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Dear Warwick,

RE: AER standardised models for metering services

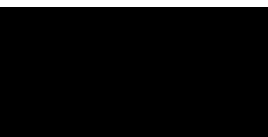
We welcome the opportunity to make this submission on the AER's preliminary standardised models for metering services consultation paper. A 'fit for purpose' standardised set of models will help increase regulatory certainty through a consistent treatment of capex, opex and pricing data across determinations.

We have undertaken a review of the preliminary metering services models and identified some key areas that should be addressed along with other stakeholder views before landing on an agreed approach. As outlined in Appendix 1 (see attached), these range from the operation of specific calculations within the model to broader questions concerning expenditure forecasting methodology. For example:

- It is assumed that both materials and contracted services will not be subject to real cost escalations moving forward. While we appreciate that this approach is consistent with recent AER decisions, the default position should be to allow DNSPs to propose materials and contracted services cost escalations as part of the regulatory price determination process.
- We have identified several issues in the general setup of the preliminary standardised metering capex and opex model some of which are easily dealt with via formula and/or minor structural changes, and we provide some suggested changes for the AER's consideration which achieve the objective of a fit-for-purpose model without unreasonably increasing its size or complexity.
- Inputs and outputs relating to the metering exit fees in the preliminary standardised metering pricing model (metering pricing model) need to be adjusted to ensure it is consistent with the existing models that it is looking to replace.

We look forward to working with the AER on this issue, including through any workshops that may be held. If you have any questions regarding this submission, please contact Steven Martin by email on [REDACTED].

Yours sincerely



Charlotte Eddy
General Manager Regulatory Strategy and Policy
AusNet Services

Part A: Review of AER preliminary standardised metering capex and opex model

1. Input - General

Base Year > Capex - Forecast base year

We note that NSP's can select the forecast base year for both opex and capex in 'Input|General' sheet (cells I18:I19), however, a circular reference arises once the selection in cell I19 (Capex - Forecast base year) switches to either "2018" or "2020" End-Year. This has a flow on effect to the gross meter population calculations in 'Input | Meters Vols & Costs' sheet (cell range N409:P423). The circular reference appears to be confined to dependent cells in section d - *Net Change in Meter Population*, cell range O389:P403. We tested this by hardcoding values in cells O389:P403, thereby removing the circular reference in each scenario. We recommend amending the relevant cell formulas in 'Input | Meters Vols & Costs' sheet to eliminate the occurrence of circular references.

Cost basis > Inputs – Capex

We observe limited flexibility for \$ input basis of capex which can only be expressed in June (end-of-year) terms in this model which is inconsistent with our in-house capex models and the AER's recently published preliminary SCS capex model. For consistency with the preliminary SCS capex model, we recommend providing an option for NSP's to enter capex in either December (mid-year) or June (end-of-year) terms, which then determines which inflation index shall apply in subsequent model calculations. This additional functionality would not unnecessarily increase model complexity and is already embedded in the AER's preliminary SCS capex model.

Cost basis > Inputs – \$dollar basis

In both capex and opex inputs sheets there are separate selections available for setting dollar denomination (i.e., \$dollars, \$000, \$millions). We recommend use of a global input selection rather than separate options for capex and opex. This selection option should be placed in the 'Input|General' sheet at the start of the model. NSP's will then have the choice to enter all inputs in one of the three denominations with consistency across both capex and opex, before relevant conversions are made in RFM/PTRM output sheets.

Cost basis > Inputs – Opex (Forecast)

In our testing we found that the \$Basis selection for 'Opex (Forecast)' (cell K30 of 'Input|General' worksheet) does not properly interact with the conversion in the 'Input|Prices' worksheet (at row 37), which in turn affects how the opex forecast (row 53 of 'Calc|Opex' worksheet) is converted into the outputs required for PTRM (row 47 of 'Output|PTRM' sheet).

For example:

If the \$Basis selection (cell K30 of 'Input|General' worksheet) is set to "Jun 2023", then the base year opex and step changes (rows 18 to 26 of the 'Input|Meter-Opex BST' worksheet) are similarly expressed in \$Jun 2023, yet total opex forecast presented in 'Output|PTRM' sheet (at row 47) may be expressed in \$Jun 2021 or some other basis. We encourage the AER to thoroughly review the controls (cells I29:K35 of 'Input|General' worksheet). We have detected a similar issue for the \$dollar basis of capex outputs, as explained below.

Cost basis > Outputs – Capex for PTRM

We note the field 'PTRM - Capex (Lagged)' located at cell K34 of 'Input|General' sheet may have intended to indicate the \$dollar basis for PTRM output, however, it does not have any cell dependents

nor affect the dollar basis of table values presented in 'Output | PTRM' sheet. We, therefore, suggest this field is removed to avoid confusion for NSP's.

2. Input - Prices

Inflation table setup - First year of forecast regulatory control period

We found a minor structural issue in cell I8 which contains data validation (drop down list box) that references an invalid sheet name ("=#REF!"). Since the cell value in I8 links to name range "FPFirstYear" from 'Input|General' sheet it appears that data validation is not required and should be removed.

Flexibility for materials price escalation

As noted in the AER consultation paper, the standardised metering total cost model allows for labour cost escalations but does not allow for materials price escalations. While we acknowledge that outcome is consistent with recent AER decisions, we consider that this position shouldn't dictate the standard inputs available in the model. As suggested in our response on the AER's standardised SCS capex model¹, a better approach would be to provide NSP's flexibility to propose real cost escalation in future resets, depending on the circumstances at that time.

We, therefore, suggest that sufficient functionality is built into the model to allow for these options to be proposed as part of the EDPR process. The merits of this can then be assessed by the AER as part of the determination process.

Cumulative inflation index

We found the construction of the unlagged and lagged inflation indexes (in rows 32-33) somewhat confusing given that the source ABS data is dependent on the CPI quarter stipulated in the control mechanism for each network business. For example, the Victorian distributors will use December quarter CPI (lagged) for capex and RFM calculations in the 2022-26 period.

There appears to be two errors in the formula construction of the lagged inflation index (contained in row 33) that is used to establish conversion factors in rows 39 and 40 of 'Input|Prices' sheet. These include:

- The link to cell F33 should be a fixed reference while the AER's formula uses a dynamic reference. E.g., in cell I33 the formula should be amended as follows:

```
=IF($F$33="Unlagged",I32,1+I29)
```

- The inflation series switches from December to June quarter for no apparent reason. E.g., in cell formula J33, a suggested amended formula is presented below:

```
=IF($F$33="Unlagged",J32,I33*(1+I23J29))
```

This amended formula uses a fixed cell reference (noted above) and incorporates December inflation data only as contained in row 29. From there the formula can be copy and pasted across columns K to P on row 33.

Suggested enhancement

For simplicity reasons, it may be best to use a single inflation series in this model which can be applied to both capex and opex (using either unlagged or lagged inflation). This will reduce the amount of complexity in the model and avoid potential confusion for NSP's when populating the capex and opex input sections. The relevant CPI quarter to use in this case would be the quarter stipulated in the

¹ AusNet response to AER issues paper - standardised SCS capex model, 27 August 2021, p.3.

control mechanism for NSP's. For Victorian distributors, December is the quarter sourced from the ABS in the current regulatory control period (2022-26).

3. Opex inputs – Base, Step and Trend

We consider the preliminary standardised model's approach to forecasting opex is appropriate because it adopts the AER's standard base-step-trend method. However, we also observe that:

- There are some inconsistencies between the preliminary standardised model's approach to opex and our existing in-house opex models. We recommend that the AER applies a consistent set of principles between the models, which would involve amending the preliminary standardised model for matters including:
 - The inputs for the step changes should be flexible, i.e., it can be separately inputted in the dollar basis appropriate to the individual step change and then converted to the dollar basis of the opex forecast.
 - The dollar basis of the total opex forecast should be consistent with the total forecast opex outputs for use in the PTRM.
 - Indexation for inflation should be flexible and allow for different year end conversions, including June to December conversions, December to June conversions, March to June conversions, nominal to June conversions and nominal to December conversions, etc. This will be useful for NSPs who are transitioning from calendar years to financial years.
- The trend component of the AER's base-step-trend approach does not allow real cost escalations to be applied to materials. While this is consistent with the AER's recent decisions, we consider a standardised model should allow for this functionality and flexibility.
- There appears to be some errors within the preliminary standardised model and these errors need to be fixed. We provide further details on these errors for review below.

Additionally, below outlines our detailed observations and concerns with the model's base-step-trend opex forecast.

a) Input | Meter-Opex BST

- Forecast Real Price Change (rows 42 to 45) only allows for labour price changes and not materials price changes. We suggest additional rows and functionalities to be added to allow for materials price changes.
- Forecast Productivity change has introduced an 'Economy of Scale' factor (row 48). This should be removed on the basis that the 'Partial Factor Productivity' (row 49) already captures the returns to scale factor.
- Base Opex (After Adjustment) in cell P18 does not vary by the dollar basis input in cell H18 i.e., the value of 'Basis_OpexForecast' (cell K30 of 'Input|General' worksheet) does not change how the Base Opex (After Adjustment) is converted from nominal to real and this needs to be fixed.
- The dollar basis of the step changes (cells H23:H26) are set equal 'Basis_OpexForecast'. We consider additional functionality should be added to allow the hardcoded step change values to be separately inputted (in the dollar basis appropriate to the individual step change) and then converted to the dollar basis of the opex forecast. The current structure requires the step change values to be separately recalculated each time the 'Basis_OpexForecast' is changed, or when inflation forecasts are updated, which is an inefficient way of converting the step changes.

b) Calc | Opex

- Forecast Real Price Change (rows 32) only allows for labour price changes and not materials price changes. As mentioned above, we suggest additional rows and functionalities to be added to allow for materials price changes.
- The 'Economies of Scale Factor' (row 35) and 'Scaled Growth Output' (row 36) should be removed for the same reason outlined above i.e., the 'Partial Factor Productivity' (row 49) already captures the returns to scale factor. However, if retained:
 - The 'Economies of Scale Factor' value (cell J35) and the 'Scaled Growth Output' (row 36) should be rolled up into one factor (and one row) to reduce complexity and confusion.
 - The 'Scaled Growth Output' should be de-linked from the 'Average forecast output change' values in row 28 i.e., it should be a factor with its own forecast inputs instead of using the 'Average forecast output change' values as an input.
- The names of the 'Forecast output change' parameters (cells F24:F27) are hardcoded – they should be soft coded whereby the original inputs (where the names are first entered) from 'Input | Meter-Opex BST' (cells F31:F34) are carried over.

c) Output | PTRM

- The Opex forecast (row 47) is currently indexed by the unlagged inflation. We suggest additional functionality needs to be added to allow the opex to be indexed by the unlagged or unlagged inflation. A drop-down menu or option to select the type will provide the user with a clear indication of the inflation series used. For example, our existing capex model is indexed by a 1-year lagged inflation series while our existing opex model is indexed by an unlagged inflation series – the option to select will make it easier to identify the inflation series type.
- The name (cell C47) should be "Total forecast opex, excluding debt raising cost".
- As noted in section 1 above, we detected an issue with the controls contained in the 'Input|General' worksheet, specifically for \$Basis of the Opex Forecast that ultimately affects the outputs required for PTRM (row 47 of 'Output|PTRM' worksheet). We anticipate that this issue will be resolved after further review by the AER.
- We suggest that the basis conversion indexes (rows 37 to 40 of 'Input|Prices' worksheet) and the dollar-basis labels (column H of 'Calc|Opex' worksheet and column E of the 'Output|PTRM' worksheet) be reviewed thoroughly.

4. Capex Section

Capex Inputs

As mentioned above, we desire consistency with our existing in-house capex models and the AER's preliminary SCS capex model for the dollar basis of capex inputs to be flexible. That is, where capex inputs can either be expressed in December (mid-year) or June (end-of-year) terms. We recommend the AER applies a consistent set of principles for base year inputs and inflation across both the standardised metering cost model and SCS capex model.

In relation to the cost build-up approach in the model, we have no concerns with applying a volume times current unit rate approach for Meters and Comms capex costs including materials, contracts and labour components. This is consistent with our historical approach for these cost categories. For our meter population data, we may not be able to enter meter types at the same level of disaggregation as that shown in the AER's pre-populated worksheet ('Input | Meters Vols & Costs'). Instead, we expect to

enter our meter population types at a more aggregated level consistent with our submitted 2022-26 ACS Metering capex model².

The ability to enter IT project related costs directly as annual values is a useful feature in the standardised metering cost model, as it consistent with our standard approach for IT capex forecasting. Where project costs are entered it appears that NSP's cannot specify labour and non-labour splits that are required to determine the amount of real labour escalation applied in this model by project. Currently there is no allowance for real labour cost or material price escalation under these circumstances. We appreciate if the AER could consider making modifications to allow for input of labour and non-labour splits associated with individual project costs.

The ability to set SCS allocations by equipment type and/or by project is an important and useful feature which reflects our approach in the 2022-26 Victorian Electricity Distribution Price Review. The calculated SCS amounts will ultimately feed into the SCS RFM/PTRM models at the next reset.

Our Distribution business recently adopted the lease accounting standard which capitalises our property leases for both statutory reporting purposes and RAB purposes. We note that there is no separate input for capitalised leases in the standardised metering cost model, and therefore, we assume this will be allowed to continue as a separate input into the metering RFM/PTRM models.

Capex Calculations

We observe a minor formula error in 'Calc | Capex Meters' sheet in output table "Total (Including Overheads and Additional Costs)". The affected cells include Q139:U139. E.g., the formula in cell Q139 should be amended as follows and then copy and pasted across row 139,

```
=('Input | Meters Vols & Costs'!Q55*  
IF('Input | Meters Vols & Costs'!$L55="$millions",10^6,IF('Input | Meters Vols &  
Costs'!$L55="$000",10^3,1)))/IF($M139=$L139="$millions",10^6,IF($M139=$L139="$000",10^3,  
1))
```

Capex Outputs

While we agree with the format and content of the PTRM /RFM outputs sheets, we did however find some minor issues as follows:

- In both 'Output | PTRM' and 'Output | RFM' sheets the capex tables (including gross capex, asset disposals, customer contributions) each contain a blank row which is presumably intended as a spare row that DNSP's can nominate an additional category or asset class. We appreciate if the AER could kindly clarify if this is the intention.
- In 'Output | RFM' sheet we observe that the regulatory years table headers (in Forecast capex table) links back to name range 'FPFirstYear' contained in 'Input|General' sheet. Since 'FPFirstYear' refers to the first year of the forecast period, this is relevant for PTRM outputs rather than RFM outputs. We suggest either linking the first year in 'Output | RFM' sheet to name range 'PPFirstYear' (which is also contained in 'Input|General' sheet) or set the first year to the third year of the prior regulatory period, thus providing for three years of forecast data in RFM output.
- In 'Output | RFM' sheet, all values are presented in \$real terms despite the Output basis in column E stating "nominal".
- We recommend the AER include balance checks for each output table in 'Output | PTRM' and 'Output | RFM' sheets, linking back to the source calculation sheets for total gross capex, total asset disposals and total customer contributions.

² Available at: [AER - Final Decision - AusNet Services distribution determination- 2021–26 - ACS - Metering - Capex model - April 2021](#)

Part B: Review of the metering pricing model

As AusNet does not operate under a metering price cap, the following feedback will focus on the metering exit fee sections of the metering pricing model.

Price cap, metering exit fee functionality and methodologies

AusNet supports the AER to have both the price caps and metering exit fees functionality in the same metering pricing model. We also support hiding functionality that are not relevant to each NSP. For example, AusNet operates under the metering revenue cap, the price cap functionality in the metering pricing model will not be relevant to AusNet. Thus, the price cap functionality should be hidden. This will ensure that no confusion will exist when stakeholders review our metering pricing model.

When reviewing the metering exit fee calculation methodology, we noticed changes to the methodology:

- Meter type and unit cost has been introduced for weighting purposes. This is inconsistent with the existing model where weighting were based on average meter volumes only. We would appreciate if the AER could clarify the purpose of introducing another weighting.
- The calculation to allocate Meter RAB by Designated Exit Fee in the 'Calc | Exit Fee' sheet does not look correct. Firstly, it calculates the value by averaging the Opening RAB of the current and preceding year before multiplying by the weight for the current year. For example, the average of the Opening RAB from year 2022-23 and 2021-22 is derived before multiplying against the weighting from 2022-23. This approach does not take into account the weighting from other years. When compared against the existing model, the existing model looks to multiply the weights from each year against the Opening RAB before deriving an average across the current and forthcoming year. For consistency, we request the AER change its approach to reflect the approach taken from the existing model.
- A Base Year input in the Linked Input – RAB section on the 'Input | Exit Fees' sheet was introduced. This is also inconsistent with the existing model as metering exit fees were built up from the first year of the new regulatory period. We would appreciate if the AER can clarify the purpose of the base year.

Additionally, some inputs and outputs (discuss below) need to be adjusted to ensure the calculated metering exit fees are correct and accurately reflect the existing models that it is looking to replace.

Inputs and outputs

Below is a list of feedback for the inputs and outputs relating to the metering exit fee section of the metering pricing model for AER's consideration:

- Tax allowance input and output - AusNet suggests a tax allowance input to be incorporated into the 'Input | Exit Fees' sheet. Subsequently, an output for tax allowance is also required, and the Exit Fees with Component Detail section on the 'Calc | Exit Fees' sheet will need updating. The inclusion of an input and output for tax allowance that any tax allowances applicable can be considered in the build-up of the metering exit fees will ensure consistency is carried across when transitioning from the existing model to the new metering pricing model.
- Meter volume input - The metering pricing model currently assumes year end meter volume inputs are required to calculate the exit fees. This is inconsistent with the input from the existing model where it uses an average meter volume. The average meter volume is derived as the average between the meter volume opening balance of the current and subsequent year. AusNet recommends that the meter volume input assumption be changed to an average meter volume.
- Regulatory depreciation for Comms & IT RAB - In the 'Input | Exit Fees' sheet, there are two tables requiring inputs from the Metering PTRM model under section '3. Linked Input – RAB'. The regulatory depreciation inputs at the asset class level do not reside in the PTRM Assets sheet, rather only straight-line depreciation by asset class. In order for NSP's to link regulatory

depreciation, this requires a separate calculation to include the RAB indexation that is used to offset forecast straight-line depreciation. We appreciate if the AER can clarify whether the inflation addition calculation should be a separate row in the Meters RAB and Comms & IT RAB tables in this pricing model.

- Section 6b of the 'Input | Exit Fees' sheet – AusNet has noticed hard coded values and formula driven values in cells K96 to O105. We cannot deduce the purpose of these values. We appreciate if the AER can clarify the purpose of these values and modify the cells where required.

Other general feedback

Lastly, we noticed that the Base year and Regulatory period headers in the following sections are not formula driven. Therefore, when the Forecast regulatory control period, first year is changed, these headers do not update accordingly. We recommend that the AER update these headers to ensure that the metering pricing model do not error out. Sections impacted include:

- 'Calc | Exit Fees' sheet – section Calculations | Exit Fees with Component Detail
- 'Output | Exit Fee prices caps' sheet – section Applicable Exit Fees Price Caps
- 'Output | Exit Fee prices caps' sheet – section Exit Fee Per Meter
- 'Output | Exit Fee prices caps' sheet – section Cost Metric