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Mr Evan Lutton  
Assistant Director, Networks Branch  
Australian Energy Regulator  
GPO Box 520  
Melbourne VIC 3001  
By email: [evan.lutton@aer.gov.au](mailto:evan.lutton@aer.gov.au)

Dear Evan

### Review of Operating Environment Factors

CitiPower, Powercor Australia and United Energy welcome the opportunity to comment on the sapere research group and Merz consulting report 'Independent review of Operating Environment Factors used to adjust efficient operating expenditure for economic benchmarking' (**report**). We support the Australian Energy Regulator's (**AER**) open and transparent approach to reviewing operating environment factors (**OEF**) for benchmarking distributors.

We consider the evolution of transparent, replicable and robust benchmarking is best served by preserving the AER's benchmarking analysis without OEF adjustments. We are concerned OEF adjustments undermine the value of the AER's benchmarking because:

- they are not based on direct causal links between operating expenditure and exogenous differences. Consequently, they fail to isolate exogenous differences from reporting differences and inefficiency
- many OEFs are immaterial and arbitrary. Including these implies a level of accuracy which does not exist
- known material OEFs have not been calculated, for example bushfire regulations. Consequently, the total OEF adjustments will be materially overstated for some distributors and understated for others.

Nevertheless, if the AER perseveres, we recommend OEF adjustments should only be made when:

- there is strong evidence of exogenous differences between distributors, for example regulatory obligations
- the impact is material, where materiality is measured as 1% difference in operating expenditure compared to benchmark efficient networks
- there is robust quantitative analysis which directly links operating expenditure with the exogenous driver.

Further an OEF adjustment for bushfire regulations should be included as costs are material and exogenous. Robust evidence can be sourced directly from Victorian distributors.

Our comments on specific OEF adjustments are provided below. Should the AER have any queries regarding this submission, please do not hesitate to contact Megan Willcox on (03) 9236 7048, or [mwillcox@powercor.com.au](mailto:mwillcox@powercor.com.au)

Yours sincerely,

Brent Cleeve  
**Head of Regulation, CitiPower, Powercor Australia and United Energy**

# **1 OEFs undermine the value of the AER's benchmarking**

## **1.1 OEFs fail to isolate exogenous differences from inefficiency and reporting differences**

The general approach taken to calculate the OEFs is simply to compare average spend for the efficient group of networks with the actual spend for each network. The OEFs for extreme weather, taxes and levies and OH&S regulations are based on this approach. The approach assumes differences in expenditure directly result from differences in exogenous factors. There is no mechanism for isolating the efficient level of expenditure required to meet the exogenous difference. Consequently, the OEF adjustments are incorporating both efficient and inefficient spend. This undermines the purpose of using benchmarking as a tool for assessing the efficiency of operating expenditure.

The termite OEF is a prominent example of an OEF calculation which fails to isolate efficient and inefficient costs. Data from only two distributors at a single point in time is used to establish a relationship between termite costs per pole and termite prevalence. Only one of these two networks is in the benchmark efficient group. Consequently the analysis has no statistical validity and no mechanism for separating inefficiency from efficiency.

Further, the data supporting the OEF adjustments are not reported consistently across distributors. As a result the OEF adjustments are capturing reporting differences rather than solely reflecting expenditure required to meet exogenous differences. Specific examples include categorisation of taxes and levies and emergency response operating expenditure. We agree with the report's recommendation that greater consistency in reporting of data in the category analysis Regulatory Information Notice (**RIN**) is required to improve data accuracy and quality. Until such time as reporting inconsistencies are removed the data is not suitable for developing OEF adjustments.

We also note that the data in the model supporting the OEF calculation is difficult to reconcile with the sourced RIN data. This makes it challenging to assess the appropriateness of the calculations applied across 13 networks. It would be helpful to provide direct references to the sourced data and include calculations in the model.

Given the difficulty in ensuring OEFs only measure differences in exogenous factors, applying inaccurate OEF adjustments undermines the value and reliability of the AER's benchmarking analysis.

## **1.2 Many OEFs are immaterial and arbitrary**

If the AER is to apply OEFs it should only do so where there are material impacts arising directly from explicit differences in exogenous factors, such as regulatory obligations.

Materiality should be measured based on a threshold of at least 1% difference in operating expenditure compared to the benchmark efficient networks. This ensures the OEFs are worthy of being assessed and investigated properly and are not randomly selected based on data availability.

Including numerous immaterial OEFs implies a level of accuracy which does not exist. Benchmarking is an inherently imperfect art and there will always be some differences between networks which are not fully accounted for. Across our three networks we experience significant variation in cost drivers due to operating conditions. Our review of submissions to the OEF review also indicates that each network has unique factors which require additional operating expenditure to address. Each network is unique and it would be impractical to try to reconcile all differences. Therefore making OEF adjustments for a small set of immaterial factors while excluding numerous other factors due to lack of data introduces new bias into the analysis.

We recommend not making OEFs for OH&S regulations, taxes and levies, termite exposure and extreme weather on the basis these are immaterial and the calculation fails to isolate efficiency from inefficiency and reporting differences.

## 2 Vegetation management and bushfire mitigation

An important distinction should be made between bushfire regulations and vegetation management. The Victorian bushfire regulations impact both vegetation management practices and asset inspection costs. Revisions to bushfire regulations following the Victorian Bushfire Royal Commission (**VBRC**) which impact operating expenditure include:

- strengthening the Electric Line Clearance Regulations to increase clearance requirements
- increased asset inspection frequencies from 5 to 3 years
- requiring audit programs for line spreaders, armour rods and vibration dampeners
- requiring audits of asset inspectors.

Only the first of these revisions relates to vegetation management, the remaining are asset inspection costs.

### 2.1 Bushfire mitigation regulations are exogenous and involve material expenditure

The costs of complying with the Victorian bushfire regulations are exogenous and material for distributors operating in Hazardous Bushfire Risk Areas (**HBRA**) in Victoria. We are not aware of these obligations existing in other jurisdictions.

Approximately 50% of Powercor's assets are located in HBRA. On average over 2006-2016, bushfire mitigation operating expenditure in HBRA contributed 23% of Powercor's total operating expenditure. Bushfire mitigation expenditure more than doubled from 2011 following the revisions to the bushfire regulations.

In addition, Victoria is one of the highest bushfire risk locations in the world. Consequently, we incur higher insurance premiums for insuring our assets. We also require insurance to cover the maximum probable loss associated with potentially catastrophic bushfire consequences being attributed to our network. Our bushfire insurance premiums exceed \$2.5M per annum across our networks.

Further, from 2016 Victorian distributors are incurring additional ongoing operating expenditure associated with the requirement to install rapid earth fault current limiters (**REFCLs**). Additional operating expenditure will be incurred in transitioning to and managing a resonant network, including for control room operations, technical support, equipment maintenance and annual REFCL testing and network rebalancing.

If the AER is to apply OEFs it must include an OEF for more stringent bushfire regulations in Victoria. The costs of complying with the bushfire regulations meet all of the AER's criteria: exogenous, material and non-duplicative. We would be happy to provide further information on our bushfire mitigation operating expenditure to support the development of an OEF adjustment.

### 2.2 Non-regulatory drivers of vegetation management are too complex to measure accurately

While we agree there are numerous factors contributing to differences in vegetation management costs across distributors, we consider the most material of these is differences in regulatory obligations.

If an OEF adjustment is applied for bushfire regulations, as recommended above, it is not necessary to also make an adjustment for vegetation management because:

- the more stringent Victorian regulatory obligations would already be factored into the bushfire OEF
- division of responsibility for vegetation management is not material
- environmental drivers of differences in vegetation management costs are too complex to measure accurately and are unlikely to have material impact when measured over a long period, i.e. ten plus years.

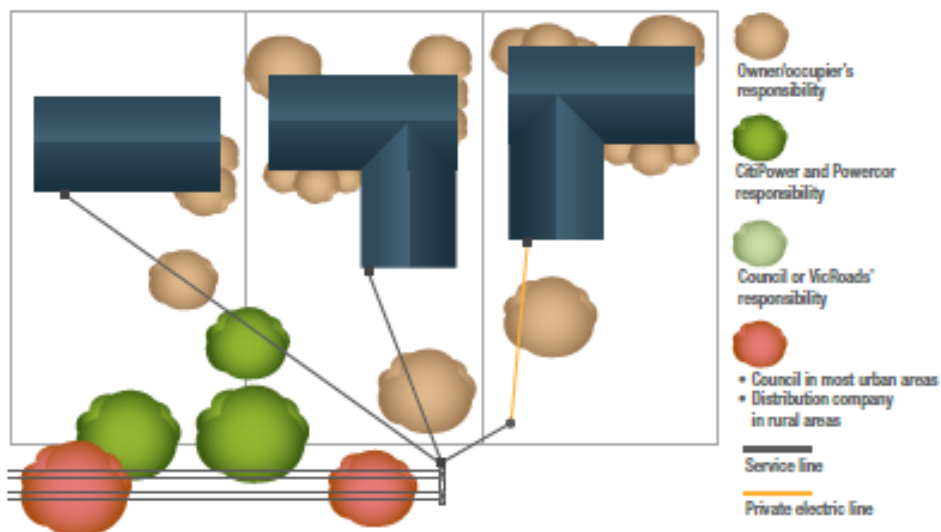
## Division of responsibility

We do not consider the division of responsibility for vegetation management to be material. In Victoria we are responsible for ensuring vegetation clearance requirements are adhered to across our network:

- Inspection: We inspect vegetation on all overhead lines on our network. We monitor and report on parties with trimming responsibility.
- Trimming: We are solely responsible for trimming in HBRA. In LBRA trimming responsibility depends on the status of land and location of vegetation. As shown in the diagram below, a single span may have a tree that a council is responsible for maintaining, as well as trees we are responsible for maintaining. Consequently we undertake considerable trimming works in LBRA.

We do not benefit from material cost savings as a result of Council's having some responsibility for trimming in LBRA. We must inspect all spans and trim spans where the vegetation source is our responsibility. This means our vegetation program extends across our entire network. While some individual trees may not be our responsibility in LBRA we do not receive material cost savings from not trimming these when we are already onsite. Additionally, we incur costs for monitoring and reporting on parties with trimming responsibility.

Figure 1 Responsibility for vegetation management in Victoria



## Environmental drivers

From a practical perspective, it would be too complicated to account for every environment factor which contributed to vegetation growth, such as weather and tree types. Even within our own network we experience varying tree types and climatic conditions. We consider, on balance these factors are not likely to contribute to material differences between distributors when measured at the aggregate expenditure level and over more than ten years (e.g. 2006-2016).

We agree with the report findings that the vegetation related data in the category analysis RIN is not sufficiently robust to develop an OEF for vegetation management. Our own review of the data identified anomalies which we expect result from definitional or reporting inconsistencies between distributors. If the AER wishes to pursue a vegetation management OEF, we agree with the report's recommendation that additional data will need to be collected.

### **3 Concerns with other OEFs**

#### **3.1 Sub-transmission**

We are concerned that the current OEF calculation for sub-transmission assets is unable to distinguish between capacity required to meet licence conditions and capital inefficiency. Applying the OEF adjustment rewards distributors for greater sub-transmission capacity, irrespective of utilisation.

Further, the OEF calculation is complicated and involves assumptions which compromise its validity, including:

- equivalent maintenance costs for 33kV, 66kV and 132kV assets. In our experience maintenance costs generally increase with the voltage level
- exclusion of CitiPower's 22kV sub-transmission assets which are equivalent to 33kV in terms of maintenance costs
- reliance on maintenance data sourced from the category RIN which is unreliable due to reporting inconsistencies.

Nevertheless, if the AER continues to apply an OEF for subtransmission it should include CitiPower's 22kV subtransmission assets. 11 of our 22kV zone substations and associated subtransmission lines are connected to transmission terminal stations. The 22kV subtransmission lines from terminal station to zone substation have no distributed loads. 22kV sub-transmission assets are more expensive to maintain than distribution assets and, in our experience, have similar maintenance costs to 33kV assets.

#### **3.2 Jurisdictional taxes and levies**

Differences in reporting of jurisdictional taxes and levies across DNSPs makes accurate quantification of an OEF very difficult.

We currently report jurisdictional taxes and levies as follows:

- Essential Services Commission Victoria licence fees are recovered through the B-factor in the revenue control formula and therefore are not included in operating expenditure
- Energy Safe Victoria licence fees are included as operating expenditure and reported in the RIN:
  - as a specific line item 'levies' for CitiPower and Powercor
  - within the corporate overheads category for United Energy
- Council rates, land taxes, payroll taxes and water rates are included in operating expenditure and reported within the network and corporate overheads categories.

The quantification of the taxes and levies OEF only captures the amounts reported by DNSPs as specific line items. However, as shown above, DNSPs do not necessarily report taxes and levies within only one category. Further, there is inconsistency of reporting between DNSPs, even within the same jurisdiction.

Consequently, the OEF adjustment calculated most likely reflects reporting differences. Therefore, we do not consider taxes and levies to be an appropriate OEF candidate until consistent reporting is established. To promote consistent reporting in future, we support greater clarity on the definition of taxes and levies in the regulatory information notices (**RIN**).

### 3.3 Connections services operating expenditure

The report states differences in service classification are accounted for by the AER using network services operating expenditure for benchmarking. However, inconsistency in the reporting of connections services operating expenditure results in inconsistency in reporting of network services operating expenditure.

Our understanding of the AER’s definitions for the economic benchmarking RIN is:

- operating expenditure for network services includes operating expenditure associated with connection assets once these become part of the shared network
- operating expenditure for connections services includes operating expenditure associated with the installation and provision of connection services before these become part of the shared network.

It is therefore unclear why distributors would need to separately report operating expenditure for connection services (as a sub-component of standard control services) when connection services are not classified as standard control services in the AER’s framework and approach.

The inconsistency in reporting is highlighted by the differences in reporting within states which are subject to the same service classifications, as demonstrated in the table below.

We recommend the AER address these reporting inconsistencies as part of its OEF review. Ensuring comparability of the benchmarked expenditure is essential to normalising differences across networks and is more material to benchmarking outcomes than most of the OEFs considered.

**Table 1** Connections service operating expenditure reported in benchmarking RIN

State	Number of distributors	Period reported	% of network services operating expenditure
ACT	1 out of 1	2005/06 to 2013/14	2% - 3%
NSW	2 out of 3	2005/06 to 2013/14	1% - 7%
VIC	1 out of 5	2006 to 2015	5%
QLD	0 out of 2	2006 to 2016	NA
TAS	1 out of 1	2006 to 2016	<1%
SA	1 out of 1	2005/06 to 2015/16	~1%