

**Expenditure Forecast Assessment Guidelines**

**Summary of meeting – 23 September 2013**

***Category analysis data templates***

Held via video link between the AER’s Hobart, Melbourne and Canberra offices

On 23 September 2013, the AER, as part of its Better Regulation work program, hosted a meeting to discuss the category analysis data templates published with the AER Draft Expenditure Assessment Guidelines on 9 August 2013. The meeting ran from 9:00 am to 1:00 pm and was chaired by Israel Del Mundo of the AER. A full attendee list can be found in Attachment A.

This summary outlines the key topics and themes of the meeting, including views expressed at the meeting. The outline broadly follows that of the agenda.

1. ***Objectives and general comments***

The objectives of the workshop were to:

* discuss how the businesses could complete the templates
* discuss comments in response to the Category Analysis Survey and relevant comments in the businesses’ submissions, and
* where businesses has indicated challenges existed to completing the templates:
	+ identify what specific issues are; and
	+ how specific issues can be overcome.

AER staff indicated at the start of the meeting the objectives above, that the views expressed were AER staff member views, and that minutes and actions would be recorded and published.

AER staff then worked through each of the key expenditure assessment categories and associated templates.

1. ***Replacement capex***

AER staff initiated the discussion of the repex data requirements by noting the objective in repex is to standardise the asset categories making up the asset groups that NSPs are currently required to report against.

AER staff then briefly recapped the process so far taken to meet these standardisation objectives.

AER staff noted that the Issues Paper proposed to maintain the approach of collecting asset volumes and unit costs. The AER sought feedback on using repex model asset groups that were used in its latest determinations. NSPs generally supported that the asset groups capture material differences in work processes and asset lives.

AER staff noted the major issues identified at the Issues Paper stage by NSPs were that they should have discretion to classify assets below the asset groups. Some NSPs indicated a preference for some groups to be aggregated into major categories. AER staff noted that after receiving responses to the Issues Paper there was a pre–draft guideline consultation period, where AER staff circulated a “straw-man” outlining standardised asset types, proposing they be based on design specifications materially affecting cost. The repex data template released with the draft guidelines is an illustration of staff’s further reflection on NSP responses to the straw-man.

AER staff then discussed issues raised by Aurora and Transend in response to the survey on the templates:

* Regarding definitions of high, medium and low ampere rating bands applying to various repex asset categories, AER staff clarified that these bands were not specified on purpose. This was because they considered it likely only a few discrete rating bands applied to each asset type, and NSPs would be in the best position to classify these. Transend considered that there was a vast difference across transmission assets, noting that AEMO maintains a list of the ratings which the AER could rely on to form appropriate bands. Aurora indicated that it has standard capacity assets across several of the asset types irrespective of the other drivers used in the asset definition. It noted that to align the standard designs a conversion of capacity to ampacity will be required. Aurora further noted asset design made allowances for network growth, highlighting this as a consideration in any assessment.
* Transend raised in its survey response the significant increase in the level of detail in the unit cost breakdown information required. Transend noted that the volumes of the assets replaced in a particular period, because of their heterogeneity, would materially affect the reported unit cost. Transend sought clarification over what time periods the unit costs related to, with AER staff responding that unit costs for the current and forthcoming regulatory periods would be required. Transend considered that any unit cost information it provided would need qualification according to the estimation technique and assumptions it used to construct them.
* The extent of historical data required by the AER in the repex vintage sheet was an issue in the survey responses, notably the difficulty that NSPs would have in mapping existing asset registers to the AER’s asset categories and installation dates. Transend indicated that it would have difficulty because of issues in data retention related to the organisation’s life and would need more time to clarify what it was able to provide. Aurora noted that it had already conducted an exercise as part of its last determination which resulted in a dataset that was highly qualified with assumptions– it anticipated this to be the subject of ongoing improvement.
* Aurora raised in its survey response a need for clarification on the discretion it had to categorise below the designated asset categories, and noted that some of the categories may not be definitive enough. AER staff noted that the NSPs are free to provide disaggregation of each of the asset categories provided they reconcile. The proposed splitting of expenditure into labour, materials and contractors was not anticipated to be a significant issue.
* Aurora sought clarification on the interactions in assets, specifically the condemned wood may become a “new wood pole” or “staked pole”. AER staff indicated that “staked pole” referred to the act of staking poles and a pole could be staked a second time.
* Aurora asked for clarification of the definition for the “subdivision connection” category. Specifically, Aurora were unsure about whether the definition of a subdivision included the expenditure related to reticulating a new estate and subsequent connection of the premises within the new estate; and also whether the subdivision connection category includes expenditure related to civil works, such as reinstatement, trenching, etc. AER staff considered that connections to premises within the new estate should be treated as residential connections and separate from the subdivision connection category. Additionally, AER staff considered that expenditure related to activities arising from reticulation of a new estate, such as civil works, should be captured in the connection subdivision category.

Transend raised a general concern about the appropriateness of some definitions for transmission networks, for example, the proposed disaggregation of works/ costs into CBD, urban and rural.

1. ***Demand forecast assessment***

AER staff noted the indicative templates contained two formats for collecting demand data:

* for demand forecast assessments (tabs 3.1 and 3.2)
* for populating the augex model (tabs 3.3 and 3.4)

The two formats would collect very similar information and may be consolidated to avoid potential duplication. This depends on segments used for demand forecasting purposes being consistent with the segments for the augex model. Aurora indicated it would be able to provide the data for both formats.

AER staff also noted that NSPs would be required to nominate the relevant weather station or state average of temperature data used for forecasting purposes. This would need to be clarified in the templates’ instructions.

Transend and Aurora noted the demand templates generally need some work to improve their clarity. For example, demand measures 1–4 should be included in the tabs rather than the definitions sheet. AER staff took this comment on board.

1. ***Augmentations capex***

AER staff noted the indicative templates would collect augex information for two separate processes:

* To populate the augex model (templates 4.6 to 4.13)
* For asset data analysis (templates 4.1 to 4.5)

AER staff noted that the augex model, by itself, may not be sufficient to assess augex forecasts. Hence, the AER would consider looking to collect cost information for individual augex projects, including physical metrics, unit costs and volumes for the major assets that comprise augex projects, and other labour and material costs.

Transend questioned the usefulness of asset data information, particularly as information for larger projects would be provided to the AER in business cases.

Regarding lines, Aurora stated its systems capture costs and volumes for overhead and underground cables. However, it does not capture this information for poles, towers and switches. Regarding substations, Transend and Aurora indicated they may be able to provide unit cost and volume information for transformers, switches, capacitors and reactors at the zone substation level upward. However, Aurora would not be able to provide the information below the zone substation level. Aurora noted its contracts may capture this level of information, however its accounting systems would not record at this level of disaggregation. Aurora and Transend undertook to provide the AER with the types of asset cost breakdowns it records in its systems.

The NSPs were asked whether the CBD/Urban/Rural classification is appropriate, or whether a different type of classification better captures density. Aurora noted it uses a different classification and will provide the definitions to the AER. Aurora indicated it should be able to map its classifications on to SCONRR definitions.

1. ***Connections and customer driven works***

AER staff introduced customer-initiated works category templates, providing an overview of the information being sought and reasons to justify the classification of expenditure categories.

AER staff outlined the benefits of standardised reporting templates as being to generalise large programs of customer-initiated works, and, where possible, allow for the benchmarking of works across NSPs.

Aurora questioned the how many years data the AER is requesting to be completed in each of the customer initiated work categories. AER staff advised that 10 years data, spanning the current and forecast regulatory periods was required to be entered into the spreadsheets.

Aurora sought clarification on whether the ‘location’ factor specified in each of the customer initiated work categories was expected to be consistently reported using the same locations. AER staff advised that the same locations should be reported across each customer initiated work templates.

### Connections – Distribution

Aurora asked for clarification of the definition applied to the subdivision connection category. Specifically, Aurora were unsure about whether the definition of a subdivision included the subsequent connection of the premises within that subdivision and whether the subdivision connection includes civil works such as reinstatement, trenching, etc. AER staff considered that connections to premises within the estate should be treated as residential connections and separate from the subdivision connection category. Additionally, AER staff considered that expenditure related to activities arising from reticulation of a new estate, such as civil works, should be captured in the connection subdivision category.

Aurora sought clarification of whether solar connections are captured in the AER’s category of embedded generation connections and whether one solar connection would be reported as two connections – for the supply of electricity to the customers’ premises and the generation of electricity from the customers’ premises. AER staff stated that one solar connection would be recorded as one connection under the embedded generation category.

Aurora advised that the connection of photo-voltaic cells will not necessitate a modification to the connection characteristics of the customers’ premises but rather an upgrade of the metering services. Aurora asked whether the upgrade of metering services meant would be recorded as expenditure under the embedded generation category. AER staff questioned whether the metering upgrade required ongoing maintenance costs or was a one-off item of expenditure. Aurora advised that the metering upgrade was an item of expenditure incurred once and related to the installation of a specific meter with the technical capability to support an embedded network connection. AER staff agreed to follow up with Aurora Energy as to whether the meter upgrade would be included under connections or metering expenditure.

### Transmission connections

AER staff sought further explanation of Transend’s survey response, which stated that it was not accustomed to reporting expenditure related to connections projects at a granular level of detail as outlined in the AER’s indicative reporting templates. AER staff outlined that data collected from the expenditure template would be used in a detailed engineering assessment of each connection project. AER staff asked Transend whether the proposed data template provided a complete list of the factors which affect the cost of transmission connection projects. In response, Transend advised that customer driven aspects were appropriate to capture such as MVA, kV, location and whether a single or duplicate circuit was required. Also, a qualitative specification of whether a connection project is ‘firm’ or ‘non-firm’ as requested by the connecting customer, to indicate where duplication of network segments is required to meet a customer’s connection requirements. It was noted that Tasmanian regulations may dictate this as a standard/ consistent requirement for all connections.

AER staff also clarified that data captured in the templates was to reflect the proportion of expenditure on prescribed transmission services only.

### Metering

Aurora sought clarity on the definition of special meter reads. Aurora advised that all routine meter reads in Tasmania would be classified as ‘special meter reads’ as each customers’ premises has two meters installed which requires two meter reads. Aurora suggested that ‘special meter read’ be defined as per the general understanding in the NEM i.e. a meter read requested by a customer for a special purpose. AER staff agreed with Aurora’s suggested revision of the definition, as this would minimize the regulatory burden for DNSPs reporting. Aurora asked whether the AER’s definition of meter testing includes routine testing required for compliance with AEMO’s metrology procedure. AER staff stated that the definition of meter testing should encompass routine meter reading as prescribed by AEMO and be encompassing of routine and non-routine meter testing.

### Public lighting

Aurora stated that public lighting services may use multiple types of globes and luminaires and sought clarification of how a single unit rate should be estimated for public lighting works with different globes and luminaires. AER staff questioned how significant the differences in costs are between luminaire types and suggested that an average cost be calculated for each type of luminaire with a specific cost profile. Aurora considered two categories of major and minor fittings which would differentiate luminaire type on the basis of weight. An average cost would be calculated each for major and minor fittings.

1. ***Non-network expenditure***

AER staff noted that “recurrent” was used in the common English context and intended to mean ongoing expenditure that recurred.

The NSPs indicated they have data on distance travelled for vehicles.

1. ***Vegetation management***

AER staff explained that the intention behind the inclusion of vegetation management zones was to account for differences in costs caused by regulations and volumes of work required to be performed. Collecting data on tree growth rates has been proposed as AER staff consider this to be a significant driver of determining tree cutting cycles and by extension the amount for tree trimming work required to be performed. AER staff invited comment on the contents of the vegetation management zones spreadsheet.

Transend commented on how they undertake vegetation management operations. They commented that areas to cut are determined through the inspection process. Inspectors determine if vegetation in areas are an imminent danger of causing outages ­—which need to be addressed in the short term — or if vegetation should remain cut in the routine process. They noted that for determining tree cutting work, their interest is in the output (complying with regulations, preventing outages) rather than inputs (tree growth rates).

Aurora commented that their process was similar to that described by Transend.

AER staff asked how normal tree clearance cycles are determined. Transend replied the need for inspections is based on historical evidence, with the requirement of work in some areas determined by the inspection and then developed into a work program.

AER staff asked if Transend or Aurora operate on a varying cutting cycle in response to weather outcomes. Transend responded that in this circumstance they cut on an emergency basis. They commented that they do not cut vegetation around every transmission line every year, noting for example if areas are covered primarily by grass it is not required. Transend noted that they would have no issue with supplying the AER with information on their vegetation management procedures.

AER staff asked for comments on supplying information on regulatory requirements. Both Transend and Aurora commented that they are required to comply with a vegetation management code, part of which is a requirement to put up a vegetation management plan.

AER staff sought comments on the proposed disaggregation of vegetation management expenditures for both transmission and distribution. Transend commented that geographical disaggregation seemed reasonable, depending on the actual regions selected, noting that travel time and costs would be affected by access to lines. They also noted that they may be able to separate inspection costs but it would be more difficult to split out costs for other activities. Aurora noted they do not engage in hazard tree trimming, otherwise they took this question on notice. Transend also took this question on notice, stating it would be worth the AER consulting with Transend’s technical staff.

Transend commented that they engage in aerial inspections, and a disaggregation by geographical area was not necessary. AER staff noted this feedback. AER staff also noted that NSPs would still engage in ground level inspections, so ground and aerial inspections may need to be differentiated.

Both Transend and Aurora commented that travel costs were not collected separately but effectively collected through contractual arrangements, for example, those contractors tendering for work may charge higher prices for work in rural areas noting these costs.

Aurora commented that they have key performance indicators in place with their contractors which they utilise as a measure of the amount of work performed.

Transend sought clarity on the use of a sunshine index as an explanatory factor in tree growth rates. AER staff replied that from earlier comments, they understood that Transend and Aurora do not consider tree growth rates when undertaking vegetation management work; rather, the work is determined following regular inspections. Transend and Aurora replied that they do consider tree growth rates but not in a manner predictive of expenditure using the information proposed in the spreadsheet.

AER staff commented they it would be helpful to them for Transend and Aurora to suggest alternative drivers. Transend and Aurora took this question on notice.

1. ***Maintenance and emergency response***

Aurora collects maintenance expenditure by asset group but not by the details set out in the template (e.g. material type or staked/non-staked for poles). Most maintenance jobs are packaged and so disaggregated data are not recorded. Data on labour and materials may be available but not by asset types. The use of CBD, urban and rural categories is an issue given reliability is captured differently in Tasmania.

Transend commented that the level of granularity in the template is higher than traditionally required and does not necessarily align with Transend's accounting structures. Recasting of this data (with some high level allocations) would be required for 2012-13 and probably 2013-14 (plus historic) as there would be insufficient time for Transend to amend systems and reporting structures. Some of the asset, voltage and region based analysis is likely to require system solutions which would be costly and time consuming to implement in the short term.

For large activities, Transend has unit rates but not for all activities. Job timesheets has details of labour. Transend collects maintenance expenditure by asset group but not by other details (e.g. insulation type or switch type for substation switchbays).

Aurora and Transend undertook to consider further potential methods of allocating cost data into the proposed asset categories, and possible rationalisation of categories. They would also consider further what data are available on routine/ cycles of maintenance.

Aurora does not collect emergency response expenditure by causes.

1. ***Overheads***

Aurora made the following observations:

* Finance and Regulatory are part of Network Overheads, not Corporate Overheads.
* because of its organisational structure, Network Overheads are spread over shared activities (not Corporate Overhead).
* its financial accounts are highly aggregated across several businesses (energy, retail, etc.), and so audited financial accounts for its distribution business alone may not be available (due to its corporate structure consisting of other businesses such as retail).
* its ICAM (indirect cost allocation method) feeds into its CAM.
* it has no related parties
* meter reading is a direct cost, not a network overhead
* meter reading is an alternative control service. AER staff noted that the template is a standardised template, for some NSPs it might be standard control, and for others it might be alternative control.

Transend commented that:

* Some IT and some communications (associated with operating and asset management) SCADA and some motor vehicles are part of its network overhead (SCADA etc.), not corporate overhead.
* superannuation can be a direct cost (depending on where the associated labour costs are employed, but it is indicated as a corporate overhead in the template.
* ‘transmission services’ should be defined
* as in the maintenance data requirements, the level of granularity in the overheads sheet is higher than traditionally required and does not necessarily align with Transend's accounting structures.
1. ***General Comments***

Aurora suggested that the AER consolidate the three RINs, and that definitions should be made consistent where possible.

Transend commented that its response to RIN development has been rushed due to the short timeframes imposed. It will consult its internal experts on how some of the historical data could be provided.

Regarding submissions on the draft guidelines, Aurora noted its comments were made through ENA, and Transend’s were through GridAustralia.

AER staff recognised current challenges and transitional issues in providing historic data, but asked the NSPs if they can collect data going forward. The NSPs responded that for backcast data, it would be difficult to collect consistent data. For forecast data, the required data could be provided with clarification of requirements necessary.

1. ***Next steps***

The AER will circulate draft minutes of the meeting with actions next week.

The NSPs will email the AER with specific issues raised in this meeting they want to discuss further.

1. ***Actions***

### Repex

1. Aurora will indicate what the common amperage ratings are for different voltages of asset and what they consider to be appropriate rating bands for classification of different classes of asset.
2. Aurora will indicate to the AER how unit costs could be transparently estimated for the purposes of the repex model categories identified in the templates. Aurora will also indicate to the AER where it has actual asset volume and cost/expenditure data versus where it would require estimation.
3. The AER will clarify that staked pole means the act of staking a pole and if a business has to go back and stake a pole again (subsequent to an earlier staking) it is another staking for the purposes of reporting.
4. The AER will clarify which definitions and sheets do and do not apply to transmission.
5. The AER will clarify that a subdivision connection is the connection of the subdivision and subsequent connections within the subdivisions are other (typically basic) connections (in line with Aurora’s comments on the survey)

### Demand forecasting

1. Regarding tab 3.2 (demand data at the spatial level), Transend will confirm whether it can provide the date and 30 minute time period at which maximum demand occurred.
2. Regarding tab 3.2 (demand data at the spatial level), Transend will confirm whether it can provide weather normalised data.
3. Transend will confirm whether it can provide demand data in MW and MVA.
4. AER staff to amend templates to improve their clarity. This includes work on the instructions, and including definitions in the demand sheets.

### Augmentations

1. AER staff to provide a note regarding the timing for introducing the new augex templates (regarding upcoming determinations, and annual reporting and determinations in the long term).
2. Aurora and Transend to provide their asset breakdowns for asset data analysis.
3. Aurora to provide its classification regarding CBD/Urban/Rural, including definitions.
4. AER staff to respond to a question regarding tab 4.12 and the number of entries required regarding the segments.

### Connections

1. AER staff will check the connection definitions for transmission
2. AER staff will endeavour to limit data overlap between different sheets and RINs (STPIS, economic benchmarking etc.) and ensure consistency where practical.

### Vegetation management

1. Aurora and Transend to provide information on the contracts detail and the KPIs that are contained in vegetation management contracts.
2. Aurora and Transend will also indicate to the AER the vegetation cost drivers they consider relevant to vegetation management.

### Maintenance

1. Aurora and Transend undertook to consider further potential methods of allocating cost data into the proposed asset categories, and possible rationalisation of categories.
2. Aurora and Transend would also consider further what data are available on routine/ cycles of maintenance.

### Emergency Response

1. Aurora to provide information on how historic costs by causes could be estimated, and how it could be reported going forward.

### Overheads

1. AER staff undertook to clarify what is meant by direct and indirect and network and corporate overheads.

## Attachment A: Attendee list

### Hobart office

|  |  |
| --- | --- |
| **Name** | **Organisation** |
| Leigh Mayne  | Aurora |
| Chantelle Hopwood | Aurora |
| Kim Rosinski | Aurora |
| Michael Seddon | Transend |
| Heath Dillon | Transend |
| Israel del Mundo | AER |
| Toby Holder | AER |

### Melbourne office

|  |  |
| --- | --- |
| **Name** | **Organisation** |
| Lawrence Irlam | AER |
| Mark McLeish | AER |
| Esmond Smith | AER |
| Max Hooper | AER |
| Jess Manahan | AER |
| Anthony Hynes | AER |
| Cameron Smith | AER |
| Paul Dunn  | AER  |

### Other offices

|  |  |
| --- | --- |
| **Name** | **Organisation** |
| Mark Wilson | AER (via phone from Adelaide office) |
| Yili Zhu | AER (via VCU from Canberra) |