ATTACHMENT 6.4
CORPORATE OVERHEAD AND DIVISIONAL (NETWORK) OVERHEAD

Contents

1. PURPOSE

The purpose of this paper is to present to the Australian Energy Regulator (AER) Essential Energy's response to the issues raised by the AER in its draft decision regarding corporate overheads and divisional overheads (divisional overheads hereafter referred to as network overheads).

This response addresses the following:

- Key aspects of the draft decision made by the AER in relation to overheads
- Discussion of the drivers of Essential Energy's overheads
- Essential Energy's response to the AER's draft decision
- Other considerations Essential Energy believe the AER should take into account in its assessment of overheads

2. SUMMARY

Issues raised by the AER regarding Essential Energy's overheads and Essential Energy's response are highlighted in the table below.

Table 1: Summary

AER issue	Summary of AERs findings and reasons	Essential Energy's response
Corporate overheads	**Benchmarked 'high' on cost per customer** *"Average spends for Essential Energy are well above that for most service providers. These results are consistent with our economic benchmarking".* *"Customer density should not greatly affect the level of corporate overhead a service provider incurs because corporate overheads should be largely fixed costs"*[1].	**Comparable to "frontier" DNSPs – when appropriately normalised for network size and scale** 26% of Essential Energy's corporate overhead is closely related to the network – this will distort benchmarking comparisons. When removed Essential Energy's corporate overheads are comparable with other DNSPs. Essential Energy's corporate overhead is significantly impacted by network size and scale. Key corporate functions such as Property, ICT, HR, Safety and Technical Training are all impacted by the size and geographic dispersion of the network. Comparing corporate overheads solely using customer numbers does not reflect the underlying cost drivers.
Network overheads	**Benchmarked 'comparable' on cost per kilometre of circuit length** *"Network asset volumes are more likely to drive network overheads than customer numbers"*[2]. *"Given Essential Energy's much lower density, we would expect to see it on a lower position than all other service providers"*[3]	**Comparable to "frontier" DNSPs – when benchmarked using cost per kilometre of route line length** Essential Energy agrees that network asset volumes are more likely to drive network overhead costs than customer numbers. Route line length provides a better proxy for benchmarking network overheads than circuit length as geographic dispersion is the primary driver of network overheads as opposed to 'length of cable' . It is difficult to compare network overheads due to differences in the categorisation of costs between direct and overhead expenditure

[1] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Attachment 7 Operating expenditure*, November 2014, p. 7-80
[2] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Attachment 7 Operating expenditure*, November 2014, p. 7-80
[3] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Attachment 7 Operating expenditure*, November 2014, p. 7-81

Total overheads	**Benchmarked 'very high' on cost per customer** *"On a 'per customer' metric Essential will appear higher than all other service providers other than Ergon Energy (due to its similar low customer density)".* *"Customer density only accounts for part of the cost difference between Essential and SA Power Networks and Powercor, who are also rural (albeit slightly more dense)"*[4]	**Comparable – Using cost per km of route line length** Essential Energy's overheads are significantly impacted by network size and geographic dispersion. The comparison of total overheads using customer numbers does not reflect the underlying cost drivers. When network size is considered (using route line length), Essential Energy's overheads are in line with the frontier DNSPs Lower customer density does not necessarily relate to lower relative costs per km, this is because there are diseconomies of scale encountered by having to support assets and customers in the remotest of areas. The AER's contention that Powercor and SA Power Network are "slightly more dense" than Essential is misleading. Essential's average customer density over the 2009-13 period was 4.6 customers per kilometre, whilst Powercor and SA Power Network were more than twice as dense at 11.0 and 10.3 respectively. Essential Energy has incorporated labour productivity improvements within our revised regulatory proposal. Our revised proposal is set to reduce average overheads by 23% from the prior regulatory control period (normalised for material changes in cost classifications)
Benchmarking and application to overheads	*"Assessment of Essential Energy's proposal shows there are opportunities to provide services more efficiently"* *"Our benchmarking (outlined in Attachment 7) highlights the extent of the efficiencies that are available"*[5]. The AER has reduced overheads across various control services: > Standard control operating expenditure – 38.4%[6] reduction in total forecast operating expenditure using benchmarking > Standard control capital expenditure – 29.7% (stated as 42.3%[7]) reduction in capitalised overheads using trend analysis of actual capitalised overheads 2009-14 > Metering and ancillary services - various adjustments applied in underlying models > Public lighting - overhead reduced from 41.3% to 25%[8] using other DNSP's as benchmark ratios	Essential Energy rejects the AER's assertion that overheads are inefficient. According to Huegin[9] and Frontier Economics[10] the AERs benchmarking methodology and approach is immature and is unfit for purpose. The AER has used benchmarking in a deterministic manner without providing supporting risk assessments and engineering reviews. Inconsistencies in the RIN data and errors have diminished confidence in the assessment of efficiency. Cost categorisation differences hampers meaningful benchmarking across businesses, particularly in overheads. The draft decision contains conflicting assessments on what level of overheads should be considered efficient. The proposed reductions cannot be implemented consistently due to the CAM. The AER needs to provide a clear and consistent approach to the assessment of overheads across the various control services that can be implemented consistently within the requirements of the CAM.

[4] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Attachment 7 Operating expenditure*, November 2014, p. 7-82
[5] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Overview*, November 2014,p10
[6] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Overview*, November 2014, p51
[7] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19Attachment 6: Capital expenditure*, November 2014, p76
[8] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19Attachment 16 Alternative control services*, November 2014, p58
[9] Huegin, *Huegin's response to Draft Decision on behalf of NNSW and ActewAGL. Technical response to the application of benchmarking by the AER.*, Draft 15 December 2014
[10] Frontier Economics, *Review of the AER's econometric benchmarking models and their application in the draft determinations for Networks NSW*, December 2014

3. BACKGROUND

Under the National Electricity Rules Essential Energy, as a Distribution Network Service Provider (DNSP), is required to submit a regulatory proposal to the AER every five years to set appropriate network tariffs. As part of its regulatory proposal to the AER, Essential Energy has proposed an average annual expenditure of $324m[11] for corporate and network overhead over the 2015-2019 regulatory control period. The substantive regulatory proposal was supported by detailed business plans that demonstrate a clear relationship between the expenditure sought and the legislative obligations and service levels that Essential Energy must meet as a DNSP[12].

4. DISCUSSION

4.1. The AER's draft decision

The AER did not accept our proposed operating expenditure or capital expenditure and substituted a substantially lower amount. The AER's draft decision applies substantial reductions to overhead expenditure across standard and alternative control services;

- The AER's draft determination includes an alternate amount of $1436.5m ($2013/14)[13] representing a 38.4% reduction on standard control operating expenditure of $2,331.8m ($2013/14)[14] proposed by Essential Energy. The reductions were based on the outcomes of economic benchmarking conducted by Economic Insights.
- The AER has also applied reductions to capitalised overheads in standard control capital expenditure and alternative control services, citing either historical rates or comparison rates derived from other DNSPs as the basis for the reductions

When assessing standard control operating expenditure the AER uses category benchmarks to corroborate their economic benchmarking findings, concluding that Essential Energy's total overhead as 'very high'; with corporate overhead 'high' and network overhead 'comparable'. The AER stated they are not satisfied Essential Energy's forecast operating expenditure reasonably reflects the operating expenditure criteria in the NER.[15]

Overhead type	AER Benchmark finding	Benchmarking
Corporate	High	Cost per customer
Network	Comparable	Cost per km of circuit length
Total	Very High	Cost per customer

4.2. Our position

Essential Energy rejects the AER assertion that overheads are inefficient. Our substantive regulatory proposal expenditure sought to address the expectations of our customers by providing safe, reliable and affordable services in the 2014-19 regulatory control period. A key element of our proposal was to incorporate substantial efficiencies from our network reform program.

We have revised our proposal for matters that the AER has reviewed in its draft decision. Based on these reviews, we have been mindful of examining the latest data and information that has come to light since submitting our

[11] Essential Energy Revised Regulatory Submission: Total Regulated Overhead

[12] Essential Energy Substantive Regulatory Proposal Attachment 6.2 Corporate overhead strategy – 2014, Essential Energy Substantive Regulatory Proposal Attachment 6.3 Divisional overhead strategy – 2014, May 2014

[13] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Overview*, November 2014,p52

[14] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Overview*, November 2014,p52

[15] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19* Attachment 7: Operating expenditure, November 2014, p 7-80 -83,

substantive proposal and made revisions in light of this information. Essential Energy also clearly recognised the need to continue to improve productivity in a sensible and structured manner. As such the revised proposal forecasts annualised labour productivity improvements of 22.6% by the end of the regulatory period. A number of these revisions directly impact on our overheads including:

- We have incorporated a labour productivity improvements. This reduceds our reduces our overheads from an average of $324m per annum in the substantive regulatory proposal to $303m per annum in the revised proposal. This is in addition to the substantial reform savings already included in our substantive regulatory proposal
- We have increased operating expenditure to reflect redundancy costs associated with transforming our business and required to be paid as a regulatory obligation imposed by an enterprise agreement certified by the Fair Work Commission in accordance with the Fair Work Act
- We have updated labour cost escalators reflecting our adoption of the AER's approach to labour cost escalation and a marginally lower actual CPI.

4.3. Our response to the AER's draft decision

Essential Energy rejects AERs assertion that the reductions proposed in the draft decision align with expenditure levels necessary to safely operate and adequately maintain a network of its size, scale and geographic dispersion. The proposed expenditure reductions are not reasonable or practical, and cannot be achieved without compromising the safety and reliability of the network.

This attachment demonstrates that a significant proportion of overheads are impacted by the size, scale and geographic dispersion of the network that Essential Energy operates, and that those factors are not adequately addressed in the benchmarking undertaken by the AER.

The remainder of this attachment will address:

- What drives overhead costs at Essential Energy and demonstrating how these overhead costs have a strong relationship to network size, scale and geographic dispersion
- The implication of those drivers on appropriateness of the AER's category benchmarking outcomes on network, corporate and total overheads, including demonstrating that Essential's overheads are comparable to the "frontier" DNSPs when appropriately adjusted
- Other considerations and general concerns with the AER's approach to overheads including:
    - Benchmarking limitations
    - Inconsistent approach to overhead reductions
    - Cost categorisation differences amongst DNSPs affecting overheads
    - Data integrity and inconsistency

4.4. Drivers of Essential Energy's overhead expenditure

Operating a rural network of significant size, scale and geographic dispersion has a direct bearing on the level of overhead that are required to support the safe operations and maintenance of the network.

Essential Energy operates Australia's largest electricity network covering approximately 737,000 square kilometres or 95 per cent of New South Wales, with over 844,000 network customers. Essential Energy is responsible for operating and maintaining a network of approximately 1.4 million electricity poles, 135,000 distribution substations and over 190,000 kilometres of powerlines - more than any other network in Australia. The network traverses humid coastal environments in the north coast region, through semi-arid desert in the far west, alpine peaks in the south and a grain belt that crosses central NSW from north to south.

To maintain this network Essential Energy has 112 small, medium and large depots spaced geographically across the network footprint, suitably positioned to:

- Respond effectively to restore the power quickly when the electricity supply is interrupted

- Optimise cost and productivity when mobilising field resources for delivery of maintenance and capital programs as well as addressing fault and emergency work
- Ensure field resources have knowledge of local network and access issues, improving response times and productivity
- Ensure skills are available to deliver critical functions where support from the nearest alternative depot is often a significant distance away.

Despite the decentralised structure, in some cases field crews can have to travel over to 250km from their home depot to reach a distribution substation that has failed.

To effectively service a large, geographically dispersed network, characterised by low customer density and large volumes of assets between customer connection points necessitates a high level of multi-skilling in our field resources. In most cases, there are significant distances between the large and smaller depots –e.g. Cobar (small depot) is 300km from Dubbo (large depot) and 460km from Broken Hill (large depot). To provide an efficient delivery strategy and to respond to fault and emergency situations, field workers are required to be able to perform a broad variety of tasks.

In many cases the diseconomies of scale associated with operating a decentralised business are reflected in the overhead costs of the business. Examples include:

- Maintaining a regional management and support structure that balances cost with the need to manage the safety and performance of the field resources across the network. At present a Regional Manager can still be located up to 700km from some field employees under their supervision.
- Training and safety management programs particularly in light of the multiskilling of field employees.
- Increased depots and office locations, incurring property and information and communication technology costs.
- Additional embedded support services such as safety and environmental specialists, dispersed within the business to enable access to the field workforce.

Essential Energy engaged the service of Advisian to review the AER's benchmarking techniques used in reaching its draft decision. Advisian make the following observations related to the impact of spatial factors that a network business faces:

> *As the spatial density of a DNSP decreases, more depots, equipment and personnel are required to maintain a given level of service performance, with less opportunity to share personnel or specialist equipment between depots or with other DNSPs for the resources that are deployed to serve geographically isolated areas. Consequently, the impact of these factors are ultimately reflected in the staffing levels, contracting strategies, business structure, maintenance strategies and accommodation costs included in a DNSP's Opex, which will result in less spatially dense businesses appearing less productive than higher density networks across most categories of Opex*[16].

Essential Energy accepts that some overhead costs will have a low correlation to the scale of the underlying network. Where it is practical to do so Essential Energy maintains centralised overhead functions to ensure that efficiency is maximised. This is particularly the case where functions are not directly related to the management and operation of field resources, or an opportunity to extract significant scale advantages can be obtained. Examples include functions such as Finance, Risk, Legal, Customer Services, as well as core Asset Management and Engineering services.

Other overhead functions use a combination of centralised or decentralised services to support the business. Transactional and reporting processes are often centralised to maximise efficiency, while frontline services are delivered by resources embedded in the regional management structures. Examples of these functions include Health, Safety and Environment and Customer Connections.

The specific drivers of costs in overhead functions will be explored in the following sections.

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[16] Advisian, *Review of AER Benchmarking*, January 2015, p36

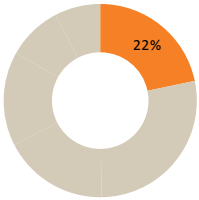
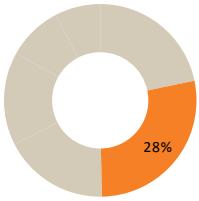
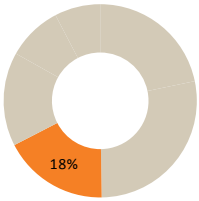
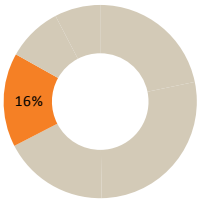
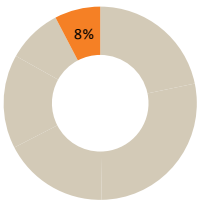
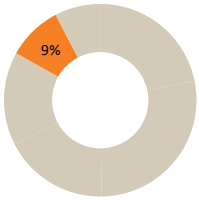
4.4.1. Drivers of corporate overhead costs

Figure 1 below sets out the major corporate overhead categories for Essential Energy, their primary drivers and what factors influence the actual quantum of overheads required to service the business.

By applying a low, moderate and high driver percentage rating against the weighted costs of corporate overhead functions, Essential Energy's estimates that about 35%[17] of all corporate overheads are driven by the size of the network. Applying the same rationale, only 13% of corporate overheads are estimated to be driven by customer numbers.

[17] Essential Energy analysis, percentages are estimates only

Figure 1 – Drivers of Corporate Overhead Expenditure[18]

				Determinant of costs		
Cost Category	**Contribution to Corporate overheads**	**Activities**	**Primary Drivers**	**Customers**	**Route Line length**	**Maximum Demand**
Property		Property Maintenance & Repair Waste & Cleaning Lease, rates and electricity costs	Number of properties	Low	High	None
ICT		Application and architecture maintenance & support Personal computing and hardware administration	Number of sites to maintain and complexity network architecture	None	Moderate	None
HR & Safety		Talent and performance management HR Support and advice Waste land management Safety programs and incident management	Number of employees and locations	Low	Moderate	None
Finance		Transactional processing Financial Accounting & Decision support Regulation & Legal	Scale of business activity and complexity (E.g.: Billing function).	None	Low	None
Customer services		Customer contact and advocacy Network Electricity Compliance Framework (NECF)	Number of customers	High	Low	None
Other		Procurement, Internal audit, Corporate Governance etc.	Business activity & number of employees	Moderate	Low	None
				13%	**35%**	**0%**

[18] Essential Energy analysis

Specific examples of the types of overheads driven by network scale and dispersion include;

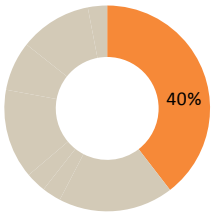
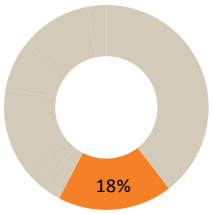
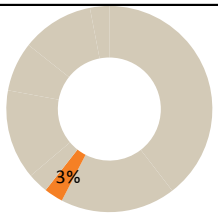
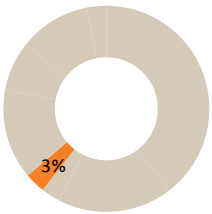
- Property costs (rent, electricity, rates, cleaning, maintenance & repair)
  - There are about 140 sites strategically located across Essential Energy's network area in order to respond to customer service levels, faults and outages in a timely manner
  - There are 112 field depots with the property costs managed and captured centrally as corporate overheads
  - Essential Energy also leases approximately 287 additional sites across the footprint that are used to support its own radio network that is used for operational and safety purposes. In many locations the Government Radio Network does not offer effective coverage, This is in addition to the 140 sites mentioned above
  - Property costs account for about 20% of Essential Energy's overhead cost per the AER's definition.
- Information, Communication and Technology (ICT) costs
  - Most of Essential's 140 sites require telephone and data costs as well as support and maintenance costs for personal computing, servers, printing, and uninterrupted power supply equipment. Furthermore, data connectivity is supplied to a multitude of network assets such as the 400 zone substations across the network
  - Due to the large and complex network, ICT applications are required with high ongoing support costs. Some applications are licenced according to the number of poles, network nodes or SCADA points, these increase Essential Energy's ICT operating costs
  - Mobile and/or satellite phones are required by most of the 3000 field based workers and as such add additional costs required to service Essential Energy's vast footprint
  - The overall architecture and number of applications required to drive the ICT network across Essential Energy's footprint is complex and often has to be delivered using a range of technologies (such as Citrix to maintain performance)
  - Whilst video conferencing is normally more cost effective than travel, it is still an additional cost required to operate across such a large network area with many sites.
- HR, Safety and Technical Training
  - There are over 2,000 trade and technical employees that require ongoing technical training
  - The workforce is mostly dispersed; field employees are required to be multi-skilled in order to perform the various tasks to industry standard, and hence training and maintaining this capability with additional costs due to travel and loss of productive time. To the extent possible this has been mitigated by online learning tools
  - Safety is Essential Energy's number one priority; additional safety overhead is required to embed the safety culture, processes and systems across the entire footprint, ensuring employee and public safety
  - HR and Health, Safety and Environment teams service about 4,000 employees, about 3,000 of which are in dispersed locations. Decentralised HR and Safety business models are utilised in order to provide timely responses to safety issues and staff needs, assisting with promoting an effective safety culture.
- Communications, Customer and Stakeholder Management
  - Consistent with our desire to maintain strong customer and stakeholder engagement, the geographic dispersion of the network results in a large number of active regional stakeholders that must be effectively engaged and serviced. Examples include:
    - 255 regional media outlets
    - 97 local councils
    - 25 State Members of Parliament

- 11 Federal Members of Parliament
- 60 Chambers of Commerce.

4.4.2. Drivers of network overhead costs

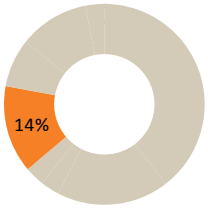
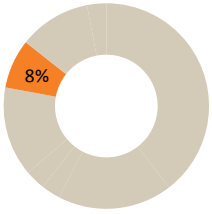
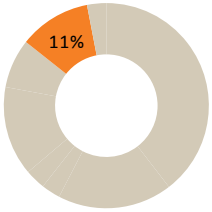
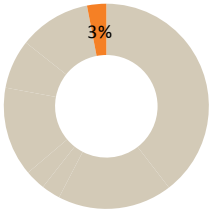
Essential Energy has broken its network overheads down into eight sub categories, and identified the key drivers of each of these. Each driver has been allocated an impact rating of High, Moderate or Low. This is summarised in Figure 2 below.

Figure 2 – Drivers of network overhead expenditure[19]

				Determinant of costs		
Cost Category	**Contribution to Network overheads**	**Activities**	**Primary Drivers**	**Customers**	**Route Line length**	**Maximum Demand**
Network Operations		Technical safety and training Regional management, depot supervision Design and work scheduling General administration	Number of network assets, Customer service levels, number of depots, number of network staff	Low	High	None
System Control		Network monitoring and control Co-ordinating field response to network outages Co-ordination of planned outages	Number of network assets, number of customers	Low	High	None
Network Connections		New customer installations and connections Contestable work ASP relationships	Number of customers, customer service levels, number of network assets, contestable work	High	Low	None
Primary Systems		Stewardship of primary network assets Asset management policies Asset maintenance & renewal planning	Number and complexity of network assets, number of customers, system demand	Low	High	Low

[19] Source: Essential Energy analysis

Figure 2 (continued) – Drivers of network overhead expenditure

Cost Category	Contribution to Network overheads	Activities	Primary Drivers	Determinant of costs		
				Customers	Route Line length	Maximum Demand
Secondary Systems		Stewardship of secondary asset systems, such as SCADA, load control, and network communications Secondary system policies and standards Secondary system maintenance and renewal planning	Number & geographic location of network assets and secondary systems	Low	Moderate	Low
Asset Network Planning		Subtransmission planning, HV distribution planning, forecasting & demand management, power quality & reliability planning, investment management	Number and complexity of network assets, customers and system demand	Moderate	High	Low
Network Development		Overall program management and delivery of network capital and maintenance programs. Includes overseeing project management of all projects, vegetation management, asset inspection	Number of network assets, system demand	None	High	Low
Other		Various, including Electrical Safety Office, Network Data & Performance	Combination of network scale, customer numbers and system demand	Low	High	low

As can be seen, Essential Energy's network overhead costs are predominantly driven by the size and scale of the network. Further examination of the two main cost categories demonstrates this relationship.

Network Operations

Network Operations account for 40% of total network overhead costs. These overheads include regional management and depot operations that are required to manage the field force, and the amount of time that field staff allocate to support activities, i.e. not to defined projects. Examples of activities allocated to support would be design and work scheduling, training, tool box talks, safety assessments and meetings, time-sheeting, and general administrative activities.

Network Operations overhead costs are a function of the number and dispersion of staff in Network Operations. This, in turn is driven by the amount of planned and unplanned work on the electricity network, which is primarily driven by the number and heath of network assets, proximity of the assets and accessibility to deliver required service levels to customers.

System Control

System Control accounts for 18% of total network overheads costs, comprising mainly of labour costs. System Control overheads are a function of the number of System Control staff, which is driven primarily by both the scale of the network, the number of fault events, the design of the network and to a lesser extent by the number of customers connected to the network. The greater the number of network assets and customer connections the Systems Control team has to monitor and control, the greater the demand for System Control resources.

4.4.3. Implications for the AERs benchmarking

The AER has relied extensively on the use of outcomes of its benchmarking to reject our proposed operating expenditure and develop substitute expenditure. Given the significance of the models, Essential Energy engaged Huegin, Frontier Economics, David Newbury and other experts to undertake an independent review of the approach used by the AER and its consultants. The detail findings are contained in their reports attached to the revised proposal, are summarised in Chapter 7 our revised proposal and section 7 of this attachment.

The AERs preferred Cobb Douglas SFA model has the following variables:

- Customer numbers – with a coefficient of 0.667
- Ratcheted demand - with a coefficient 0.21
- Line length - with a coefficient of 0.10

Line length is the only variable that presents some sort of proxy for the asset itself, but its coefficient is only 0.10. From the above discussion[20] it is clear that corporate overheads contains significant costs that have a much stronger relationship to network size than customer numbers, yet the SFA model preferred specification has a coefficient of 0.667 related to customer numbers.

In addition, due to data limitations and modelling constraints, Economic Insights has not been able to make adjustments for specific environmental factors that, in Essential Energy's opinion, are significant differences across DNSPs. The heterogeneity of the network businesses, particularly the rural versus urban business, do not appear to be adequately addressed in the benchmarking.

Similar concerns were noted by Huegin in its review of the AERs benchmarking:

> *In our experience and supported by previous Huegin studies, the incremental opex cost of increasing customers in an electricity network is actually quite low, yet the SFA model has a coefficient of 0.667. The incremental opex costs of increasing ratcheted peak demand is negligible, yet the SFA model gives this variable a coefficient of 0.21. Line length is the only variable that presents some sort of proxy for the asset itself, but even then:*
>
> - *It's influence is low in the model, with a coefficient of only 0.10; and*
> - *The actual line length is only a moderately strong proxy for influence of the asset on opex, as the design, type and location of the assets all drive opex*.
>
> *Overall, we consider that the validity of the model is poor. Whilst there are coincidental relationships between increases in customers and line length, more important considerations of the asset design and location are not considered*[21].

Essential Energy has 112 depots in order to cover the vast geographic footprint covered by its network. These depots require IT and communications technology, HSE and HR support, and management support, supervision and oversight. These diseconomies of scale all translate into additional costs borne by Essential Energy which are reflected in additional overhead costs, factors that are not adequately addressed in the AERs benchmarking models.

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[20] Refer to section 4.4,4,5,and 4.6 of this attachment

[21] Huegin, *Huegin's response to Draft Decision on behalf of NNSW and ActewAGL. Technical response to the application of benchmarking by the AER.* Draft 15 December 2014, p 17

4.5. Response to AER overhead category analysis benchmarking

The AER has applied category benchmarking to corroborate the findings of the economic benchmarking undertaken by Economic Insights. The key findings are outlined in the table below:

Overhead type	AER Benchmark finding	Benchmarked against
Network	Comparable	Cost per km of circuit length
Corporate	High	Cost per customer
Total	Very High	Cost per customer

Essential Energy does not agree with the AER's assessment of corporate and total overheads, and the basis upon they have been benchmarked. These concerns are discussed in more detail in the following sections.

4.5.1. Corporate overhead

AER Benchmark finding	Benchmarked against	Essential Energy Response on finding	Essential Energy suggested benchmarking
High	Cost per customer	Comparable when normalised for network size and scale	Cost per km of route line length

A significant proportion of Essential Energy's corporate overheads are relatively fixed, and reflect the statutory obligations and service levels that the business must operate within. As outlined above, Essential Energy's corporate overheads are also significantly influenced by the scale and geographic dispersion of the network.

Classification of corporate overheads

In its draft decision the AER states[22]:

> *Corporate overheads are overhead costs not directly attributable to operating an electricity distribution system (that is, not Network overheads).*

Essential Energy notes that the AER has used the RIN data as the primary source for benchmarking. Upon review of corporate overheads Essential Energy notes that its corporate overheads includes certain network related expenditure that should be classified as network overheads for the purposes of benchmarking. This change is consistent with the Corporate Overhead Strategy[23] and Divisional Overhead Strategy[24] that accompanied our Regulatory Proposal. A review of the Category Analysis RIN highlights these inconsistencies occur across DNSPs.

Essential Energy analysis shows that network related overhead accounts for about 26% of corporate overheads and includes:

- Telecommunication costs related to network systems as well as costs to support Essential Energy's radio communication network (as no other radio network exists in parts of our footprint).
- Outage management, Supply Interruptions Group (SIG)
- System Control

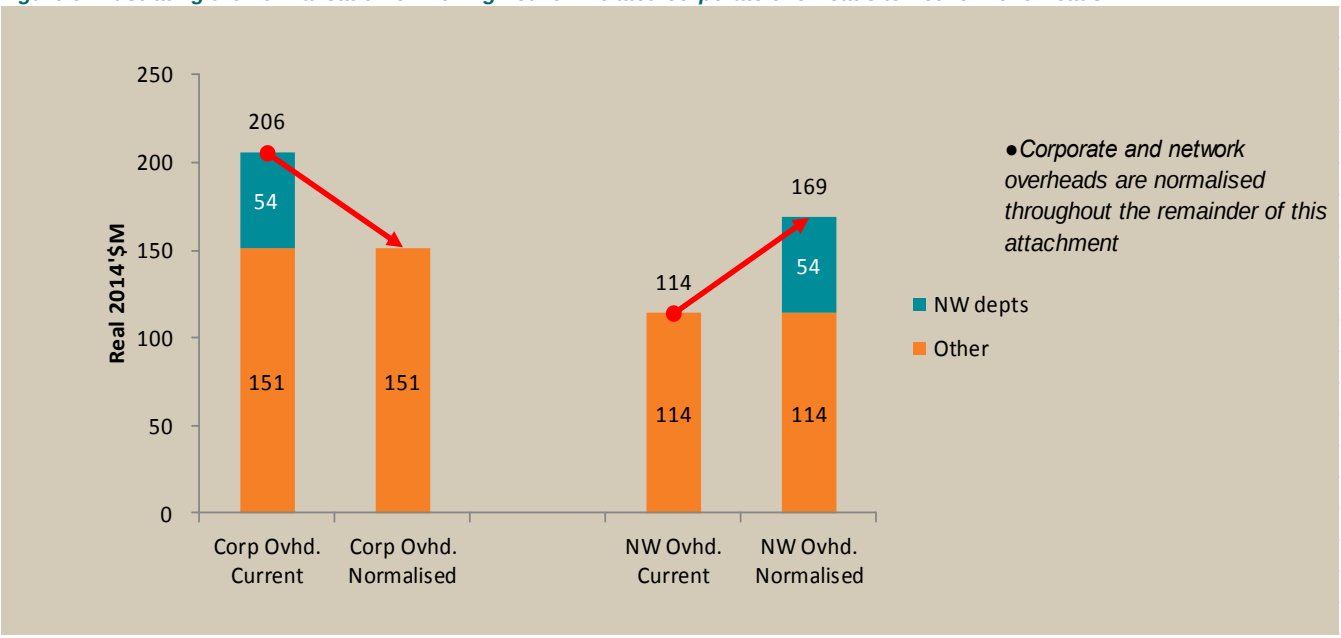
To try and provide a more robust assessment of corporate overheads, Essential has reallocated those corporate overheads costs into network overheads. The impact is detailed in Figure 3:

[22] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Attachment 7 Operating expenditure*, November 2014, p. 7-80

[23] Essential Energy Substantive Regulatory Proposal Attachment 6.2 Corporate overhead strategy – 2014, May 2014

[24] Essential Energy Substantive Regulatory Proposal Attachment 6.3 Divisional overhead strategy – 2014, May 2014

Figure 3: Illustrating the normalisation of moving network related corporate overheads to network overheads[25]



Network scale and level of corporate overheads

In its draft decision the AER states[26]:

> *We have not presented this metric against customer density. Customer density should not greatly affect the level of corporate overheads a service provider incurs because corporate overheads should be largely fixed costs.*

It has been established that Essential Energy's network scale and corresponding low customer density does drive the level of certain corporate overhead cost categories.

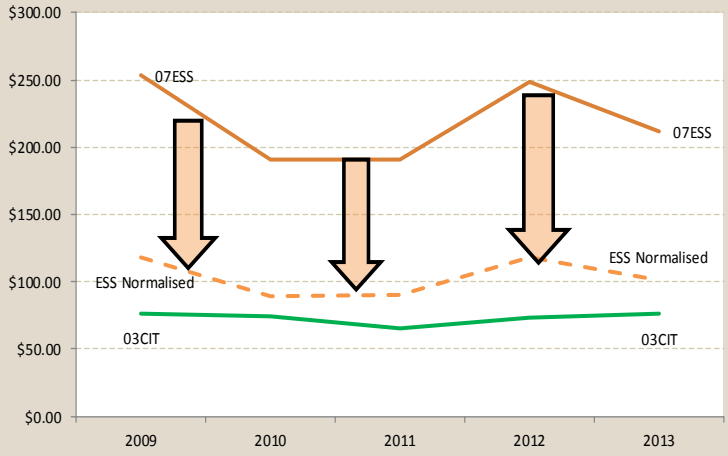
Whilst Essential Energy disagrees with the use of customer numbers to benchmark all of Essential Energy's corporate overheads, Essential Energy recognises that there are certain corporate functions that have a low relationship to network size (E.g.: Finance, Legal and other centralised administrative support functions).

Figure 4 and Figure 5 provide a comparative assessment of corporate overheads, with Essential Energy's corporate overhead adjusted for the following;

- Using the AER's definition of corporate overheads, 26% of Essential Energy's total corporate overheads relate mainly to network services have been excluded to gain a more meaningful comparison of corporate overheads.
- Property, ICT and HR related costs have a strong relationship to network size and geographic dispersion, by applying weighted percentage ranges to network size related drivers, they account for about two thirds of Essential Energy's remaining corporate overheads (after normalising for network overheads as outlined above) . Based on the driver discussion above Essential Energy estimate that 35% of these remaining corporate overheads relate to network size and have been normalised accordingly.
- As the AER has chosen to use customer numbers for benchmarking, Essential Energy has normalised its corporate overheads to exclude the estimated level of overheads driven by network size in order to illustrate its comparability to other DNSPs.

[25] For illustrative purposes only – SRP 2015 only
[26] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Attachment 7 Operating expenditure*, November 2014, p. 7-80

Figure 4: Normalised Corporate overheads per customer – AER Graph Figure A-13 uncluttered

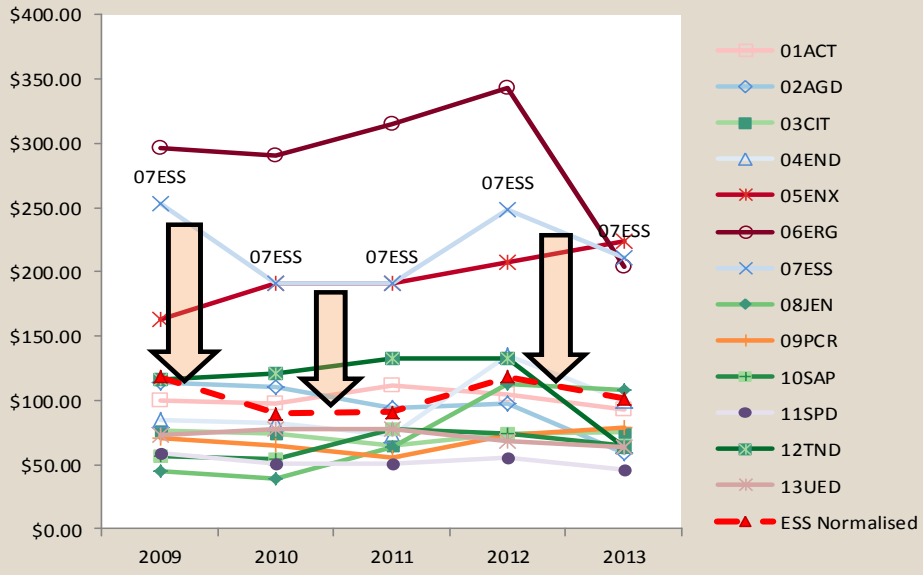


The gap betweem 07ESS (Essential's actual coporate overheads) and ESS Normalised relates to:

- **26% of Corporate overheads relating to Network expenditure (NOCR, SIG, Network Telecomms)**
- **35% weighted discount factor applied to remaining Coporate overhead for Property ICT, HR and Safety costs related to Network size**

This illustrates that a large component of EE's Corporate overheads are driven by Network size. Once normalised for these factors EE is comparable to other DNSPs.

Figure 5 - Normalised Corporate overheads per customer – AER Graph Figure A-13 overlay



Conclusion

- Essential Energy includes the functions such as System Control, Supply Interruption Group (SIG) and Network Telecoms in corporate overhead. These would normally be classified as network overhead under the AER's definition.
- Property and ICT and HR make up two thirds of the remaining corporate overhead and about 35% of this is estimated to be driven by network size.
- Once adjusted for these factors, Essential Energys overheads appear comparable to other DNSPs
- Essential Energy suggests that corporate overheads need to be considered against homogenous DNSPs to account for network scale.

4.5.2. Network overhead

AER Benchmark finding	Benchmarked against	EE Response on finding	EE suggested benchmarking
Comparable	Cost per km of circuit length	Agree: Comparable	Cost per km of route line length

The AER noted that Essential Energy's network overhead costs are "Comparable" to those of industry peers but should be lower due to lower customer density.

> *However, given Essential Energy's much lower density, we would expect to see it on a lower position than all other service providers* [27]

Network overheads have a strong relationship to network scale and geographic dispersion. Essential Energy agrees with the AER statement that asset volumes are more likely to drive network overhead costs than customer numbers[28], however network scale has very little to do with the number of customers connected to the network.

Route line length is the best proxy for network scale

The AER states[29] that "*We chose to normalise network overheads costs by circuit kilometre because asset volumes are more likely to drive network overhead costs than customer numbers."*

Whilst Essential Energy agrees that network costs are predominantly driven by network scale, when considering network overheads a better proxy for network scale than circuit length is route line length.

Route line length represents the geographic dispersion and hence the true physical spread of the network.Circuit length on the other hand is only representative of the 'length of cable' on the network and therefore while having some impact to direct maintenance costs, it has less bearing on the extent of overhead expenditure. It also may create inconsistencies when benchmarking overheads. For example Jemena and Citipower have almost 30% of their lines occupying the same geographical area where as Essential Energy has only 5%.

Benchmarked on a route line length basis, Essential Energy's network overheads were third lowest amongst service providers benchmarked over the 2009-2013 period (see Figure 6 below), even after taking the reclassification of some overheads from corporate to network into account as outlined in Section 5.1. Importantly productivity and efficiency improvements will result to Essential's network overheads being lower over the 2015-2019 period.

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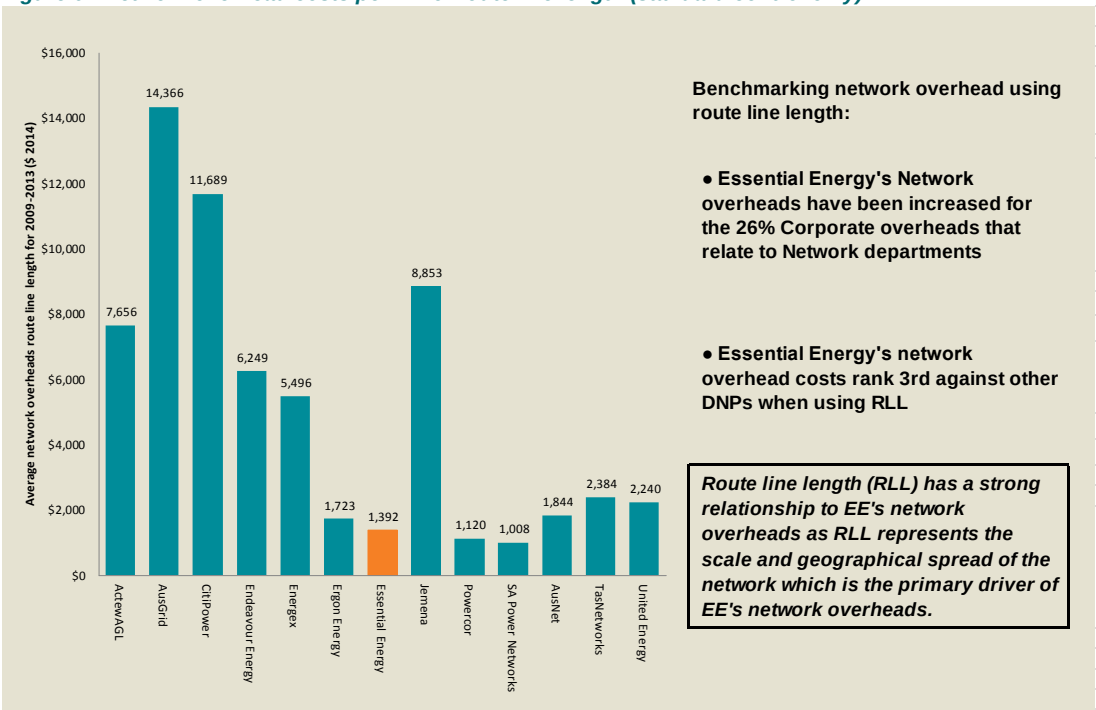
[27] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Attachment 7 Operating expenditure*, November 2014, p. 7-81

[28] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Attachment 7 Operating expenditure*, November 2014, p. 7-81

[29] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Attachment 7 Operating expenditure*, November 2014, p. 7-81

Figure 6 - Network overhead costs per km of route line length (standard control only)[30]



Conclusion

- Essential Energy's network overheads are primarily driven by network size and scale
- The best proxy for network size and scale is route line length
- When benchmarked on the basis of route line length, Essential was close to the efficient frontier over the 2009-2013 period
- As a result of productivity and efficiency improvements, Essential Energy has forecast network overheads to further decline over the 2015-19 period.

4.5.3. Total Overhead

AER Benchmark finding	Benchmarked against	EE Response on finding	EE suggested benchmarking
Very High	Cost per customer	Comparable when normalised for network size and scale	Cost per km of route line length

The AER has assessed Essential's total overheads as "Very High" when benchmarked on the basis of customer numbers. Essential disagrees with this assessment for the reasons set out below.

We have shown above that network size and scale drives both network overheads and corporate overheads, the latter albeit to a lesser degree.

It follows therefore, that benchmarking total overheads should take into account the size and scale of the network. We have shown why route line length is the best proxy for network size and scale.

The AER has stated[31] that Essential's total overheads are "Very High", and that they should be lower due to the lower customer density. However, lower customer density does not necessarily relate to lower relative costs per

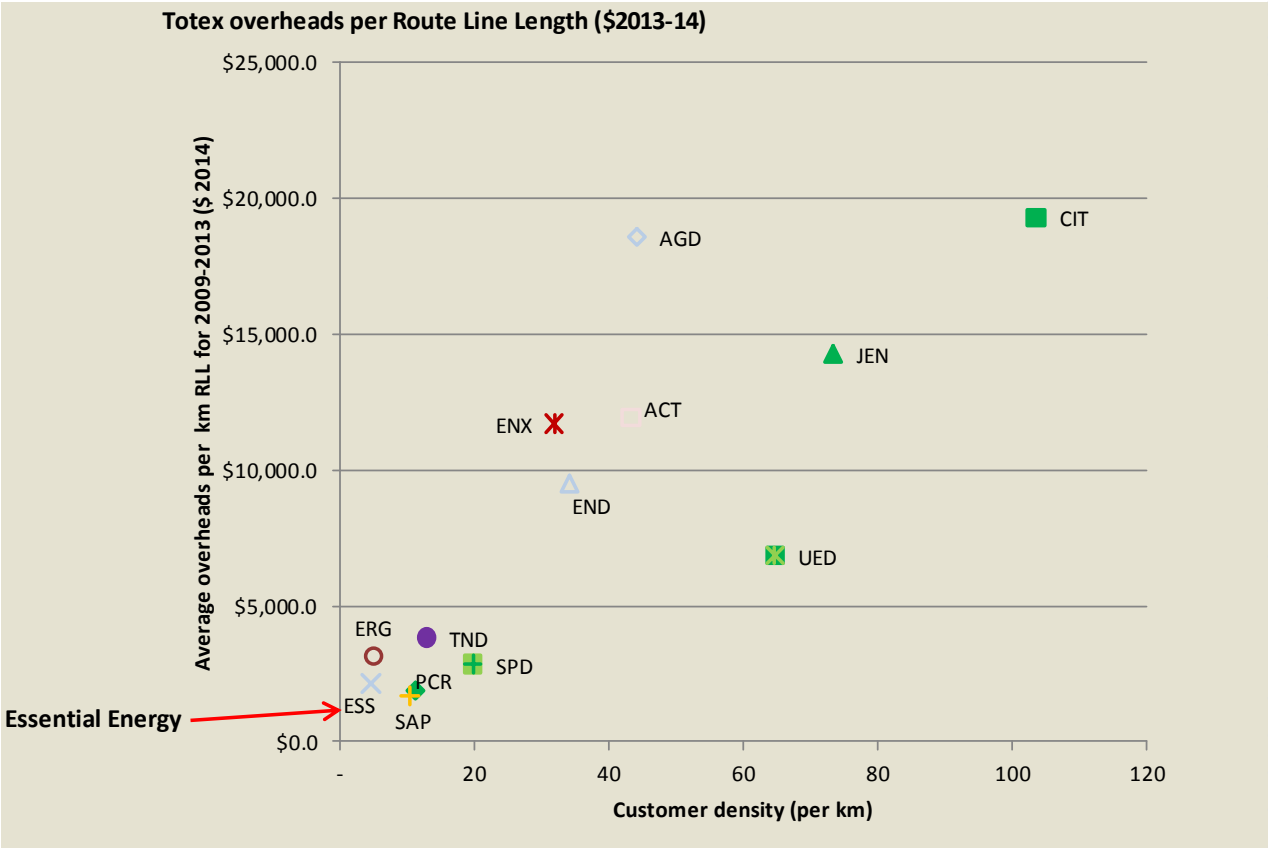
[30] Includes capitalised network overheads Sources – RIN benchmarking data, normalised to take into account the 26% of corporate overheads that relate to network All dollars are Real $2014

kilometre, reflecting diseconomies of scale encountered by having to support assets and customers in the remotest of areas.

When standard control overheads are benchmarked on the basis of kilometres of route line length, Essential Energy averaged $2,137 (real $2014) over the 2009-2013 period, with this forecast to decline to $1,880.

Figure 7 restates the AER category analysis benchmarking using route line length. While Essential Energy acknowledges that not all costs are related to network size and scale, it does demonstrate relative performance of Essential Energy, and underline the importance of recognising the appropriate drivers in measuring efficiency.

Figure 7 - Total overhead costs against Customer Density (using km of route line length)(Standard Control only)[32]



Conclusion

- The size and scale of Essential Energy's network is a significant driver of total overhead costs
- The best proxy for network size and scale is route line length
- When benchmarked using route line length, Essential Energy's total overheads are comparable to those deemed to be at the efficient frontier
- Improvements in productivity will lead to a significant reduction in total overheads over the 2015-19 period.
- Lower customer density does not necessarily relate to lower relative costs per kilometre as diseconomies of scale are encountered by having to support assets and customers in the remotest of areas.

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[31] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Attachment 7 Operating expenditure*, November 2014, p. 7-82

[32] Source – RIN benchmarking data

4.6. Revised Proposal

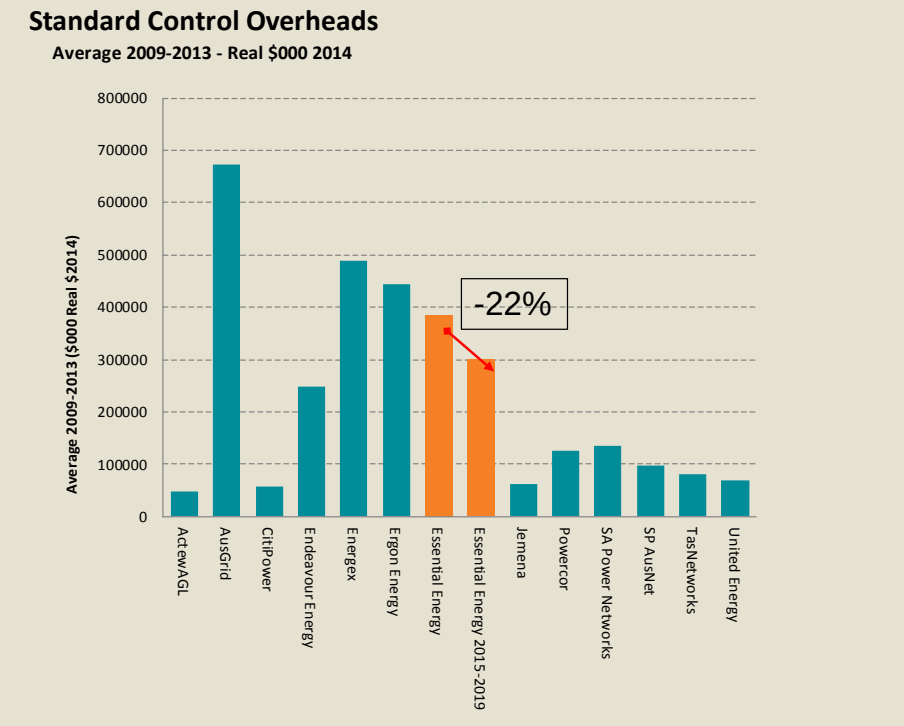
The AER has used 2009-2013 overhead data in its benchmarking despite the fact that Essential Energy's forecast overheads for 2015-2019 regulatory period included substantial reductions already made in the overhead areas. The reductions provide for improved efficiency balanced against the need to maintain and safe and reliable network.

Essential Energy substantive regulatory proposal outlined significant efficiency improvements implemented under the Network Reform Program. The proposed total overheads for the period 2015-19 regulatory period are lower than for the 2009-14 regulatory period, both at a total level and as a percentage of the total expenditure.

The design and implementation of Essential Energy' reforms always seek to balance safety and reliability objectives with the need to improve the efficiency of the business. As noted in Attachment E.1[33] of the substantive regulatory proposal, Essential Energy's focus has been on uncovering genuine efficiencies that will deliver long term benefits to customers, rather than simply cutting costs in an unsustainable manner.

These reductions have a significant impact on our forecast overheads as outlined in Figure 8.

Figure 8 – Total overhead costs (standard control only)



Source: RIN data

Essential Energy's Revised Regulatory Proposal incorporates the latest data showing that its efficiency programs will have a greater impact on our operating expenditure in the 2015-19 regulatory control period through improved labour productivity. This reduces operating expenditure overall but has consequential impacts on exit costs. Essential Energy also clearly recognises the need to continue to improve productivity in a sensible and structured manner. As such the revised proposal forecasts annualised labour productivity improvements of 22.6% by the end of the regulatory period.

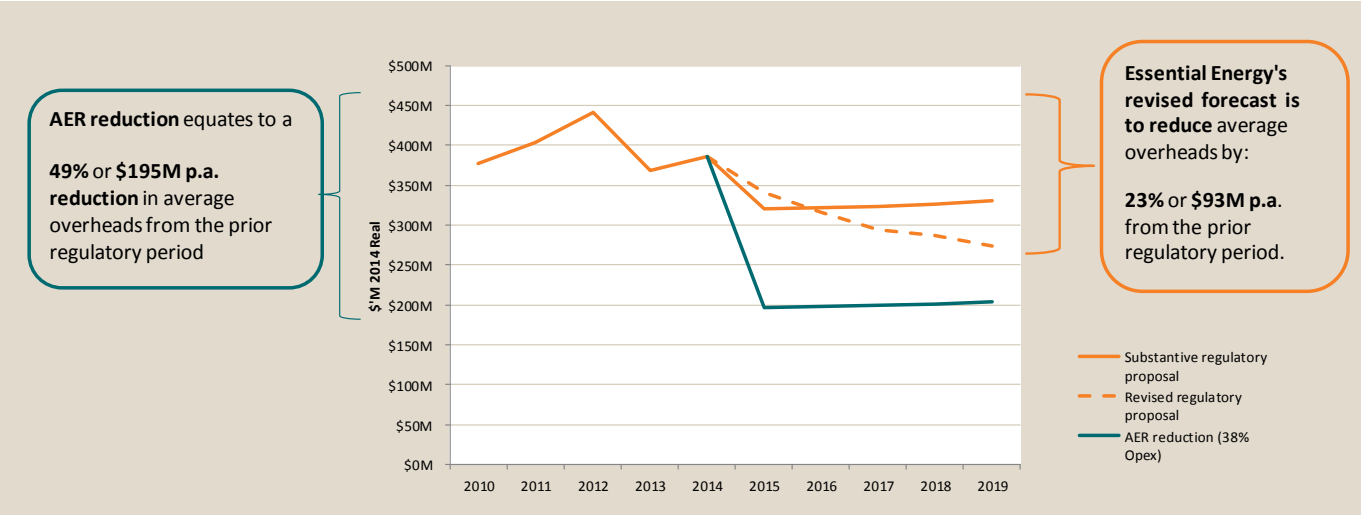
Our revised proposal is set to reduce average total overheads by $93 million per year over the 2015-2019 period, a reduction of 23%[34] from prior regulatory control period (normalised for material changes in cost classifications). As

[33] Essential Energy - Attachment E.1_Delivering efficiencies for our customers - 2014

[34] This differs to figure 8 as this refers to overheads for all control services. Figure 8 relates to Standard Control services only

demonstrated in Figure 9 the revised proposal continues to deliver efficiencies, but in a manner that allows the business to ensure safety and reliability are not compromised.

Figure 9 – Total overheads AER draft decision vs. Essential Energy revised regulatory proposal (change from previous regulatory period) [35]



4.7. Other considerations

Essential Energy highlights the following issues impacting the assessment of overhead expenditure:

- Benchmarking limitations
- Inconsistent approach to the application of reductions in overheads
- Inconsistency in cost categorisation
- Issues of data reliability and integrity

AER benchmarking is unfit for purpose:

- The methodology and approach to conduct economic benchmarking is immature
- Inconsistencies in the data used and errors have diminished confidence in the assessment of efficiency
- As a result, a more detailed assessment of Essential Energy's expenditure forecasts are necessary

Essential Energy recognises the challenges and limitations of any benchmarking. When using benchmarking to inform any assessment of efficiency these limitations require careful consideration, with any outputs to be cross checked against engineering and risk assessments.

In reaching its draft decision the AER has placed a significant reliance on the outcomes of its benchmarking models. Given the significance of the models, Essential Energy engaged Huegin, Frontier Economics and other experts to undertake an independent review of the approach used by the AER and its consultants. In their report[36] Huegin concluded the AERs benchmarking to be unfit for purpose and identified a number of factors supporting its assessment;

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[35] Source data includes RIN data 2010-14, Essential Energy substantive regulatory proposal 2015-19 and Essential Energy revised regulatory proposal 2015-19. Essential Energy has assumed the overhead reduction would be consistent with the total opex reduction of 38.4% as per the AERs draft decision

[36] Huegin, *Huegin's response to Draft Decision on behalf of NNSW and ActewAGL. Technical response to the application of benchmarking by the AER.*, 15 December 2014

- There is no consensus on the most appropriate form of modelling technique - or in the appropriate definition of input and outputs that should be considered when benchmarking utilities
- Small samples and heterogeneity frustrate efforts to benchmark Australian networks. The introduction of international data constrains the ability to adjust for environmental factors
- The validity and robustness of the benchmark measures are limited in their capacity to inform the conclusion reached, including to provide signals of efficiency
- Reliance on benchmarking is premature, lacks consideration of environmental variables and relies on immature data
- The lack of consideration of environmental variables presents a bias against businesses with business conditions not considered in the models. These include physical asset differences, geographical differences and accounting policies
- Too much emphasis was placed on a single model, with the chosen model not reflective of industry costs.

Similar concerns are echoed by Frontier Economics in their review of the AERs benchmarking models.[37]

The potential for erroneous outcomes from the AERs benchmarking, combined with Essential Energy's own experience in operating a rural network, raise significant concerns that the proposed expenditure reductions are not reasonable or practical, and cannot be achieved without compromising the reliability and safety of its network. The potential implications to safety and reliability are discussed in detail in Attachment 1.2[38] to our substantive regulatory proposal. Essential Energy asserts that the proposed reductions will impact its ability to manage that safety of its network as summarised below

Essential Energy disagrees that the AER's determination provides a revenue stream within which the business can prioritise its expenditure to adequately manage the safety risks, so far as is reasonably practicable. We consider that the magnitude of the AER proposed capital expenditure and operating expenditure reductions, coupled with the retrospective nature for which these will need to take effect, will drive an abrupt and fundamental organisational re-design, reprioritisation of programs and an increase in safety risk to our workers and members of the public beyond the limits that are acceptable[39].

When seeking to validate the outcomes of the economic benchmarking, the AER has relied on partial productivity indicators and category analysis. In Essential Energy's view the selected measures do not adequately recognise significant drivers that influence an efficient level of expenditure for a rural distributor.

Benchmarking should be against homogenous networks

The drivers of network costs can be quite different between urban and rural service providers, and meaningful benchmarking can only be conducted between homogenous service providers. Essential Energy contends that it can only be meaningfully benchmarked against other predominantly rural service providers.

However, the AER have benchmarked Essential Energy against a heterogeneous group of service providers, and have drawn conclusions from this analysis. This subject is covered in more detail in section 4.3.2 of the Huegin report.[40]

There are significant differences in the way that RIN data has been prepared

The AER has relied upon RIN data to conduct its benchmarking exercise however there are significant differences in the way that RIN data has been prepared by the different service providers. This includes in the preparation of the overhead data in the RINs.

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37 Frontier Economics, Review of the AER's econometric benchmarking models and their application in the draft determinations for Networks NSW, January 2015

38 R2A, Asset / System Failure Risk Assessment, January 2015

39 Essential Energy Revised Regulatory Proposal

40 Huegin, *Huegin's response to Draft Decision on behalf of NNSW and ActewAGL. Technical response to the application of benchmarking by the AER*, 15 December 2014

For example, most service providers have included capitalised overheads in overhead expenditure before allocations; however Essential and at least one other service provider have excluded capitalised overheads from this section, and added them incrementally to the RIN section below.

In addition, the total overheads in Category Analysis RIN Sheet 2.1 (Expenditure Summary) do not reconcile with Sheet 2.10 (Overheads) in all cases. This makes benchmarking using RIN data difficult and potentially unreliable.

AER uses an inconsistent methodology to make reductions to overheads

- There are varied and inconsistent assessments of overheads in the draft decision
- The AER's decision on overheads cannot be applied in reality due to the Cost Allocation Methodology (CAM) approved by the AER
- The AER should assess overheads on its merits rather than independent multiple decisions that have no reference to regulatory instruments that it must abide by

The draft decision contains inconsistent approaches when determining overhead across the different control services, including conflicting assessments on what level of overhead should be considered efficient. The proposed reductions cannot be implemented consistently due to the Essential Energy's CAM. The AER needs to provide clear and consistent approach to the assessment of overheads across the various control services that can be implemented consistently within the requirements of the CAM.

In a final decision published in May 2014, the AER approved Essential Energy's CAM, which applies overheads across standard control capital expenditure, standard control operating expenditure and alternative control services. The draft decision applied reductions at different rates across the control services. To be compliant with the CAM the overhead rate cannot be altered in one category of expenditure without being changed across all categories.

It may be the case that the various attachments to the draft decision were prepared at a different point in time and may have been prepared in isolation from one another; if this is the case the outcome may have been unforeseen. Table 2 summarises the decisions related to overhead made across the control services within the draft decision. The varied approaches and inconsistent outcomes are evident.

Table 2: Summary of draft decisions impacting overheads

Control Service:	Proposed Reductions:	Method / Rationale:
Standard control operating expenditure	Unclear – 38.4% reduction in Total operating expenditure	Benchmarking findings
Standard control capital expenditure	42.3% reduction in capitalised overheads[41]	Trend analysis of actual capitalised overhead 2009-14. Maintains the average proportion of actual capitalised overhead to total capital expenditure of 32 per cent.[42]
Metering & Ancillary Network Services	Various – applied in some models	Unclear
Public lighting	Overhead reduced from 41.25% to 25%	Industry experience and norms

[41] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19Attachment 6: Capital expenditure*, November 2014, p76
[42] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Overview*, November 2014, p51

Standard Control Capital Expenditure:

The AER outlines the following rationale for reducing capitalised overheads[43];

> *We do not accept Essential Energy's proposal on the basis that we expect that Essential Energy's capitalised overheads should be lower given we have reduced Essential Energy's 'base' opex such that a lower amount of overheads need to be capitalised.*

We have instead included an amount of $478.6 million ($2013-14) in our alternative estimate. This is 42.3 per cent less than Essential Energy's proposal; In coming to this view we have applied trend analysis to assess Essential Energy's proposal to the actual capitalised overheads it incurred during the 2009-14 regulatory control period.

Upon review of the AER draft decision Essential Energy highlights the following issues:

- The reduction has been incorrectly calculated as 42.3% - restated the implied reduction is 29.7% (using the adjusted allowance of $478.6m)
- The AER's approach contravenes the approved CAM and assumes overheads are purely variable costs
- The methodology that has been used to determine the proposed reduction is a trend analysis of the current regulatory determination. This approach does not recognise changes in accounting treatments and a change in the relative amount of direct operating expenditure and direct capital expenditure work (impacting the level of capitalisation).
- The AER has not considered the interrelationship between capital expenditure and operating expenditure, that being the consequential outcomes on operating expenditure if an artificial cap is applied to what portion of overheads can be capitalised. In the absence of this consideration, Essential Energy has not been provided an opportunity to recover efficient costs.

Public lighting:

In reviewing Essential Energy's Alternative Control Services Proposal the AER noted:

> *Essential Energy's proposal to apply a 41 per cent divisional and corporate overhead cost on top of its public lighting charges in not considered efficient. We have not seen overheads for distribution businesses set at such high rates and the evidence from other jurisdictions calls into question the quantum of overheads Essential Energy sought. We consider an efficient benchmark is the application of a 25 per cent indirect charge as applied in Victoria and as proposed by Ausgrid. We have adopted this for Essential Energy*[44]

Upon review of the AER draft decision Essential Energy highlights the following issues:

- The percentage of overhead for public lighting is determined through our AER approved CAM.
- The methodology that has been used to determine the proposed reduction oversimplifies the inherent limitations of comparing overhead rates across businesses. As noted within the cost categorisation section of this attachment, the accounting treatments and cost classifications vary considerably across the DNSPs. It is therefore problematic to make simple comparisons without correcting for these differences.

Metering and Ancillary Network Services:

Essential Energy price build up for ancillary network services includes both direct and indirect costs to provide a cost reflective price for our customers. A detailed review of the AER draft determination and the Marsden Jacob report has identified some inconsistencies in overhead treatment.

Marsden Jacob calculated implied overheads to assist with benchmarking. In order to benchmark overhead rates on a comparable basis, Marsden Jacob calculated an 'implied overhead rate' for each of the businesses by taking

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[43] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19Attachment 6: Capital expenditure*, November 2014, p76

[44] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19Attachment 16 Alternative control services*, November 2014, p58

the ratio between the total labour rate proposed by the distribution business (including all on-costs and overheads) and the standard labour rate (including on-costs but not overheads).

The result of this calculation of implied overhead rates for Essential Energy is a different overhead rate for each labour category. This is inconsistent with Essential Energy's overhead allocation method; where overheads are applied on a percentage basis consistent with Essential Energy's Cost Allocation Methodology (CAM) approved by the AER in May 2015. A constant overhead rate is applied to all labour categories.

Essential Energy note that the AER has utilised Marsden Jacobs implied overhead rates in determining labour rates (including on-costs and overheads) to apply within the draft determination. This is inconsistent with the CAM, and results in over recovery of overheads on most labour categories.

Marsden Jacob in their analysis of overheads confirmed that Essential's overheads were below the recommended benchmark. We do note however that Marsden Jacob have iterated in their report that while they have considered the overhead rates for ancillary network services in isolation, capping the overhead rate may have unintended consequences for the broader CAM. They recommended that the appropriate method of addressing the overhead allocation should be tested with the AER staff responsible for developing and enforcing the CAM.

Essential Energy has consistently applied indirect costs to all ANS fees included within the revised proposal consistent with the CAM.

Categorisation of costs and data integrity significantly impedes the ability to undertake a detailed review of efficiency

Categorisation of costs

Essential Energy notes that there are a broad range of approaches used across the DNSPs in categorising costs. While the AER has cited the use of all expensed and capitalised overheads *"because opex overheads are affected by a service providers' capitalisation policies*[45] this issue does not mitigate the impact of variable categorisation of costs between overheads and direct operating expenditure.

Essential, through its cost allocation methodology, tends to treat a greater portion of its costs as overheads when compared to many other DNSPs. This difference in treatment of costs means that equivalent costs are treated as direct costs and therefore form part of unit rates.

These variations are more apparent in the case of businesses where a greater proportion of work is performed by contracted parties. In its review of benchmarking Heugin noted

Many of the overhead costs reported by the NSW and ACT businesses are absorbed into the contract costs for direct maintenance activities for the frontier businesses, as the frontier businesses generally outsource more work[46]

The decision to outsource work does not of itself imply an increased level of efficiency, however to compare overhead costs without accounting for these issues can be problematic. The inconsistency in cost classification affects the ability to conduct meaningful comparisons between DNSPs.

In Figure 10 Essential Energy has modelled a scenario[47] to illustrate the impact of how different business models can affect direct cost classifications and overhead rates. Essential Energy conducts its network operations internally. The scenario assumes a business model where Essential Energy mainly outsources its network operations. The rationale being that if outsourced, Essential Energy would not incur the level of overhead it currently recognises through its current costs categorisation. The outsourced network functions would be invoiced to Essential Energy by the contractor and the invoice amount would be loaded with both an element of the

[45] AER, *Draft decision Essential Energy distribution determination 2015-16 to 2018-19 Attachment 7 Operating expenditure*, November 2014, p. 7-80

[46] Huegin, *Huegin's response to Draft Decision on behalf of NNSW and ActewAGL. Technical response to the application of benchmarking by the AER*, 15 December 2014 p43

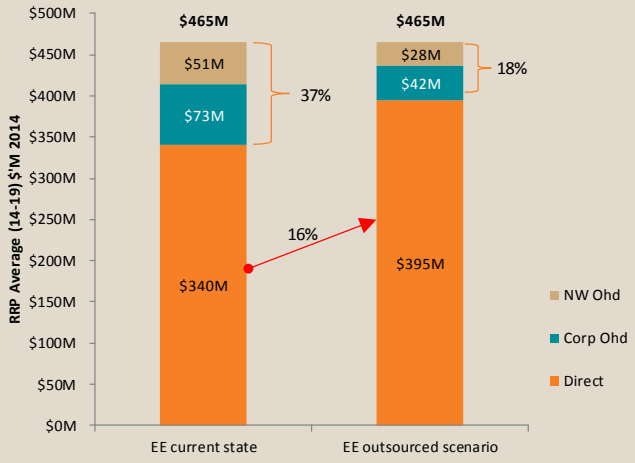
[47] The revised direct and overhead percentages produced in the scenario are indicative only

contractor's corporate and network overhead. This split would not be visible on the invoice and the whole invoice would be processed as a direct cost.

This transfer of overhead to an effective direct cost increases the direct cost pool whilst reducing the overhead pool and thus has a compounding effect on the overhead rate (as the direct costs in the denominator increase and the overhead costs in the numerator decrease and hence the overhead rate reduces).

It should be noted that Essential Energy's overhead rate in the original submission was on average 41.25%. This has since reduced by 5% to 37% in the revised proposal. This is due to higher than forecast efficiency savings through improved labour productivity.

Figure 10: Impact of outsourcing on direct and overhead cost categorisation[48]



The outsourced scenarios illustrates:

- **Corporate and network overheads related to field operations are reclassified as direct expenditure**
- **Hence, there is a corresponding dollar decrease in Network and Corporate overheads (net zero overall cost impact)**
- **The overhead rate would reduce from 37% to 18% in the outsourced scenario**

This illustrates that different business models (e.g. Outsourced vs. Insourced) can have very different overhead vs. direct cost splits which inevitably makes comparison across various businesses problematic when comparing overhead rates.

- *The Revised Regulatory Proposal includes a* ***5% average overhead rate reduction*** *from the original submission. This is due to efficiencies identified since the original submission.*

Scenario assumptions for overheads

- *The only network overheads remaining in EE would be those related to Engineering support functions*
- *The overhead costs related to the depots are assumed to be outsourced and hence incurred by the contractor/s.*
- *Corporate overheads are assumed to be normalised for the 35% normalisation factor relating to overheads associated with network size, mainly related to Property, ICT, HR and Safety. These are also assumed to be incurred by the contractor/s.*

Data integrity

In undertaking its assessment of Essential Energy's overheads the AER has relied extensively upon data supplied through the Economic Benchmarking and Category Analysis RIN. While Essential acknowledges that the AER has relied upon only high level operating expenditure categories in reaching its draft decision, Essential Energy's view is that caution needs to be exercised in using the RIN data as benchmarking is impeded by the inconsistency of data definitions and categorisation.

In addition the Basis of Preparation documentation highlights concerns or inconsistencies with how many categories of costs have been determined. Further detail on these issues is contained within Section 4 of Attachment 6.3 *Appropriateness of RIN data for benchmarking, PricewaterhouseCoopers.*

[48] Essential Energy AER Submission FY15-19 ROMO model data, total regulated opex FY15 (FY14$ Real)

4.8. Conclusion

Essential Energy rejects the AER assertion that overheads are inefficient for the following reasons

- The AERs economic benchmarking is immature and unfit for purpose
- The size, scale and number of assets in Essential Energy's network is a primary driver of its overheads and this is not adequately addressed in the economic benchmarking models
- In its category analysis the AER has benchmarked corporate and total overheads on the basis of customer numbers. This fails to take into account the fact that the size and geographic dispersion of Essential Energy's network is a major driver of overhead costs, including Essential Energy's low customer density that leads to diseconomies of scale.
- The drivers of overheads costs in a predominantly rural DNSP are quite different to the drivers in an urban DNSP, so benchmarking should be done amongst homogenous DNSPs.
- The RIN data that the AER has used to conduct its benchmarking has not been prepared on a consistent basis between the DSNPs, and there are also significant differences in cost classifications between DNSPs.
- The reductions in overheads implied by the AER's draft determination would seriously undermine Essential Energy's ability to operate a safe and reliable electricity distribution network.

Essential Energy's revised proposal reflects substantial improvements in the efficiency delivered through the network reform program as outlined in our substantive regulatory proposal. We have reviewed the latest information and have incorporated further labour productivity efficiencies into the revised proposal that balance our the need to continue to improve productivity in a sensible and structured with the expectations of our customers to provide a safe and reliable network. Our revised revised proposal forecasts annualised labour productivity improvements of 22.6% by the end of the regulatory period.