

NSW ANS LABOUR RATES REVIEW

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Table of Contents

About this report	3
Executive Summary	4
1 Introduction	6
1.1 Objective.....	6
1.2 Scope	6
2 Background	7
2.1 Alternative Control Services	7
2.2 Previous AER determinations.....	7
3 Methodology	9
3.1 Market rates for similar services in NSW	9
3.2 Intra and interstate benchmarking	9
3.3 AER maximum rate cap benchmarking.....	10
4 Market comparison	12
4.1 Administration	12
4.2 Technical Specialist	13
4.3 Field Worker	13
4.4 Engineer	14
4.5 Senior Engineer	15
4.6 Engineering Manager	16
4.7 Forecast market for services during the next regulatory period	17
5 Interstate and Intrastate comparison	19
5.1 Raw labour rates benchmarking (\$2022-23)	19
5.2 On-cost and overhead.....	19
5.3 All-inclusive labour hourly rates benchmarking (\$2022-23)	20
5.4 Interstate comparison (\$2022/23 DNSP Labour Rates).....	21
6 AER benchmark rate cap	22
6.1 Raw labour rates cap benchmarking.....	22
6.2 All-inclusive labour rate cap benchmarking	22
6.3 Overtime Rates	23
Appendix A. AER assessment approach	24
Appendix B. Example translation of Hays' annual salary to maximum rate cap	25
Appendix C. Salary benchmarks	26
Appendix D. On-cost percentage across DNSPs	31
Appendix E. Interstate comparison	32

About this report

The sole purpose of this report and the associated services provided by CutlerMerz is to document the outcomes of a review of a selection of the NSW DNSP' ANS labour rates.

In producing this report, we have relied upon, and presumed accurate, any information (or confirmation of the absence thereof) provided by Ausgrid, Endeavour Energy, Essential Energy and other publicly available sources. Except as otherwise stated in the report, we have not attempted to verify the accuracy or completeness of any such information. If the information is subsequently determined to be false, inaccurate or incomplete then it is possible that our observations and conclusions as expressed in this report may change.

The passage of time, manifestation of latent conditions or impacts of future events may require re-examination, further data analysis, and re-evaluation of the findings, observations and conclusions expressed in this report. We have prepared this report in accordance with the usual care and thoroughness of the consulting profession, for the sole purpose described above and by reference to applicable standards, guidelines, procedures and practices at the date of issue of this report. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this report, to the extent permitted by law.

This report should be read in full and no excerpts are to be taken as representative of the findings. No responsibility is accepted by CutlerMerz for use of any part of this report in any other context.

This report has been prepared on behalf of, and for the exclusive use of the NSW DNSPs, and is subject to, and issued in accordance with, the provisions of the contract between CutlerMerz and NSW DNSPs. We accept no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this report by any third party.

Executive Summary

CutlerMerz (“we” / “our”) was engaged by the NSW DNSPs (Ausgrid, Endeavour Energy and Essential Energy) to determine labour rate benchmarks for delivering ancillary network services (ANS) which will assist/inform each entity in ANS pricing for the 2024–29 regulatory proposal.

Benchmark labour rates, for both raw and all-inclusive labour rates, were required for seven classifications:

1. Administration
2. Field worker
3. Technical specialist
4. Engineer
5. Senior engineer
6. Engineering manager
7. Outdoor technical specialist (Essential Energy only).

To assess the reasonableness and efficiency of NSW ANS labour rates, we benchmarked the 2022/23 rates provided by Ausgrid, Endeavour and Essential Energy against:

- NSW contestable market for similar services
- Interstate and intrastate peer DNSPs
- AER maximum rate caps.

Comparison to market rates

From our in-house database, rates from more than a dozen NSW Accredited Service Providers (ASPs) were used to generate the minimum, maximum and median benchmarks for each ANS labour category and escalated to 2022/23 equivalent rates to facilitate comparison with the NSW DNSP rates. These benchmarks represent the rates that businesses servicing the NSW utilities industry (Electricity, Gas and Water) are charging for similar services that NSW DNSPs provide through ANS.

The current rates applied by NSW DNSPs are considered reasonable and efficient compared to market rates for all categories with the exception of the field worker category. For this category, market service providers provide more competitive labour rates. We consider that this is driven by two factors based on anecdotal evidence from our work with ASPs. Firstly, it appears that ASPs have lower overhead costs included within their all-in labour rates than the overhead applied by NSW DNSPs. Secondly, ASPs’ field worker labour rates are generally provided on projects that also involve material supply. By marking-up material supply, ASPs are able to recover a proportion of their overhead (and potentially profit margins) through this mechanism rather than directly on the labour services provided. We expect that if market service providers passed their full overhead and profit margins through their field worker labour rates, the DNSP rates for field workers would more likely be considered reasonable and efficient when compared to market rates.

Comparison to interstate rates

In benchmarking against the NSW 2022/23 labour rates from interstate DNSPs, we have extrapolated 2022/23 equivalent charges based on the labour rates provided in recent distribution determinations for DNSPs from

Victoria, Queensland and South Australia. We could not benchmark Essential Energy's 'Outdoor Technical Specialist' as there are no comparable rates from other DNSPs which can be used.

On-costs and overheads applied by each of the distribution businesses varied substantially both in definition and in magnitude. To avoid the need for assumptions regarding the breakdown of on-costs and overheads, the interstate benchmarking focussed on all-inclusive labour rates.

Although NSW labour rates are higher across the administration, engineer and engineer manager categories, there are no concluding trends from the interstate comparison. NSW labour rates are either in the middle or bottom half of rates for technical specialists, predominantly in the middle for field workers and are lower than Ergon Energy's rates for senior engineers. The magnitude of differences are relatively minor and accordingly, there is nothing conclusive that can be drawn from the interstate comparisons.

Comparison to AER maximum labour rate caps

We developed two alternative maximum labour rate caps for the respective labour classifications, with both based on the Hays' 2021/22 energy sector and office support salary data¹.

The first labour rate cap was calculated in keeping with the methodology employed by the AER's consultant for previous ANS rate reviews. This approach utilised a raw labour rate calculated on a 40-hour week for 52 weeks per annum.

For the second labour rate cap, we calculated the raw labour rate based on a 9-day fortnight (36-hour week). The 36-hour week is established for several labour categories in the NSW DNSPs' Enterprise Agreements. These agreements establish that the maximum standard hours to be worked by full time employees are 72 hours per fortnight, with any excess hours considered as overtime.

The maximum figure for each labour salary group was selected to represent the highest 'reasonable' rate and a total escalator of 6.4% was applied to convert the rates from 2021/22 to 2022/23 equivalent rates. This compound total escalator reflects the annual change in the Consumer Price Index over December 2020 to March 2022 (5.09% per year); plus the AER's final decision on NSW labour escalators (X-factors) for 2022-23 for Ancillary Network Services (1.2%).

Overall, the NSW DNSPs' all-inclusive labour rates are for the most part either aligned with the maximum rate caps or below. When considering a 36-hour work week, the maximum rates caps are higher than the NSW DNSPs' all-inclusive labour rates across all categories. For the technical specialist and senior engineer categories, as well as the outdoor technical specialist for Essential Energy, the 40-hour week maximum rate caps are below the labour rates of NSW DNSPs by approximately 5 percent.

¹ [Hays Salary Guide Australia 2021/22](#)

1 Introduction

In light of recent AER determinations and consultant reports to the AER on the matter of ANS rates, an expectation exists that the AER may wish to consider a more assertive approach to ANS rate reviews in which prices are moved toward the efficiency frontier from the current approach of maximum reasonable prices. Section 2.2 of this report provides further background on this.

Based on this expectation, the NSW DNSPs wanted to pressure test their ANS rates ahead of their regulatory submission for the 2024-29 period.

1.1 Objective

The NSW DNSPs (Ausgrid, Endeavour Energy and Essential) have engaged CutlerMerz to assess the reasonableness of the 2022/23 NSW ANS labour rates.

The intended outcome from this engagement are independently benchmarked unit rates at 2022/23 dollar values which will assist/inform each entity in ANS pricing for the 2024–29 regulatory proposal.

1.2 Scope

The ANS labour rates for the following categories were benchmarked as part of this assignment:

- Administration
- Technical Services
- Engineers
- Field Workers
- Senior Engineers
- Engineer manager
- Outdoor technical specialist

We note that the category of outdoor technical specialist is only used by Essential Energy and was added at the request of this network. Ausgrid and Endeavour Energy labour rates for this category were therefore not included.

2 Background

2.1 Alternative Control Services

Alternative control services (ACS) are customer specific services which include public lighting services, metering services and ancillary network services (ANS). The AER sets service specific prices to provide a reasonable opportunity to the distributor to recover the efficient cost of each service from customers using that service.

The AER considers the following services as meeting the definition of ANS as ‘non-routine services provided to individual customers as requested (AER, 2021)’:

- Auxiliary metering services
- Basic connection services
- Connection application and management services
- Network ancillary services.

Ancillary network services are either charged on a fee or quotation basis, depending on the nature of the service. Fee-based service price caps are determined based on the cost inputs and the average time taken to perform each service. These services tend to be homogenous in nature and scope, allowing for costing in advance of supply with reasonable certainty and therefore inclusion in the AER’s determinations. By comparison, prices for quoted services are based on the quantities of labour and materials required, with the quantities dependent on a particular task. Prices for quoted services are determined at the time of a customer’s enquiry and reflect the individual requirements of the customer’s service request. For this reason, it is not possible to list prices for quoted services in the AER’s decisions. However, in its decisions the AER sets labour rates to be applied to ancillary network services provided on a quotation basis.

2.2 Previous AER determinations

2.2.1 AER determination of ACS rates for NSW DNSPs 2019-2024

In the draft determination of ACS rates for NSW DNSPs 2019-2024, the AER reduced some of the DNSPs’ labour rates to their maximum rate caps and accepted proposed rates which were below the cap. The AER also noted that network businesses should not increase their revised proposal labour rates to meet maximum rate caps.

The AER used labour rates estimated by their consultant as the basis for setting the maximum rate benchmark. The AER’s consultant established reasonable labour rates based on Hays 2017 Energy sector and office support salary data where the maximum figure for each labour salary group was selected to represent the highest ‘reasonable’ rate cap. This methodology established reasonable labour rates but did not consider whether they were efficient or best practice.

The AER’s final determination for NSW DNSPs considered labour rates recommended by the consultant were efficient for the purposes of the 2019–24 regulatory control period, but also noted the following extract from the consultant’s 2018 *Review of Alternative Control Services* report²:

“While we consider these to be reasonable maximum rates, they are not necessarily efficient rates. In the next review, we recommend the AER consider whether it is appropriate to reduce the maximum rates to reflect more efficient benchmarks.”

2.2.2 AER determination of ACS rates for Victorian DNSPs 2021-2026

The AER’s most recent determination of ACS hourly labour rates was in April 2021 for the Victorian DNSPs. Consistent with the approach taken in the NSW determinations, the AER compared the Victorian DNSPs’ ANS labour rates against maximum total labour rates recommended by the AER’s consultant. The AER’s consultant

² [Marsden Jacob - Review of Alternative Control Services - September 2018 6.pdf](#)

established reasonable labour rates based on Hays 2021 Energy sector and office support salary data where the maximum figure for each labour salary group was selected to represent the highest ‘reasonable’ rate cap.

Similar to its 2018 report, the AER consultant’s Review of Victorian distributors Alternative Control Services 2020 report again recommended that the AER may consider a more assertive approach for future reviews and prices based on efficient costs rather than reasonable costs. The consultant also noted in the 2020 report:

“A more assertive approach would require more detailed information to ensure that material differences between the organisations and their services is considered when establishing efficient costs. Ideally, this information would be received in a standardised format to facilitate comparison.”

Refer to Appendix A for more details on the AER assessment approach.

3 Methodology

To assess the efficiency of NSW ANS labour rates, we have benchmarked the 2022/23 rates provided by Ausgrid, Endeavour and Essential Energy against:

- NSW contestable market for similar services
- Interstate and intrastate peer DNSPs
- AER maximum rate caps

Rates from more than a dozen Accredited Service Provider (ASP) businesses were used to generate the minimum, maximum and median benchmarks for each category.

NSW 2022/23 ANS labour rates were provided by Ausgrid, Endeavour Energy and Essential Energy. ANS labour cost information for DNSPs from other States was sourced from recent AER determinations.

Hays 2021/22 NSW specific salary benchmarks for the energy sector are used as the basis to develop reasonable NSW labour rate benchmarks for 2022/23. Data trend analysis based on the Hays' salary report is also used to assess the reasonableness of deviations in the labour rates across different States.

3.1 Market rates for similar services in NSW

The ASP scheme is governed by the NSW Department of industry and accredits businesses and registers individuals as competent to work on contestable services, giving consumers who need to connect to the network access to a competent and competitive market of service providers.

One of the key benefits of the creation of a market for contestable services is enabling customers' access to competitive costs. We therefore consider ASP rates appropriate for the purpose of setting 'efficient' market rate benchmarks for comparable services.

From our in-house database, FY2022 rates from more than a dozen ASP businesses were used to generate the minimum, maximum and median benchmarks for each ANS labour category. These were escalated to 2022/23 equivalent rates to facilitate comparison with the NSW DNSP rates. They represent the rates that businesses servicing the NSW utilities industry (Electricity, Gas and Water) are charging for similar services that NSW DNSPs provide through ACS/ANS.

3.2 Intra and interstate benchmarking

3.2.1 Intrastate benchmarking

We benchmarked the 2022/23 ANS labour rates provided by the NSW DNSPs against each other. ANS labour rates are disaggregated into 'raw' labour rates, on-costs and overheads to facilitate comparison.

3.2.2 Interstate benchmarking

In benchmarking against the labour rates from interstate DNSPs, we have extrapolated 2022/23 equivalent rates based on the labour rates provided in the most recent distribution determinations for:

- **United Energy, Powercor, Jemena, CitiPower and Ausnet** – \$2021-22 labour rates from the 2021–26 AER determinations were escalated one year for inflation and labour escalation.
- **SA Power Networks, Ergon and Energex** – \$2020–21 labour rates from the 2020-25 AER determinations were escalated two years for inflation and labour escalation.

By way of forecasting 2022/23 equivalent charges for DNSPs from other States, our escalators are in line with the AER methodology by adopting the labour price growth forecast (X Factor) for ancillary network services and the ABS CPI inflation index as determined by the AER in its final decision for each network business.

On-costs and overheads applied by each of the distribution businesses varied substantially both in definition and in magnitude. To avoid the need for assumptions regarding the breakdown of on-costs and overheads, the interstate benchmarking focussed on all-inclusive labour rates.

3.3 AER maximum rate cap benchmarking

ANS labour rates consist of all labour costs incurred in the provision of the service, which can be disaggregated into 'raw' labour rates, on-costs and overheads to facilitate comparison across networks. The definitions for the labour rate subcomponents are discussed in the following subsections.

3.3.1 Raw labour rate

The raw labour rate is the basic hourly salary that excludes leave allowances, superannuation, overheads and any additional costs. We have developed two maximum labour rate caps based on Hays' 2021/22 energy sector and office support salary data.

In keeping with the methodology employed by the AER's consultant in previous labour rates reviews, a raw labour rate was calculated based on a 40-hour week for 52 weeks per annum. In addition, a raw labour rate was estimated to account for 9-day fortnights (36-hour weeks) established for several labour categories in DNSPs' Enterprise Agreements. Such agreements establish that the maximum standard hours to be worked by full time employees are 72 hours per fortnight, with any excess hours considered as overtime.

The maximum figure for each labour salary group was selected to represent the highest 'reasonable' rate and a total escalator of 6.4% was applied to convert to 2022/23 equivalent rates. This compound total escalator reflects the annual change in the Consumer Price Index over March 2021 to March 2022 (5.09% per year) plus the AER's final decision on NSW labour escalators (X-factors) for 2022-23 for Ancillary Network Services (1.2%).

A full translation of the disaggregated Hays salary benchmarks to AER ANS labour categories is provided in Appendix B.

3.3.2 On-costs and overheads

On-costs include:

- Basic leave allowances (sick leave, annual leave, public holidays)
- Superannuation
- Workers Compensation
- Payroll tax
- Annual leave loading
- Long service leave loading.

Overheads are all additional costs included in the total labour rates proposed by distribution business. Overheads include additional costs including (but not limited to): supervisory and management costs, customer service and billing, communications and information technology, fleet costs, and corporate costs such as finance and planning.

The 2022/23 ANS labour rates provided by the NSW DNSPs were compared against the maximum rate caps developed for 2022/23. Appendix B provides a worked example of how we have translated Hays' annual salary to a maximum rate cap.

We assumed the NSW on-costs and overhead percentages have not changed since the previous AER review and remain at 52.23% and 61% respectively. In addition to the all-inclusive labour rates which include raw labour, on-costs and overhead percentages, the AER has allowed for a vehicle allowance of \$20 per hour (\$2019) to be added on the labour rates for outdoor workers in FY2019. We have applied a compound escalator (CPI and labour escalation) to the 2019 vehicle allowance and added \$22.60 per hour to the outdoor technical specialist and field workers labour rates.

4 Market comparison

As discussed in Section 3.1, comparable rates from ASP businesses were used to generate the minimum, maximum and median benchmarks for each ANS labour category and compared with the NSW DNSP rates.

The results of our benchmarking exercise are presented in the subsections below. The figures compare the following labour category benchmarks:

- \$2022/23 minimum, maximum and median benchmarks extrapolated from ASP business rates. Represented by 'market min', 'market median' and 'market max' legends.
- \$2022/23 AER maximum rate cap developed based on 36-hour work week, represented by the 'Hays Max' 36 legend (refer to section 6 for details).
- \$2022/23 AER maximum rate cap developed based on 40-hour work week, illustrated by the 'Hays Max' 40 legend (refer to section 6 for details).
- \$2022/23 all-inclusive labour rates provided by the NSW DNSPs

4.1 Administration

As shown in Figure 1, Essential Energy and Ausgrid's rate for the administration labour category sit well below the market minimum benchmark. Endeavour's rate is lower than the market median.

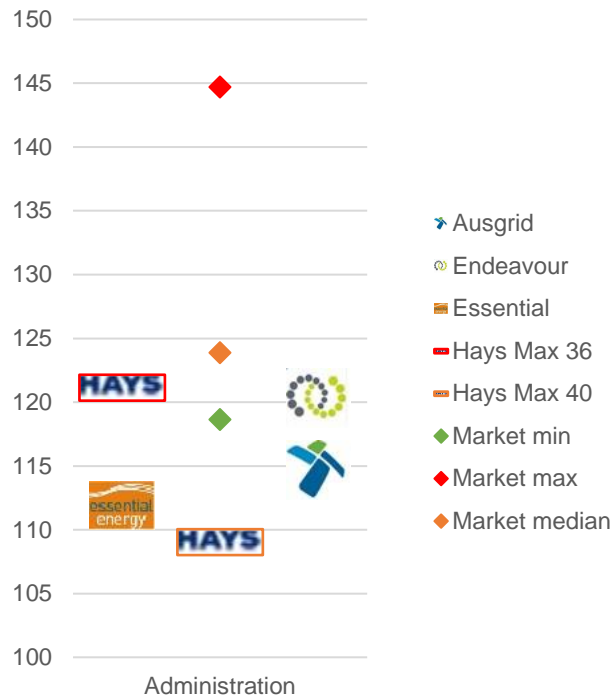


Figure 1 Administration hourly rate (\$2022/23)

Table 1 Administration hourly rate (\$2022/23)

Labour Category	Market min	Market max	Market median	Ausgrid	Endeavour	Essential	Hays Max 36	Hays Max 40
Administration	118.65	144.70	123.90	114.69	120.36	111.88	121.15	109.06

4.2 Technical Specialist

NSW DNSPs’ rate for the Technical Specialist labour category sit well below the market median benchmark. Endeavour and Ausgrid’s rates are in line with the market minimum value. Refer to Figure 2 and Table 2 for details.

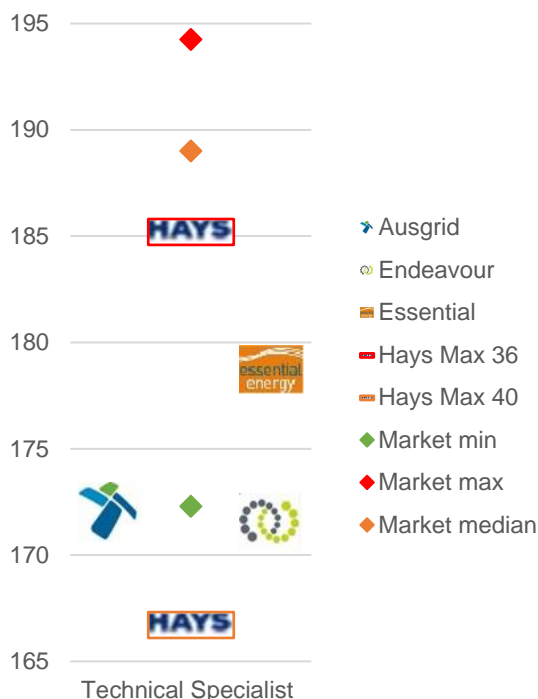


Figure 2 Technical Specialist hourly rate (\$2022/23)

Table 2 Technical Specialist hourly rate (\$2022/23)

Labour Category	Market min	Market max	Market median	Ausgrid	Endeavour	Essential	Hays Max 36	Hays Max 40
Technical Specialist	172.28	194.25	189.00	172.02	171.52	178.73	185.21	166.72

4.3 Field Worker

NSW DNSPs’ rate for field workers sit above the maximum market rate but are below the maximum AER rate caps for both 36 and 40-hour work weeks. We consider that this is driven by two factors based on anecdotal evidence from our work with ASPs. Firstly, it appears that ASPs have lower overhead costs included within their all-in labour rates than the overhead applied by NSW DNSPs. Secondly, ASPs’ field worker labour rates are generally provided on projects that also involve material supply. By marking-up material supply, ASPs are able to recover a proportion of their overhead (and potentially profit margins) through this mechanism rather than directly on the labour services provided. We expect that if market service providers passed their full overhead

and profit margins through their field worker labour rates, the DNSP rates for field workers would more likely be considered reasonable and efficient when compared to the market rate. Refer to Figure 3 and Table 3 for details.

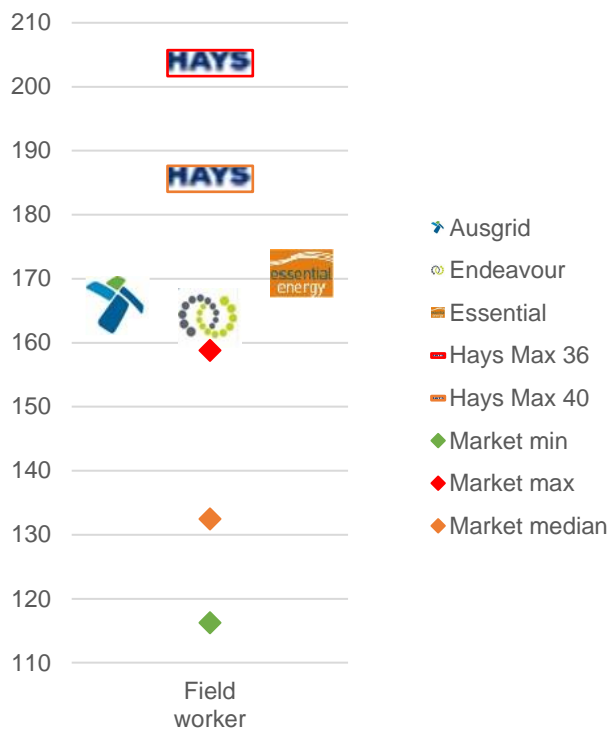


Figure 3 Field Worker hourly rate (\$2022/23)

Table 3 Field Worker hourly rate (\$2022/23)

Labour Category	Market min	Market max	Market median	Ausgrid	Endeavour	Essential	Hays Max 36	Hays Max 40
Field worker	116.22	158.78	132.43	165.78	163.79	170.82	203.71	185.63

4.4 Engineer

NSW DNSPs’ rate for the Engineer labour category are below the market median benchmark and higher than the market minimum ASP rates. Refer to Figure 4 and Table 4 for details.

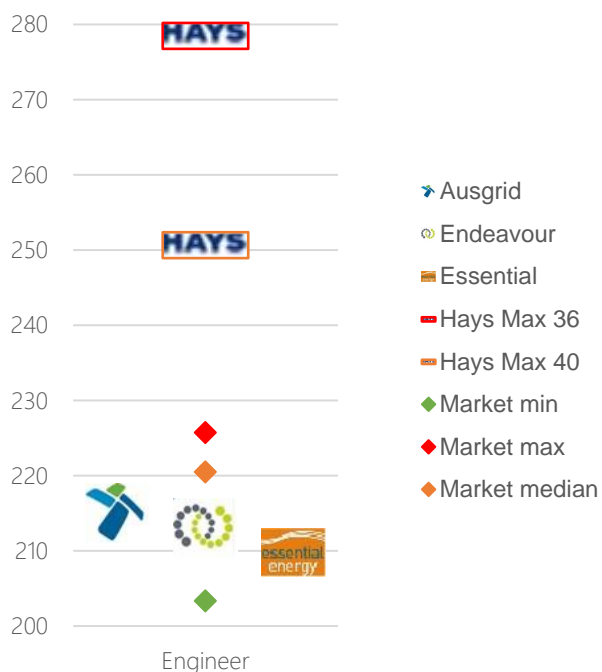


Figure 4 Engineer hourly rate (\$2022/23)

Table 4 Engineer hourly rate (\$2022/23)

Labour Category	Market min	Market max	Market median	Ausgrid	Endeavour	Essential	Hays Max 36	Hays Max 40
Engineer	203.35	225.75	220.50	215.03	213.08	209.79	278.52	250.71

4.5 Senior Engineer

The Senior Engineer labour rate provided by Ausgrid and Endeavour are lower than the minimum market rate. Essential Energy has not provided labour rates for benchmarking. Refer to Table 5 and Figure 5 for details.

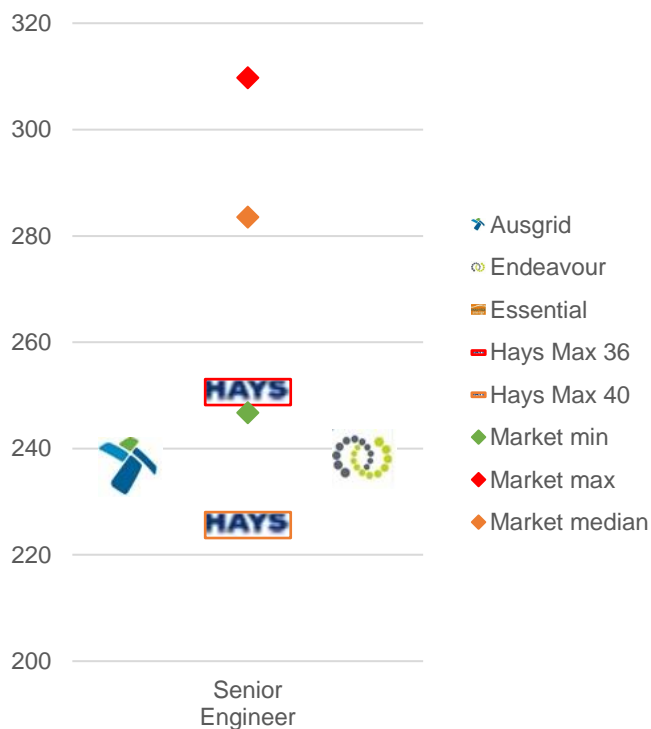


Figure 5 Senior Engineer hourly rate (\$2022/23)

Table 5 Senior Engineer hourly rate (\$2022/23)

Labour Category	Market min	Market max	Market median	Ausgrid	Endeavour	Essential	Hays Max 36	Hays Max 40
Senior Engineer	246.75	309.75	283.50	236.52	237.94	N/A	250.66	225.64

4.6 Engineering Manager

The Engineering Manager labour rate provided by Ausgrid and Endeavour sit below the market rate median. Essential Energy has not provided labour rates for benchmarking. Refer to Figure 6 and Table 6 for details.

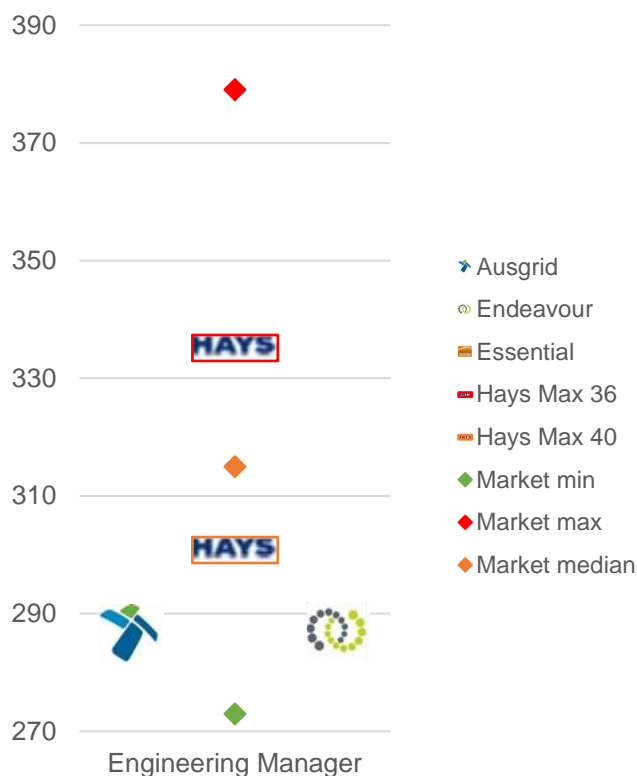


Figure 6 Engineering Manager hourly rate (\$2022/23)

Table 6 Engineering Manager hourly rate (\$2022/23)

Labour Category	Market min	Market max	Market median	Ausgrid	Endeavour	Essential	Hays Max 36	Hays Max 40
Engineering Manager	273.00	379.05	315.00	286.58	286.94	N/A	335.22	300.85

4.7 Forecast market for services during the next regulatory period

Employment in Electricity, Gas, Water and Waste Services is projected to grow by 2,600 (or 1.9%) over the five years to November 2026³. The industry employs 1.2 percent of the workforce, with average earnings at \$1,731 per week versus the all-industry average of \$1,200. Many workers have a VET qualification, although around a third of workers do not have any post-school qualifications. Most people whose main job is in this industry work full-time.

Australia’s border closures for much of 2020 and 2021 due to managing the threat of COVID-19 has had a significant impact on workforce shortages across large and small businesses. Near record low unemployment, high participation rates, stagnant wage growth and sluggish workforce skilling has resulted in 63% of employers unable to find workers with the skills they need⁴. The NSW utilities’ sector is not immune to the constraints in the labour market and we expect that resourcing limitations will continue to affect their operations.

³ [Electricity, Gas, Water, Waste Services | Labour Market Insights](#)

⁴ [Federal Budget 2022-23 \(deloitte.com\)](#)

In NSW, the Electricity Infrastructure Roadmap coordinates investment in transmission, generation, storage and firming infrastructure as ageing coal-fired generation plants retire. The roadmap will deliver at least five Renewable Energy Zones (REZ) in the Central-West Orana, Illawarra, New England, South-West and Hunter-Central Coast regions of NSW. These Zones will deliver an intended network capacity of 12 gigawatts. It is expected that implementing the roadmap will attract up to \$32 billion in private investment for regional energy infrastructure by 2030 and that it will support 6,300 construction jobs and 2,800 ongoing jobs, mostly in regional NSW.⁵ We expect that the human resources involved in delivering the Roadmap will further constrain the labour market for NSW DNSPs.

⁵ [About the Roadmap | Energy NSW](#)

5 Interstate and Intrastate comparison

5.1 Raw labour rates benchmarking (\$2022-23)

Figure 7 compares the \$2022/23 raw hourly labour rates provided by NSW DNSPs. The raw labour rates provided by Endeavour Energy and Ausgrid include allowances. It is assumed that the more material impact of allowances is on the field worker and technical specialist classifications. For these classifications, allowances account for 6-7% (on average) of the raw labour rate. For all other labour categories, the impact was assumed to be negligible.

We note that Essential Energy’s labour rates do not include allowances. Therefore, to facilitate the comparison we inflated Essential Energy’s field worker and technical specialist raw labour rates to incorporate an extra 6.5% to account for allowances.

Figure 7 Raw labour rates comparison (\$ per hr)



5.2 On-cost and overhead

All NSW DNSPs have assumed a 52.23% on-cost percentage to be applied to their 2022/23 labour rates, which is consistent with the AER’s consultant’s proposed allocations.

Table 7 On-cost % applied to raw labour rate

DNSP	Ausgrid	Endeavour Energy	Essential
On-cost %	52.23%	52.23%	52.23%

As shown in Table 8, the overhead percentage Ausgrid applied across its labour categories ranges from 50.8% (senior engineer) to 84.4% (field worker). Essential Energy has applied a 61% overhead rate, consistent with the 'Implied overhead rates' calculated by the AER's consultant in 2018, as a ratio of the total labour rates compared with the base labour rates (including on-costs). Endeavour has applied 55.21% across all labour categories.

Table 8 Overhead % applied to raw labour rate including on-costs

AER Labour Category	Ausgrid	Essential Energy	Endeavour Energy
Administration	53.7%	61.0%	55.2%
Technical Specialist	52.4%	61.0%	55.2%
Engineer	62.9%	61.0%	55.2%
Field worker	84.4%	61.0%	55.2%
Senior Engineer	50.8%	61.0%	55.2%
Engineering Manager	54.9%	61.0%	55.2%

Benchmarking the allocation of indirect costs between DNSPs can be challenging and has the potential to result in invalid and misleading comparisons. The main reason being inconsistencies in the way in which each business categorises and allocates costs. Furthermore, each business' financial structure influences the way in which capitalisation is considered.

In our experience benchmarking electricity businesses, we have observed a wide range of indirect allocations across cost categories. The allocations range from zero per cent to over 50 per cent between businesses within the same cost categories. The considerable variance between the allocations of indirect costs at both a category and aggregate level between businesses raises questions on the appropriateness of benchmarking indirect cost allocations.

Appendix D presents on-cost percentage allocations across a sample of DNSPs.

5.3 All-inclusive labour hourly rates benchmarking (\$2022-23)

Ausgrid's proposed all-inclusive labour rates are in line with its NSW peers across all labour categories. Although the raw labour rate is 6.3% below the NSW average, the substantially higher-than-average overhead rate applied to field worker has minimised the gap.

Endeavour Energy's proposed all-inclusive labour rates are generally in line with average benchmarks, except for the administration category which remains higher than the NSW average by less than 5%.

Similar to the other NSW DNSPs, no significant deviations have been identified in Essential Energy's labour rates for applicable categories.

Figure 8 All-inclusive labour Rates (\$ per hr)



5.4 Interstate comparison (\$2022/23 DNSP Labour Rates)

In benchmarking against the NSW 2022/23 labour rates from interstate DNSPs, we have extrapolated 2022/23 equivalent charges based on the labour rates provided in recent distribution determinations for DNSPs from Victoria, Queensland and South Australia. We could not benchmark Essential Energy’s ‘Outdoor Technical Specialist’ as there are no comparable rates from other DNSPs which can be used. As for the Engineering Manager ANS labour category, it was not included in the Victorian DNSPs’ 2021–26 regulatory determination and therefore no rates are available for this category for these DNSPs.

Appendix E contains all-inclusive labour rate comparison figures across DNSPs from different States for each applicable labour category. Although NSW labour rates are higher across the administration, engineer and engineer manager categories, there are no concluding trends from the interstate comparison. NSW labour rates are either in the middle or bottom half of rates for technical specialists, predominantly in the middle for field workers and are lower than Ergon Energy’s rates for senior engineers. The magnitude of differences are relatively minor and accordingly, there is nothing conclusive that can be drawn from the interstate comparisons.

6 AER benchmark rate cap

6.1 Raw labour rates cap benchmarking

Figure 9 presents our estimated maximum rate caps against the raw labour rates provided by NSW DNSPs. We note that our estimated rate caps for an engineer are higher than those for a senior engineer. This is due to the rate for a Transmission Line Design Engineer being higher than the Senior Engineer rates in Hays' salary report. Over the past three years, the salary of a Transmission Line Design Engineer has increased by \$50,000, making it higher than the highest salary for a senior engineer. In addition, the Hays report has a breakdown for power engineer roles into power systems, protection and transmission line design engineers which is not provided for senior engineers. The higher role specificity for engineers in comparison with senior engineers likely also explains the higher salary for engineers. Given these limitations in the Hays data set as well as limitations in allocating Hays labour categories to DNSP labour classifications, some caution should be exercised when distilling insights from comparisons that use Hays' rates.

Figure 9 \$2022/23 Raw labour rates cap benchmarking



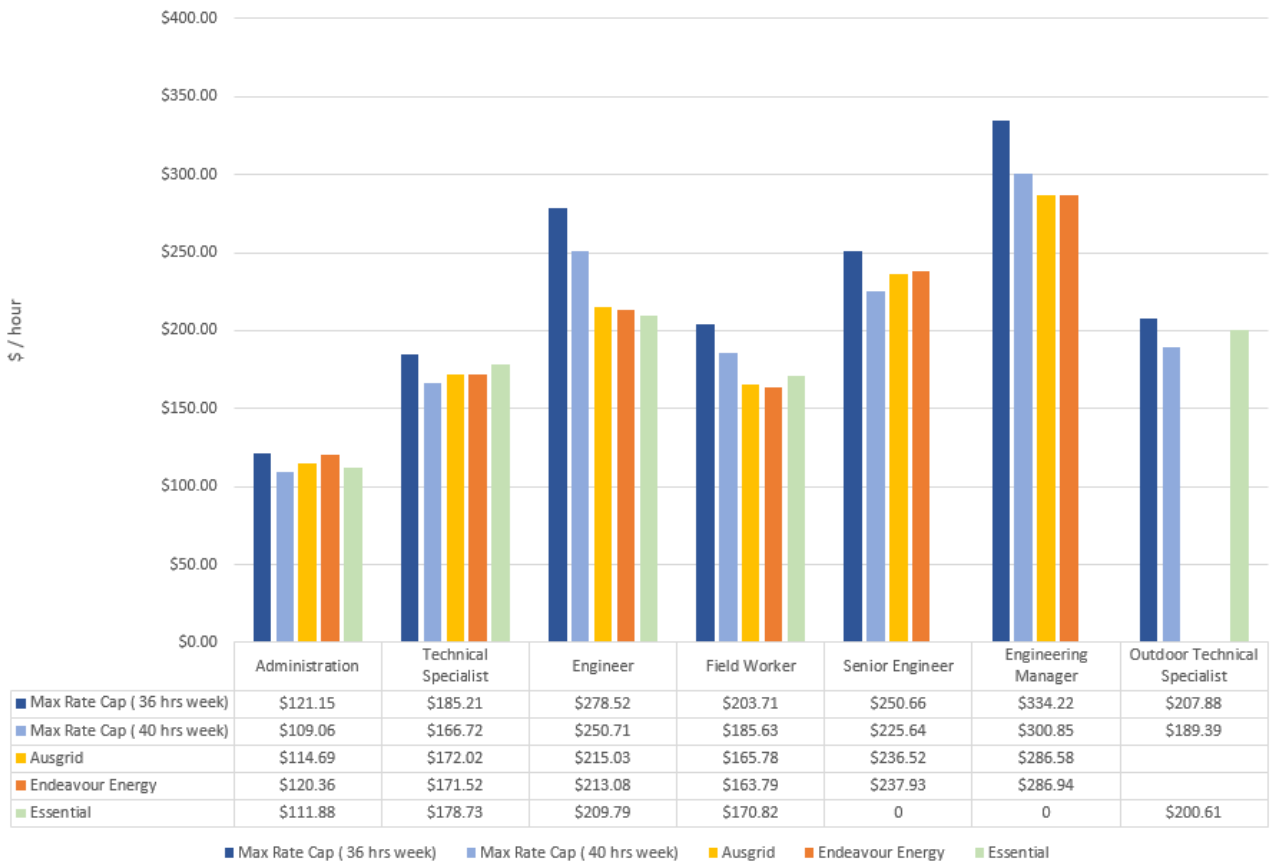
The NSW DNSPs' raw labour rates are for the most part aligned with the maximum rate cap or below, especially when a 36-hour work week is considered.

6.2 All-inclusive labour rate cap benchmarking

The all-inclusive labour caps include oncosts (52.23%), overheads (61%) and an additional fleet allowance for the field worker and outdoor technical specialist categories.

Figure 10 presents our estimated maximum rate cap against the all-inclusive labour rates provided by NSW DNSPs.

Figure 10 \$2022/23 All-inclusive labour rates cap comparison



As with the raw labour rates, the all-inclusive labour rates are for the most part aligned with the maximum rate cap or below, especially when a 36-hour work week is considered.

6.3 Overtime Rates

In its recent determinations, the AER accepted their consultant’s recommendation that after-hours labour rates be capped at 1.75 times the relevant ordinary rate.

We note that an overtime multiplier would depend on forecast overtime hours and the rates applicable to these hours. Upon requesting a breakdown of overtime hours, for either actual or forecast hours, NSW DNSPs indicated that such level of detail was not readily available within the businesses.

We therefore analysed the overtime rates in the Enterprise Agreements to sense check the current escalator of 1.75. All overtime hours for shift workers, except for public holidays which are paid at double time and a half in most instances, are paid at either time and a half or double time. This applies to the following overtime situations:

- Over time worked Monday to Friday
- Overtime worked from midnight Friday to midday Saturday
- Overtime worked from midday Saturday to midnight Sunday

Based on this information, we find the current cap applied for the calculation of overtime rates to be reasonable.

Appendix A. AER assessment approach

The AER applies price caps to ancillary network services as a form of control. For services offered on a quoted basis, the AER sets a schedule of labour rates for the first year of the regulatory control period. The AER assessment of the efficient costs for providing ancillary network services focuses on comparing a DNSP's proposed labour rates against maximum labour rate caps. Where the DNSP's proposed labour rates exceed the threshold, the AER substitutes the proposed rate with the threshold value which it considers as a reasonable rate.

For the subsequent years of the regulatory control period, labour rates are escalated annually by

$$(1 + \Delta CPI_t)(1 - X_t^i)$$

- ΔCPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from the March quarter in year t-2 to the March quarter in year t-1
- X_t^i is the X- factor for service i in year t.

As ancillary network services typically have a very high share of labour and labour-related inputs, the AER uses labour price growth forecasts as the ancillary network services X factor

Appendix B. Example translation of Hays' annual salary to maximum rate cap

Step 1 – Base rate selection (Engineer)

AER labour category: Engineer

Location: NSW

Table 9 \$2020/21 Hays Annual Salary mapped to AER Engineer Category (\$'000s)

AER Labour Category	Hays Labour Category	Low	High
Engineer	Design Engineer*	\$77	\$110
Engineer	Project Engineer (EPCM)	\$87	\$130
Engineer	Power Systems Engineer	\$92	\$150
Engineer	Protection Engineer	\$102	\$140
Engineer	Transmission Line Design Engineer	\$122	\$200
Engineer	Asset Engineer (3-7 yrs)*	\$92	\$130
Engineer	Project Engineer*	\$92	\$133

Highest equivalent Hays labour category: Transmission Line Design Engineer

Highest annual salary rate for Transmission Line Design Engineer, NSW, 2020/21: \$200,000 per annum.

Step 2 – Scaling Hays Annual salary to \$2022/23 hourly rate (Engineer)

Raw Labour hourly rate \$2020/21 = \$200,000 / 52 weeks / 40 hours per week = \$96.15 (40 hr week)

Raw Labour hourly rate \$2020/21 = \$200,000 / 52 weeks / 36 hours per week = \$106.84 (36 hr week)

Table 10 NSW Escalation Factor

Escalation Factor (from FY 21/22)	FY2022	FY2023
Total Escalation	1	1.064
CPI	1	1.051
Labour Escalator	1	1.012

Raw Labour hourly rate \$2022/23 = \$96.15 x 1.064 = \$102.27 (40 hr week)

Raw Labour hourly rate \$2022/23 = \$106.84 x 1.064 = \$113.64 (36 hr week)

Step 3 – Include Oncosts in \$2022/23 hourly rate (Engineer)

Labour hourly rate \$2022/23 include oncosts = \$102.27 x (1+0.5223) = \$155.69 (40 hr week)

Labour hourly rate \$2022/23 include oncosts = \$113.64 x (1+0.5223) = \$173.0 (36 hr week)

Step 4 –All-inclusive \$2022/23 hourly rate cap (Engineer)

All-inclusive labour hourly rate \$2022/23 = \$153.36 x (1+0.61) = \$250.71 (40 hr week)

All-inclusive labour hourly rate \$2022/23 = \$170.37 x (1+0.61) = \$278.52 (36 hr week)

AER has allowed for a vehicle allowance of \$20 per hour (\$2019) to be added on the labour rates for outdoor workers in FY2019. We have applied a compound escalator (CPI and labour escalation) to the 2019 vehicle allowance and added \$22.67 per hour to the outdoor technical specialist and field workers labour rates. The vehicle allowance does not apply to engineer labour rates.

Appendix C. Salary benchmarks

Mapping of disaggregated Hays' salary benchmarks to AER ANS labour categories:

Table 11 \$2021/22 Hays annual salary scaled to hourly rates based on 40 work hours per week

AER Category Mapping	Role	NSW		VIC		QLD		SA	
		Low	High	Low	High	Low	High	Low	High
Administration	Administration Assistant (6-12 mths exp)	\$20	\$23	\$20	\$23	\$20	\$24	\$20	\$23
Administration	Administration Assistant (12+ mths exp)	\$24	\$32	\$22	\$25	\$22	\$26	\$22	\$27
Administration	Project Admin Assistant (3+ yrs exp)	\$28	\$38	\$25	\$32	\$26	\$31	\$27	\$34
Administration	Project Coordinator	\$29	\$42	\$27	\$39	\$26	\$31	\$29	\$37
Administration	Data Entry Operator	\$20	\$22	\$20	\$24	\$20	\$26	\$22	\$27
Administration	Records Officer	\$27	\$39	\$20	\$25	\$22	\$26	\$22	\$27
Engineer	Design Engineer*	\$37	\$53	\$38	\$54	\$42	\$55	\$39	\$54
Engineer	Project Engineer (EPCM)	\$42	\$63	\$44	\$63	\$46	\$72	\$39	\$59
Engineer	Power Systems Engineer	\$44	\$72	\$44	\$72	\$46	\$60	\$44	\$59
Engineer	Protection Engineer	\$49	\$67	\$37	\$62	\$56	\$67	\$44	\$62
Engineer	Transmission Line Design Engineer	\$59	\$96	\$49	\$67	\$44	\$74	\$47	\$69
Engineer	Asset Engineer (3-7 yrs)*	\$44	\$63	\$42	\$64	\$43	\$62	\$47	\$59
Engineer	Project Engineer*	\$44	\$64	\$47	\$64	\$47	\$66	\$42	\$64
Engineering manager	Engineering Manager	\$78	\$115	\$69	\$88	\$75	\$99	\$74	\$93
Engineering manager	Project Manager	\$64	\$91	\$59	\$78	\$64	\$82	\$59	\$74
Engineering manager	Project Manager	\$69	\$88	\$64	\$78	\$62	\$86	\$59	\$69
Engineering manager	Commissioning Manager	\$69	\$88	\$78	\$93	\$69	\$86	\$74	\$88
Field worker	Leading Hand	\$32	\$48	\$44	\$54	\$44	\$62	\$39	\$49
Field worker	Electrician	\$32	\$48	\$44	\$59	\$42	\$56	\$39	\$49
Field worker	Mechanical Fitter	\$32	\$43	\$29	\$39	\$37	\$54	\$34	\$47
Field worker	Line Worker	\$37	\$58	\$32	\$39	\$39	\$54	\$34	\$49
Field worker	G&B Linesworker	N/A	\$0	\$42	\$64	\$47	\$66	\$42	\$54
Field worker	Switching Operator	\$32	\$63	\$42	\$59	\$44	\$62	\$42	\$59
Field worker	Cable Joints	\$37	\$58	\$46	\$58	\$44	\$56	\$42	\$54
Field worker	Cable Layer	\$32	\$48	\$37	\$47	\$44	\$54	\$42	\$54

Senior engineer	Senior Design Engineer*	\$54	\$72	\$50	\$70	\$55	\$75	\$49	\$69
Senior engineer	Principal Design Engineer	\$69	\$87	\$72	\$96	\$75	\$91	\$69	\$78
Senior engineer	Senior Project Engineer (EPCM)	\$64	\$82	\$64	\$83	\$71	\$87	\$64	\$74
Senior engineer	Commissioning Engineer	\$54	\$66	\$64	\$74	\$62	\$81	\$59	\$74
Technical specialist	Technician	\$32	\$48	\$42	\$56	\$37	\$49	\$34	\$44
Technical specialist	Control Room Operator	\$37	\$53	\$47	\$56	\$39	\$51	\$39	\$54
Technical specialist	Maintenance Superintendent	\$42	\$58	\$47	\$54	\$59	\$74	\$49	\$64
Technical specialist	Maintenance Planning/Scheduler	\$39	\$58	\$39	\$51	\$54	\$65	\$47	\$64
Technical specialist	Operations Manager	\$69	\$96	\$64	\$83	\$78	\$103	\$59	\$74
Technical specialist	E&I Technician	\$34	\$53	\$39	\$54	\$44	\$74	\$39	\$49
Technical specialist	Protection Technician	\$34	\$53	\$47	\$59	\$62	\$81	\$54	\$74
Technical specialist	Generator Technician	\$34	\$58	\$39	\$49	\$38	\$65	\$42	\$64
Technical specialist	Site Engineer	\$34	\$49	\$39	\$64	\$41	\$59	\$37	\$49
Technical specialist	Planner/Scheduler	\$42	\$64	\$51	\$64	\$37	\$62	\$54	\$66
Technical specialist	OHS Supervisor	\$44	\$56	\$42	\$59	\$47	\$65	\$44	\$54

Table 12 \$2021/22 Hays annual salary scaled to hourly rates based on 36 work hours per week

AER Category Mapping	Role	NSW		VIC		QLD		SA	
		Low	High	Low	High	Low	High	Low	High
Administration	Administration Assistant (6-12 mths exp)	\$22	\$26	\$22	\$25	\$22	\$26	\$22	\$26
Administration	Administration Assistant (12+ mths exp)	\$26	\$35	\$24	\$27	\$24	\$29	\$25	\$30
Administration	Project Admin Assistant (3+ yrs exp)	\$32	\$43	\$27	\$35	\$29	\$35	\$30	\$38
Administration	Project Coordinator	\$33	\$46	\$30	\$44	\$29	\$35	\$33	\$41
Administration	Data Entry Operator	\$22	\$25	\$22	\$26	\$22	\$29	\$25	\$30
Administration	Records Officer	\$30	\$44	\$22	\$27	\$24	\$29	\$25	\$30
Engineer	Design Engineer*	\$41	\$59	\$43	\$60	\$46	\$61	\$44	\$60
Engineer	Project Engineer (EPCM)	\$46	\$69	\$49	\$69	\$51	\$80	\$44	\$65
Engineer	Power Systems Engineer	\$49	\$80	\$49	\$80	\$51	\$67	\$49	\$65
Engineer	Protection Engineer	\$54	\$75	\$41	\$68	\$63	\$75	\$49	\$68
Engineer	Transmission Line Design Engineer	\$65	\$107	\$54	\$75	\$49	\$82	\$52	\$76

Engineer	Asset Engineer (3-7 yrs)*	\$49	\$69	\$46	\$71	\$48	\$68	\$52	\$65
Engineer	Project Engineer*	\$49	\$71	\$52	\$71	\$52	\$74	\$46	\$71
Engineering manager	Engineering Manager	\$87	\$128	\$76	\$98	\$83	\$110	\$82	\$104
Engineering manager	Project Manager	\$71	\$101	\$65	\$87	\$71	\$91	\$65	\$82
Engineering manager	Project Manager	\$76	\$98	\$71	\$87	\$68	\$96	\$65	\$76
Engineering manager	Commissioning Manager	\$76	\$98	\$87	\$104	\$76	\$96	\$82	\$98
Field worker	Leading Hand	\$35	\$53	\$49	\$60	\$49	\$68	\$44	\$54
Field worker	Electrician	\$35	\$53	\$49	\$65	\$46	\$63	\$44	\$54
Field worker	Mechanical Fitter	\$35	\$48	\$33	\$44	\$41	\$60	\$38	\$52
Field worker	Line Worker	\$41	\$64	\$35	\$44	\$44	\$60	\$38	\$54
Field worker	G&B Linesworker	N/A	\$0	\$46	\$71	\$52	\$74	\$46	\$60
Field worker	Switching Operator	\$35	\$69	\$46	\$65	\$49	\$68	\$46	\$65
Field worker	Cable Jointer	\$41	\$64	\$51	\$64	\$49	\$63	\$46	\$60
Field worker	Cable Layer	\$35	\$53	\$41	\$52	\$49	\$60	\$46	\$60
Senior engineer	Senior Design Engineer*	\$60	\$80	\$56	\$77	\$61	\$83	\$54	\$76
Senior engineer	Principal Design Engineer	\$76	\$96	\$80	\$107	\$83	\$101	\$76	\$87
Senior engineer	Senior Project Engineer (EPCM)	\$71	\$91	\$71	\$92	\$79	\$96	\$71	\$82
Senior engineer	Commissioning Engineer	\$60	\$74	\$71	\$82	\$68	\$90	\$65	\$82
Technical specialist	Technician	\$35	\$53	\$46	\$63	\$41	\$54	\$38	\$49
Technical specialist	Control Room Operator	\$41	\$59	\$52	\$63	\$44	\$57	\$44	\$60
Technical specialist	Maintenance Superintendent	\$46	\$64	\$52	\$60	\$65	\$82	\$54	\$71
Technical specialist	Maintenance Planning/Scheduler	\$44	\$64	\$44	\$57	\$60	\$72	\$52	\$71
Technical specialist	Operations Manager	\$76	\$107	\$71	\$92	\$87	\$114	\$65	\$82
Technical specialist	E&I Technician	\$38	\$59	\$44	\$60	\$49	\$82	\$44	\$54
Technical specialist	Protection Technician	\$38	\$59	\$52	\$65	\$68	\$90	\$60	\$82
Technical specialist	Generator Technician	\$38	\$64	\$44	\$54	\$43	\$72	\$46	\$71
Technical specialist	Site Engineer	\$38	\$54	\$44	\$71	\$45	\$65	\$41	\$54
Technical specialist	Planner/Scheduler	\$46	\$71	\$57	\$71	\$41	\$68	\$60	\$74
Technical specialist	OHS Supervisor	\$49	\$63	\$46	\$65	\$52	\$72	\$49	\$60

Table 13 \$2021/22 Hays annual salary (\$'000s)

AER Category Mapping	Role	NSW		VIC		QLD		SA	
		Low	High	Low	High	Low	High	Low	High
Administration	Administration Assistant (6-12 mths exp)	\$42	\$48	\$42	\$47	\$42	\$49	\$42	\$48
Administration	Administration Assistant (12+ mths exp)	\$49	\$66	\$45	\$51	\$45	\$55	\$46	\$56
Administration	Project Admin Assistant (3+ yrs exp)	\$59	\$80	\$51	\$66	\$55	\$65	\$56	\$71
Administration	Project Coordinator	\$61	\$87	\$56	\$82	\$55	\$65	\$61	\$77
Administration	Data Entry Operator	\$42	\$46	\$42	\$49	\$42	\$55	\$46	\$56
Administration	Records Officer	\$56	\$82	\$42	\$51	\$45	\$55	\$46	\$56
Engineer	Design Engineer*	\$77	\$110	\$80	\$112	\$87	\$115	\$82	\$112
Engineer	Project Engineer (EPCM)	\$87	\$130	\$92	\$130	\$95	\$150	\$82	\$122
Engineer	Power Systems Engineer	\$92	\$150	\$92	\$150	\$95	\$125	\$92	\$122
Engineer	Protection Engineer	\$102	\$140	\$77	\$128	\$117	\$140	\$92	\$128
Engineer	Transmission Line Design Engineer	\$122	\$200	\$102	\$140	\$92	\$153	\$97	\$143
Engineer	Asset Engineer (3-7 yrs)*	\$92	\$130	\$87	\$133	\$90	\$128	\$97	\$122
Engineer	Project Engineer*	\$92	\$133	\$97	\$133	\$97	\$138	\$87	\$133
Engineering manager	Engineering Manager	\$163	\$240	\$143	\$184	\$155	\$205	\$153	\$194
Engineering manager	Project Manager	\$133	\$190	\$122	\$163	\$133	\$170	\$122	\$153
Engineering manager	Project Manager	\$143	\$184	\$133	\$163	\$128	\$179	\$122	\$143
Engineering manager	Commissioning Manager	\$143	\$184	\$163	\$194	\$143	\$179	\$153	\$184
Field worker	Leading Hand	\$66	\$100	\$92	\$112	\$92	\$128	\$82	\$102
Field worker	Electrician	\$66	\$100	\$92	\$122	\$87	\$117	\$82	\$102
Field worker	Mechanical Fitter	\$66	\$90	\$61	\$82	\$77	\$112	\$71	\$97
Field worker	Line Worker	\$77	\$120	\$66	\$82	\$82	\$112	\$71	\$102
Field worker	G&B Linesworker	N/A	N/A	\$87	\$133	\$97	\$138	\$87	\$112
Field worker	Switching Operator	\$66	\$130	\$87	\$122	\$92	\$128	\$87	\$122
Field worker	Cable Joiner	\$77	\$120	\$95	\$120	\$92	\$117	\$87	\$112
Field worker	Cable Layer	\$66	\$100	\$77	\$97	\$92	\$112	\$87	\$112
Senior engineer	Senior Design Engineer*	\$112	\$150	\$105	\$145	\$115	\$155	\$102	\$143
Senior engineer	Principal Design Engineer	\$143	\$180	\$150	\$200	\$155	\$190	\$143	\$163

Senior engineer	Senior Project Engineer (EPCM)	\$133	\$170	\$133	\$173	\$148	\$180	\$133	\$153
Senior engineer	Commissioning Engineer	\$112	\$138	\$133	\$153	\$128	\$168	\$122	\$153
Technical specialist	Technician	\$66	\$100	\$87	\$117	\$77	\$102	\$71	\$92
Technical specialist	Control Room Operator	\$77	\$110	\$97	\$117	\$82	\$107	\$82	\$112
Technical specialist	Maintenance Superintendent	\$87	\$120	\$97	\$112	\$122	\$153	\$102	\$133
Technical specialist	Maintenance Planning/Scheduler	\$82	\$120	\$82	\$107	\$112	\$135	\$97	\$133
Technical specialist	Operations Manager	\$143	\$200	\$133	\$173	\$162	\$214	\$122	\$153
Technical specialist	E&I Technician	\$71	\$110	\$82	\$112	\$92	\$153	\$82	\$102
Technical specialist	ProtectionTechnician	\$71	\$110	\$97	\$122	\$128	\$168	\$112	\$153
Technical specialist	GeneratorTechnician	\$71	\$120	\$82	\$102	\$80	\$135	\$87	\$133
Technical specialist	Site Engineer	\$71	\$102	\$82	\$133	\$85	\$122	\$77	\$102
Technical specialist	Planner/Scheduler	\$87	\$133	\$107	\$133	\$77	\$128	\$112	\$138
Technical specialist	OHS Supervisor	\$92	\$117	\$87	\$122	\$97	\$135	\$92	\$112

Appendix D. On-cost percentage across DNSPs

Table 14 On-cost percentages

Marsden Jacob Proposed On-costs and Allowances	All NSW DNSPs	All Victorian DNSPs	SAPN	QLD DNSPs
Standard leave	18.2%	19.3%	18.2%	18.2%
Superannuation	15.0%	9.5%	10.3%	10.3%
Workers Compensation	2.3%	0.3%	0.5%	0.5%
Payroll tax	5.5%	4.9%	5.0%	5.0%
Annual leave loading	1.4%	1.4%	1.4%	1.4%
Long Service leave allowance	2.5%	2.5%	2.5%	2.5%
On-costs	52.2%	42.7%	42.8%	42.8%

Appendix E. Interstate comparison

Figure 11 FY22/23 All-inclusive administration rates interstate comparison (\$ per hr)

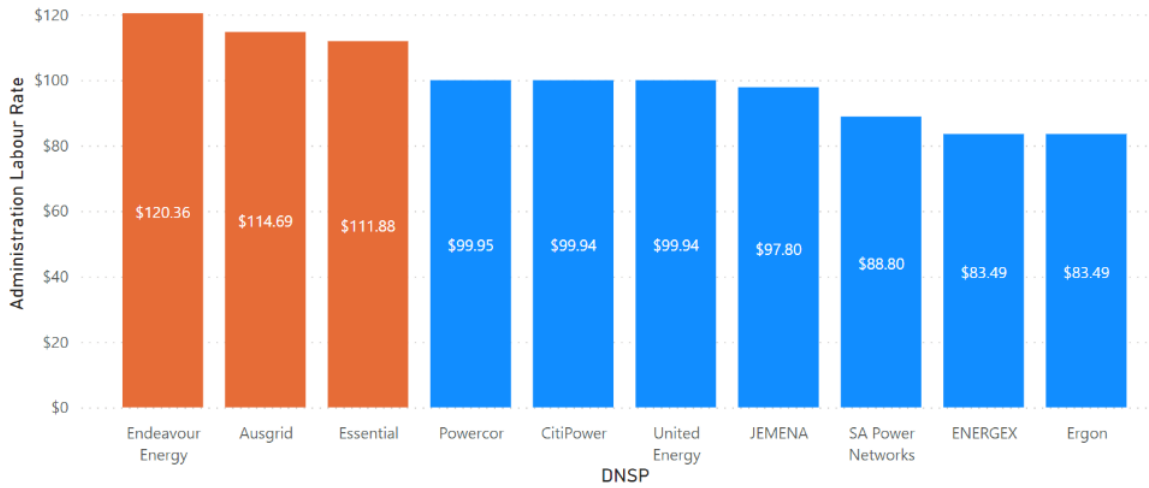


Figure 12 FY22/23 All-inclusive technical specialist rates interstate comparison (\$ per hr)

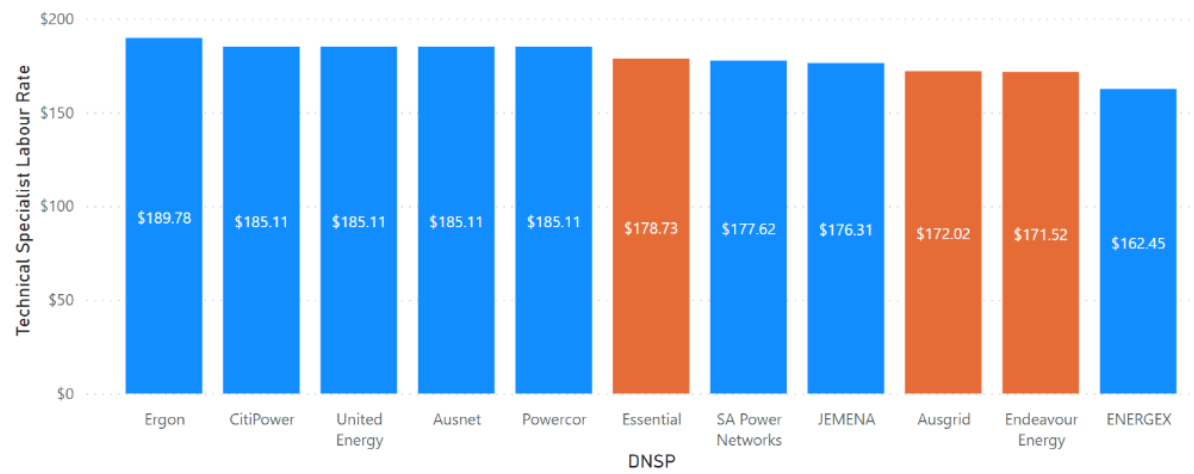


Figure 13 FY22/23 All-inclusive engineer rates interstate comparison (\$ per hr)

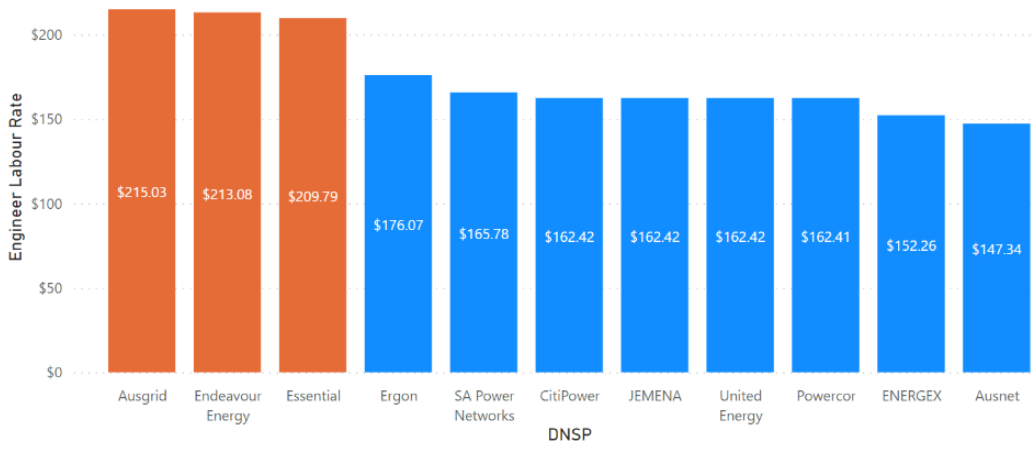


Figure 14 FY22/23 All-inclusive field worker rates interstate comparison (\$ per hr)

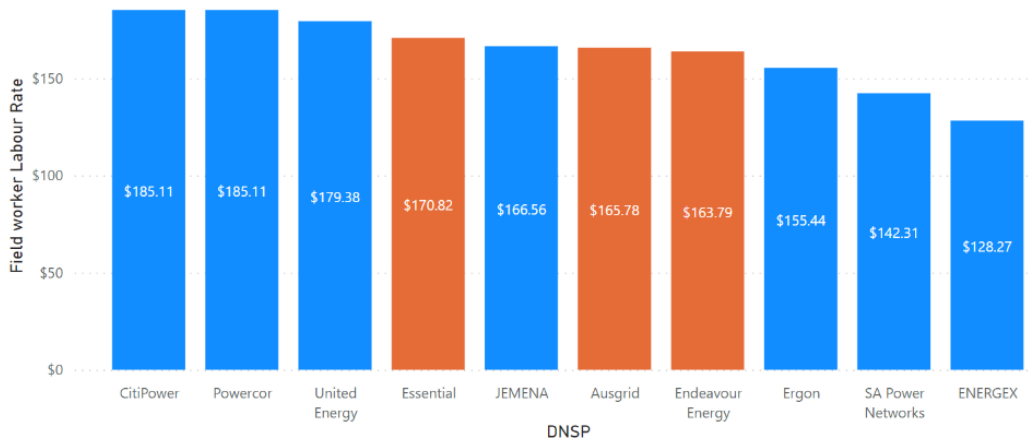


Figure 15 FY22/23 All-inclusive senior engineer rates interstate comparison (\$ per hr)

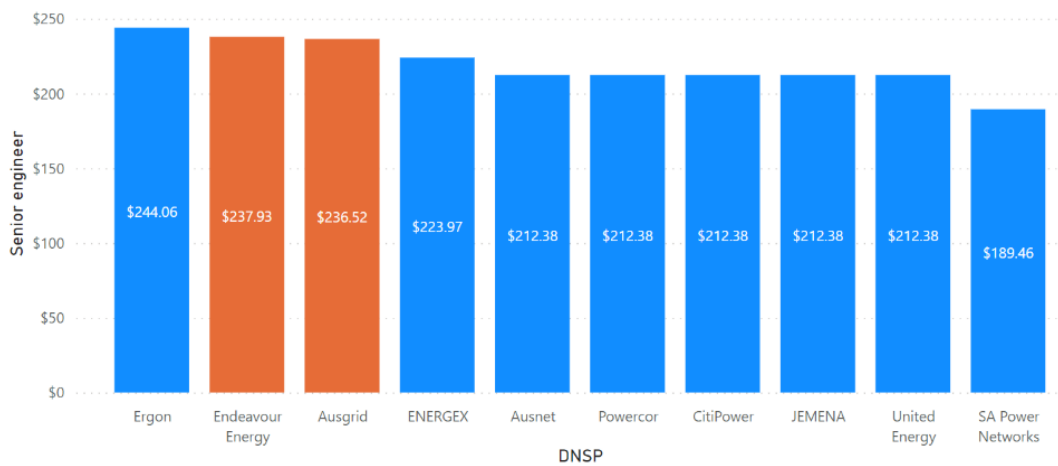


Figure 16 FY22/23 All-inclusive project / engineering manager rates interstate comparison (\$ per hr)

