to us. The rebate value is equal to the value of forecast incremental revenue to ensure competitive neutrality between a third party and the distributor constructing the connection assets. The gifted asset value that we report is our estimate of the construction cost of assets that have been gifted to us.

On 21 October 2020, the Federal Court of Australia published a decision which impacts the tax treatment of customer contributions. The decision confirms that only cash contributions should be treated as assessable income for income tax purposes, whereas previously cash contributions and gifted assets has been treated as assessable revenue. The decision also confirms that where assets are constructed and "gifted" to us the associated rebate is now to be treated as a tax depreciating asset.

Consistent with our 2021-2026 final determination:

- gross capex for the purposes of calculating tax depreciation and rolling forward the tax asset base should be our cost of construction plus our cost of rebates

- net capex for the purposes of calculating regulatory depreciation and rolling forward the regulatory asset base should be gross capex as defined above less the value of cash contributions

The draft SCS capex model currently provides inputs for gifted assets and cash contributions, but not rebates. We therefore recommend the AER provide for an additional input for the value of rebates to be included and for net and gross capex to be calculated as above.

We also recommend the data and terminology in the model be consistent with the basis for reporting data in template 8.2 of the Annual RIN, with separate inputs for direct cost, gifted assets, rebates and cash contributions. For example, the heading for *'Input|Projects'* columns I:M indicates that the costs in these columns include gifted assets, which is not how net capex is currently reported in RIN data. It would be clearer if gifted assets were input separately (along with rebates and cash contributions).

3. Ensuring the model is transparent, flexible and simple, consistent with best practice modelling principles

We suggest some technical changes, included in appendix 1, consistent with best practice modelling principles which would make the model smaller in size, more flexible and improve transparency. These principles include

- avoiding fixed numbers in formulas

- assigning each column a consistent year or purpose throughout the model

- constructing formulas so they are consistent across columns

- avoiding volatile functions such as INDIRECT & OFFSET as they introduce a high risk of error, are difficult to check, and reduce calculation speed.

We also identified two missing formula on *'Input| Expensing'* sheet:

- the formula in cell I17 should be copied down to I18:I57 and cell I6 should then refer to I8:I57

- the formula in cell P532 should be copied down the column to row 1008.

4. Keeping the SCS capex model fit for purpose

We understand the intended purpose of the SCS capex model is to enable consolidation of capex inputs and calculate the outputs needed to populate the AER's PTRM. We agree with this intended purpose and consider the AER's draft model delivers this.

We therefore recommend the AER not be tempted to add in new purposes for the model over time, including for example adding in additional templates which support population of the reset RIN or to add in historical time series of data. Population of additional reset RIN templates for example would require the model to accommodate networks various different approaches for mapping internal accounting policies with RIN categories. Such an approach would also likely create additional work for the AER in understanding all the different mappings across networks.

Our concern is the more the AER seeks to achieve in a single model, the greater the likelihood that the model loses flexibility and transparency which could undermine its original objective. We consider there are other ways better suited to efficiently deliver the additional inputs and outputs relevant to the AER's assessment processes, beyond population of the SCS capex model and PTRM.
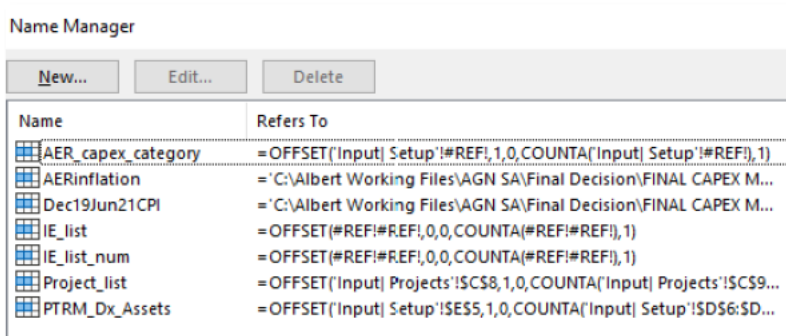
Appendix 1 – Proposed model adjustments

Missing formulae

On *'Input| Expensing'* sheet, the formula in cell I17 should be copied down to I18:I57. Cell I6 should then refer to I8:I57

Also on *'Input| Expensing'* sheet, the formula in cell P532 should be copied down the column to row 1008.

Defined names

Remove links to external files in named ranges, or delete the named range if not used

AERinflation

Dec19Jun21CPI

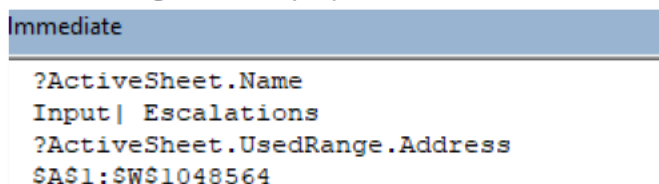Delete defined names with errors

AER_capex_category

IE_list

IE_list_num

Reduce the model size

The two changes described below reduced the file size from 7 MB to less than 1 MB without losing any functionality. This will make the model faster and more stable.

i. File type
Save as "xlsb" file type instead of "xlsm". This typically results in a significant reduction in file size and faster file opening/saving.

ii. Used range
Excel stores only the "used range" part of each worksheet.

The "used range" of the *'Input| Escalation'* sheet was A1:W1048576, over 24 million cells.

This causes the file size of the workbook to be much larger than necessary, since there is no data beyond row 25. We found that the usual method of deleting blank rows and clearing the formats didn't solve the problem. It can be fixed by:

- – Added a new blank sheet (*'Sheet1'*)
- – Copied cells A1:J25 to the new sheet
- – Used "replace all" to change "Input| Escalations" to "Sheet1" within the whole workbook
- – Deleted *'Input| Escalations'*
- – Renamed the new sheet to be "Input| Escalations"

Hardcoded numbers in formulae

The model often uses INDEX/MATCH with a hardcoded number in the formula for the row reference. This could result in a lot of extra work to update if additional rows are added later.

The formula could be changed to refer only to the one row (or match based on a unique heading or description) and then the hardcoded input won't be required.

Calc| Overheads Allocation rows 30 & 31, 35 & 36, 65 & 66 all include a hardcoded number in the formulae.

> For example, the current formula for cell C30 is:
>
> ='Input| Overheads'!C16*INDEX('Input| Escalations'!$C$14:$I$19,~~5,~~MATCH(C29,'Input| Escalations'!$C$14:$I$14,0))
>
> Could be changed to:
>
> ='Input| Overheads'!C16*INDEX('Input| Escalations'!C**18**:I**18**, MATCH(C$29,'Input| Escalations'!$C$14:$I$14,0))

This formula can then be copied directly to rows 31, 35 and 36

OFFSET function

The OFFSET function is a 'volatile' function and uses more memory, slows down models and can cause model instability. The trace dependents function often doesn't work for a cell that is referred to by OFFSET.

The stability and transparency of the model will be improved if OFFSET isn't used.

Cells D9:I58 and D66:I115 on the *'Output| PTRM'* sheet currently use OFFSET.

> For example, the current formula for cell D9 on *'Output| PTRM'* is:
>
> =IFERROR(SUMPRODUCT(OFFSET(INDEX('Input| Projects'!$X$9:$BU$532,1,MATCH($C9,'Input| Projects'!$X$8:$BU$8,0)),0,0,1000,1),'Calc| Project Costs'!CG$9:CG$1008)/10^3,"")
>
> Could be changed to:
>
> =SUMPRODUCT(INDEX('Input| Projects'!$X$9:$BU$1008, ,MATCH($C9, 'Input| Projects'!$X$8:$BU$8,0)), 'Calc| Project Costs'!CG$9:CG$1008)/10^3

Blank formatting

Cells that are formatted to appear blank can easily be deleted or overtyped. Where columns are used for checks make it clear that they're not blank columns. This could be done by shading, showing a value (TRUE or FALSE) or custom formatting to show a symbol if the result is zero, rather than "".

> For example:
>
> *'Input| Expensing'* Column I

2024-25	2025-26	
2.00%	0.50%	-
2.00%	2.00%	-
0.00%	0.00%	-
0.00%	0.00%	-
2.00%	2.00%	-
0.00%	0.00%	-
0.00%	0.00%	-
0.00%	0.00%	-
0.00%	0.00%	-
0.00%	2.00%	-

Unused formulae with errors

Cells K22 and K24:L34 of the *'Input| Escalations'* sheet contain an array formula that includes a #REF error. The IFERROR function resulted in the cells being formatted as blank.

	J	K	L
19	=INDEX(C14:I18,5,MAT(		
20			
21			
22		=IFERROR(TRANSPOSE(#REF!),"")	
23			
24		=IFERROR(TRANSPOSE(#REF!),"")	=IFERROR(TRANSPOSE(#REF!),"")
25		=IFERROR(TRANSPOSE(#REF!),"")	=IFERROR(TRANSPOSE(#REF!),"")
26		=IFERROR(TRANSPOSE(#REF!),"")	=IFERROR(TRANSPOSE(#REF!),"")
27		=IFERROR(TRANSPOSE(#REF!),"")	=IFERROR(TRANSPOSE(#REF!),"")
28		=IFERROR(TRANSPOSE(#REF!),"")	=IFERROR(TRANSPOSE(#REF!),"")
29		=IFERROR(TRANSPOSE(#REF!),"")	=IFERROR(TRANSPOSE(#REF!),"")
30		=IFERROR(TRANSPOSE(#REF!),"")	=IFERROR(TRANSPOSE(#REF!),"")
31		=IFERROR(TRANSPOSE(#REF!),"")	=IFERROR(TRANSPOSE(#REF!),"")
32		=IFERROR(TRANSPOSE(#REF!),"")	=IFERROR(TRANSPOSE(#REF!),"")
33		=IFERROR(TRANSPOSE(#REF!),"")	=IFERROR(TRANSPOSE(#REF!),"")
34		=IFERROR(TRANSPOSE(#REF!),"")	=IFERROR(TRANSPOSE(#REF!),"")
35			

IFERROR function

IFERROR is used extensively throughout the model. While sometimes helpful, IFERROR can mask other errors that should be corrected (refer above). Other, more specific logic checks could be used, such as ISNA, or check whether the denominator equals zero, etc.

If the project names in cells C9:C1008 of *'Input| Projects'* are set to zero as a default then almost all IFERROR statements in the model could be removed, as the calculations won't have to deal with the text "".

Use logic functions or calculations for checks instead of text ("")

If IFERROR is used, it would help with checks and consolidating data if it used zero instead of "".

For example, *Calc| Project Costs* cells M9:Q1008

The current formula in cell M9 is:

= IF($C9="","",IFERROR('Input| Projects'!$O9*(INDEX('Input| Escalations'!$C$23:$I$25,3,MATCH('Calc| Project Costs'!M$8,'Input| Escalations'!$C$23:$I$23,0))-1)+1,""))

Could be changed to:

=IF($C9="",0,IFERROR('Input| Projects'!$O9*(INDEX('Input| Escalations'!$G$23:$M$25,3,MATCH('Calc| Project Costs'!M$8,'Input| Escalations'!$G$23:$M$23,0))-1)+1,0))

As a result, the IFERROR function wouldn't be required in columns S:CK.

Remove nested IFs where possible

For example, *'Input| Expensing'* cell I8
The current formula is:
=IF(H8>1,1,IF(G8>1,1,IF(F8>1,1,IF(E8>1,1,IF(D8>1,1,"")))))

Could be changed to

=IF(OR(D8:H8>1), 1, "")

or preferably

= OR(D8:H8>1)

Consistent formulae

A formula should be able to be copied across and down all cells in a contiguous range. This is currently not the case, especially between yearly and total columns and where check columns appear between populated ranges.

A new blank column in between the tables will help. For example, add a blank column on *'Calc|Project Costs'* sheet before and after column Q and before and after Column W.

Alternatively, on *'Calc|Project Costs'* sheet columns Q, W and BV (the check columns) could be moved to the far right of the sheet (eg columns BW and after).

Consistent column headings

Each year should be assigned to the same column in all sheets throughout the model.

For example:
On *'Input| Escalations'* sheet forecast real labour escalation inputs (rows 23:25) shows 2019-20 in column C, while for inflation (rows 14:19 on the same sheet) 2019-20 is in column G.

8. Inflation		
	2015-16	2016-17
CPI year on year change (%) - lagged one year (actual/estimate) June 2021 estimate	1.72%	1.69%
Cumulative Inflation Index	1.0172	1.0344
Index: Nominal to Real 2021 June	1.0947	1.0766
Real 2017-18 December to Real 2021 June		

9. Forecast real labour escalation		
	2019-20	2020-21
Internal labour - real price escalation	1.49%	1.35%
Internal labour index	1.0149	1.0286

The same approach should be applied between worksheets. For example, currently 2016-17 is in column D of *'Input| Escalations'* (rows 14:19) but column C on *'Input| Overheads'*

Show negative sign

If a value greater than 1 is input in column N of *'Input| Projects'*, the value in column O will be negative, but the negative sign won't show. The check in Column P will flag an error, but if the negative sign showed against the value in column O it will be clearer and easier to see the error. Alternatively, to ensure that the value in column O is a positive number use the ABS function.

Other comments

- On *'Calc| Project Costs'* Include column C in the frozen pane on the left-hand side
- Summary tables beneath tables 35, 36, 37, 38, 41, 42, 45, 46 on *'Calc| Project Costs'* would assist with mapping reconciliations

- Hyperlinks on the *'Index'* sheet to each worksheet would be helpful
- *'Index'* sheet cell H19 indicates that *'Model Validation'* tab will be hidden, but it would be preferable for it to be not hidden
- Remove merged cell formatting from table headings and use 'Centre across selection' instead
- Remove white background fill and instead de-select gridlines from the 'View' menu