HOUSTONKEMP
Economists

Escalation of contract labour for capital expenditure

A report for Jemena Electricity Networks

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Disclaimer

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As part of their regulatory proposals to the Australian Energy Regulator (AER), the Victorian distribution network service providers (DNSPs) propose forecasts for capital expenditure that escalate unit labour costs in line with forecast movements in the wage price index (WPI) for the electricity, gas, water and waste services (EGWWS) sector in Victoria. However, the AER's draft decisions reject the use of WPI for EGWWS as the basis of escalation for capitalised contracted labour costs. The AER states that contracted labour costs for capital expenditure should be escalated at the rate of the consumer price index (CPI), ie, they should receive zero escalation in real terms.

We have been commissioned by Jemena Electricity Networks (Jemena) to review and assess the AER's draft decisions not to apply real escalation to contract labour costs for Jemena's network capital expenditure.

Real escalation of unit labour costs

It is important to preface a discussion of labour cost escalation by distinguishing between unit labour costs and total labour costs. Unit labour costs reflect the unit price of labour, the escalation of which may be measured by WPI growth. Total labour costs take into account the quantity of labour and therefore incorporate considerations of productivity.

The purpose of providing real escalation for labour costs is to improve the accuracy of forecast labour costs by reflecting realistic expected growth in unit labour costs, therefore, attempting to ensure that forecast expenditure reasonably reflects efficient and prudent labour costs.

Over time, growth in unit labour costs has generally, but not always, exceeded the rate of inflation. Independent forecasts used by the AER indicate that growth in unit labour costs is likely to exceed the rate of inflation over the forthcoming regulatory period. This is further supported by relevant labour shortages that are anticipated to continue, applying upward pressure on unit labour costs.

The AER's long-standing position is that the WPI is the most appropriate benchmark for the escalation of unit labour costs by DNSPs, because it provides a more accurate measure for escalation of unit labour costs by holding fixed the composition of labour (ie, it measures defined 'baskets' of labour following the same jobs over time holding the quality and quantity of labour fixed).

The type of labour undertaken by individuals employed by DNSPs and contracted by DNSPs is inherently similar and can realistically be expected to be supplied within the same labour markets. DNSPs compete with firms to secure labour including each other, other electricity network businesses, and electricity contracting firms and other businesses.

The reasons underpinning the use of WPI growth for the EGWWS industry to account for the real escalation of employed unit labour costs equally apply to contract unit labour costs. Since both relevant contractor firms and DNSPs can realistically be expected to compete for skilled labour within the same labour markets, it follows that it would not be feasible for material divergence to arise in the long term between the level of pay and the rate of increase of pay as between relevant contractor firms and DNSPs.

Draft decision on escalation of contract labour costs

In its draft decision for Jemena's regulatory proposal, the AER does not apply real escalation to total labour costs for capital expenditure, implying that any real escalation of unit labour costs of contract labour is not accounted for.

The historical basis for this decision appears to be expressed in the AER's final decision for SA Power Networks 2020-25 distribution determination, in which it provides three reasons for applying zero real escalation to contracted labour costs for capital expenditure, ie:

- SA Power Networks had the ability to manage overall contractor costs in line with CPI growth given the short-term nature of contracts related to capital expenditure;
- forecasting unit labour cost growth for contracted services, absent taking into account productivity growth, would likely overstate the growth in the price of contracted services; and
- the absence of material evidence to support the premise that SA Power Networks incurred unit labour cost increases for contracted labour services in line with WPI growth in the regulatory period preceding that of the period in the determination.

These reasons do not necessarily represent a standard approach taken by the AER since it has come to different conclusions in other decisions.

Ability to manage contract labour cost escalation

Although DNSPs have an ability to manage their short-term costs, an assessment of prudent and efficient expenditure requires consideration of the DNSPs' long-term cost in achieving the expenditure objectives. This is paired with the requirement that proposed expenditure must reflect realistic expectations of forecast costs.

Given that employed labour and contracted labour can realistically be expected to be supplied within the same labour market, the simultaneous assumptions that employed and contracted unit labour costs escalate at the rate of WPI growth and CPI growth, respectively, cannot be sustained. This difference would also imply that contractors, in the long-term, are able to employ the same labour as DNSPs at a materially different (and lower) unit cost than can be achieved by DNSPs, or than is available to the market in equilibrium. These expectations are unrealistic.

Further, escalating contract labour costs at a rate different to employed labour costs when both types of labour can realistically be expected to be supplied within the same labour market could result in allowed contract labour costs that do not reflect the efficient costs of achieving the capital expenditure objectives.

Since DNSPs are price takers in the labour market, it is unreasonable to assume that DNSPs could contract in the short-term to limit the escalation of contract labour costs to CPI growth. The unit labour cost as at the specific point in time when the contract is struck would reflect any real escalation of unit labour costs. Additionally, if a DNSP sought to contract at some earlier point in time when unit labour costs were low, expectations of future unit labour costs would be included in the agreement.

Similarly, it follows that there exists no evidence presented by the AER or reasoned basis explaining how DNSPs would be capable of limiting the escalation of contracted unit labour costs to the rate of CPI growth.

The above reasons indicate that the AER's draft decision approach for forecasting contract labour capital expenditure does not reasonably reflect the capital expenditure criteria.

Relevance of productivity improvements

It is reasonable to assume that productivity improvements would impact all workers in a labour market, on average, at an equal level. This is consistent with the AER's current approach for forecasting labour costs within operating expenditure.

It follows then that the only difference in the escalation of contracted labour costs and employed labour costs arises from a difference in the real escalation of contracted unit labour costs and employed unit labour costs.

As discussed, contracted labour and employed labour can realistically be expected to be supplied within the same labour markets. Subsequently, there is no reason why the contracted unit labour cost should not be escalated in line with that of employed unit labour cost, ie, at the rate of WPI growth to reflect realistic expectations of future changes to unit labour costs.

The construction of the WPI ensures that the quantity and quality of labour services are held constant alongside holding fixed the composition of labour. Specifically, the WPI measures pure price movements including movements due to inflation, cost of living, enterprise or agency agreements, award rises, minimum wage rises, individual contracts and salary reviews. As a result, the WPI takes into account wage growth due to labour productivity growth and compositional changes by ensuring these are removed from the WPI measure, ie, the WPI is a measure of wage growth that is expressed to be 'net of' such productivity improvements.

Given this, forecasting labour price growth using WPI growth accounts for productivity improvements. Subsequently, no adjustment to the WPI for changes in labour productivity is required. It follows that forecasting labour price growth using WPI growth is unlikely to overstate the growth in the price of contracted labour.

Requirements of enterprise bargaining agreements

The AER has previously discussed the difficulties with reliance on EBA outcomes to establish forecasts of labour expenditure and that the NER are not based on a cost recovery framework.

The best approach is to use WPI growth for the EGWWS industry to determine expected escalation of contracted labour costs so that these estimates account for realistic expectations of growth in contracted unit labour costs.

1. Introduction

As part of their regulatory proposals to the Australian Energy Regulator (AER), the Victorian distribution network service providers (DNSPs) are required to submit forecasts of their operating and capital expenditures over the forthcoming regulatory period extending between 1 July 2026 and 30 June 2031.

1.1 Scope of this report

All Victorian DNSPs propose forecasts for capital expenditure that escalate unit labour costs in line with forecast movements in the wage price index (WPI) for the electricity, gas, water and waste services (EGWWS) sector in Victoria. Over the forthcoming regulatory period, this approach gives rise to positive real escalation for labour costs.

The AER agrees that WPI for EGWWS should be the basis for the escalation of capitalised unit labour costs for personnel employed by the Victorian DNSPs.

However, the AER's draft decisions reject the use of WPI for EGWWS as the basis of escalation for capitalised contracted labour costs. The AER states that contracted labour costs for capital expenditure should be escalated at the rate of the consumer price index (CPI), ie, they should receive zero escalation in real terms.

We have been commissioned by Jemena Electricity Networks (Jemena) to review and assess the AER's draft decisions not to apply real escalation to contract labour costs for their network capital expenditure.

1.2 Relevant regulatory requirements

The National Electricity Rules (NER) require the AER to accept the forecast of a DNSP's required capital expenditure if it is satisfied that the total forecast capital expenditure reasonably reflects each of the following capital expenditure criteria:[1]

> (i) the efficient costs of achieving the capital expenditure objectives;
>
> (ii) the costs that a prudent operator would require to achieve the capital expenditure objectives; and
>
> (iii) a realistic expectation of the demand forecast, cost inputs and other relevant inputs required to achieve the capital expenditure objectives.

In determining whether the AER is satisfied that the total forecast capital expenditure reasonably reflects the capital expenditure criteria listed above, the AER must have regard to, amongst others, the following specific capital expenditure factors:[2]

> (1) the most recent annual benchmarking report that has been published under rule 6.27 and the benchmark capital expenditure that would be incurred by an efficient Distribution Network Service Provider over the relevant regulatory control period;
>
> (2) the actual and expected capital expenditure of the Distribution Network Service Provider during any preceding regulatory control periods;
>
> (4) the extend to which the capital expenditure forecast would efficiently reduce the risk and impact on consumers of power outages caused by severe weather events;
>
> (5) the relative prices of operating and capital inputs; [and]

[1] NER, clause 6.5.7(c)(1).

[2] NER, clause 6.5.7(e).

(7) whether the capital expenditure forecast is consistent with any incentive scheme or schemes that apply to the Distribution Network Service Provider under clauses 6.5.8A or 6.6.2 to 6.6.4.

This report assesses whether Jemena's proposal to apply a non-zero real escalation to contract labour costs for its network capital expenditure gives rise to expenditure forecasts that reasonably reflect the capital expenditure criteria. We also review the AER's draft decision by reference to the same assessment framework.

1.3 Structure of this report

The remainder of this report is structured as follows:

- in section 2 we examine the economic rationale for applying a non-zero real escalation to contract unit labour costs for network capital expenditure and the basis for that escalation, as against the capital expenditure criteria; and
- in section 3 we review and assess the basis developed by the AER not to apply a real escalation to contract labour costs for network capital expenditure, as against the capital expenditure criteria.

2. Real escalation of unit labour costs

The purpose of providing real escalation for labour costs is to improve the accuracy of forecast labour costs by reflecting realistic expected growth in unit labour costs, so as to ensure that forecast expenditure reasonably reflects efficient and prudent labour costs.

Over time, growth in unit labour costs has generally, but not always, exceeded the rate of inflation. Independent forecasts used by the AER indicate that growth in unit labour costs is likely to exceed the rate of inflation over the next forthcoming regulatory period. The AER's long-standing position is that the WPI for the EGWWS is the most appropriate measure for escalating unit labour costs because it holds fixed the composition of labour (ie, it measures defined 'baskets' of labour by following the same jobs over time holding the quality and quantity of labour fixed).

The reasons underpinning the use of WPI growth for the EGWWS industry to account for the real escalation of employed unit labour costs equally apply to contract unit labour costs.

The type of labour undertaken by individuals employed by DNSPs and contracted by DNSPs is inherently similar and can realistically be expected to be supplied within the same labour markets. It follows that it would not be feasible for material divergence to arise in the long term between the level of pay and the rate of increase of pay as between relevant contractor firms and DNSPs.

In our opinion, the use of WPI for the EGWWS sector as the basis for the expected escalation of total labour costs for contracted capital expenditure reasonably reflects the capital expenditure criteria set out in the NER.

2.1 Unit labour costs and total labour costs

Unit labour costs reflect the unit price of labour, the escalation of which may be measured by WPI growth. Total labour costs take into account the quantity of labour and therefore incorporate considerations of productivity.

It is important to preface a discussion of the escalation of labour costs by first elaborating on the difference between unit labour costs and total labour costs. Unit labour costs reflect the unit price of labour, ie, the price a DNSP must pay for one unit of defined labour. Total labour costs reflect the product of the price of labour and the specified quantity of that labour.

The AER escalates total labour costs in its assessment of a DNSP's forecast expenditure.[3] In doing so, the AER's preferred approach is to assess labour price (ie, unit labour cost) changes over the forecast period using the WPI.[4] This approach seeks to ensure that forecast expenditure reflects the realistic expectations of changes to unit labour costs.

Escalation of unit labour costs does not involve direct consideration of productivity. However, productivity effects are a consideration with respect to the forecast quantity of labour and therefore the forecast total labour costs. Specifically, productivity improvements enable greater output per worker, so that a business can deliver the same outcomes with less labour input.

Productivity improvements can occur in multiple ways, including by means of:

[3] See: AER, *Draft decision: Jemena electricity distribution determination 1 July 2026 – 30 June 2031 – Attachment 3 – Operating expenditure*, September 2025, pp 3, 17-21.

[4] AER, *Expenditure forecast assessment guideline for electricity distribution*, October 2024, p 8.

- improvements in the productivity of individual workers through increases in their human capital, eg, by increased skills or capabilities due to experience or training; and
- improvements in industry-wide levels of productivity through increases in the quantity or quality of physical capital, eg, by the introduction of new technology.

We discuss productivity and its considerations for forecast total labour costs in section 3.3 below.

2.2 Basis for the real escalation of unit labour costs

The purpose of providing real escalation for labour costs is to improve the accuracy of forecast labour costs by reflecting realistic expected growth in unit labour costs, therefore, attempting to ensure that forecast expenditure reasonably reflects efficient and prudent labour costs.

Over time, growth in unit labour costs has generally, but not always, exceeded the rate of inflation. Independent forecasts used by the AER indicate that growth in unit labour costs is likely to exceed the rate of inflation over the next forthcoming regulatory period.

The AER states that for it to be satisfied that forecasts of operating expenditure and capital expenditure reasonably reflect the operating expenditure criteria and capital expenditure criteria, as specified in the NER, it must be satisfied that these *'forecasts reasonably reflect a realistic expectation of these costs'*.[5]

In applying the first capital expenditure criterion, the AER has previously stated that:[6]

> The efficient costs of a prudent DNSP depend on what happens in the labour and materials markets over the forthcoming regulatory control period.

The purpose of applying real escalation to labour costs is to improve the accuracy of the forecast total labour costs by reflecting the expected growth in unit labour prices. It follows that this approach attempts to ensure that clause 6.5.7(c)(1)(iii) of the NER is met, specifically that a realistic expectation of unit labour costs is reflected in the total forecast capital expenditure of a DNSP.

In the absence of precise information pertaining to the exact future unit labour cost over a specified regulatory control period, expectations of the change in the future unit price of labour are used to escalate forecast total labour costs to reflect a realistic expectation of unit labour costs. This is consistent with the AER's principled approach to the escalation of unit labour costs, ie:[7]

> To the extent that the incentives within the regulatory framework assume current labour costs are efficient, the AER considers that satisfying both the NEL and NER requires compensating a DNSP purely for expected changes in the price of labour. That is, changes in the costs to a DNSP of employing labour, unaffected by compositional changes in the quality or quantity of work performed.

Just as it is common practice to escalate general costs at the rate of CPI growth since this is a general measure of the change in prices of several baskets of goods, it is logical to escalate unit labour costs at the rate of change of the unit price of a "basket of labour".

To highlight the difference between changes in the CPI and changes in a measure of unit labour costs, and subsequently demonstrate that a realistic expectation of labour costs usually reflects non-zero real escalation, we present cumulative changes in level of the CPI (Australia) and the WPI for the EGWWS

[5] AER, *Draft distribution determination: Aurora Energy Pty Ltd 2012-13 to 2016-17*, November 2011, p 95.

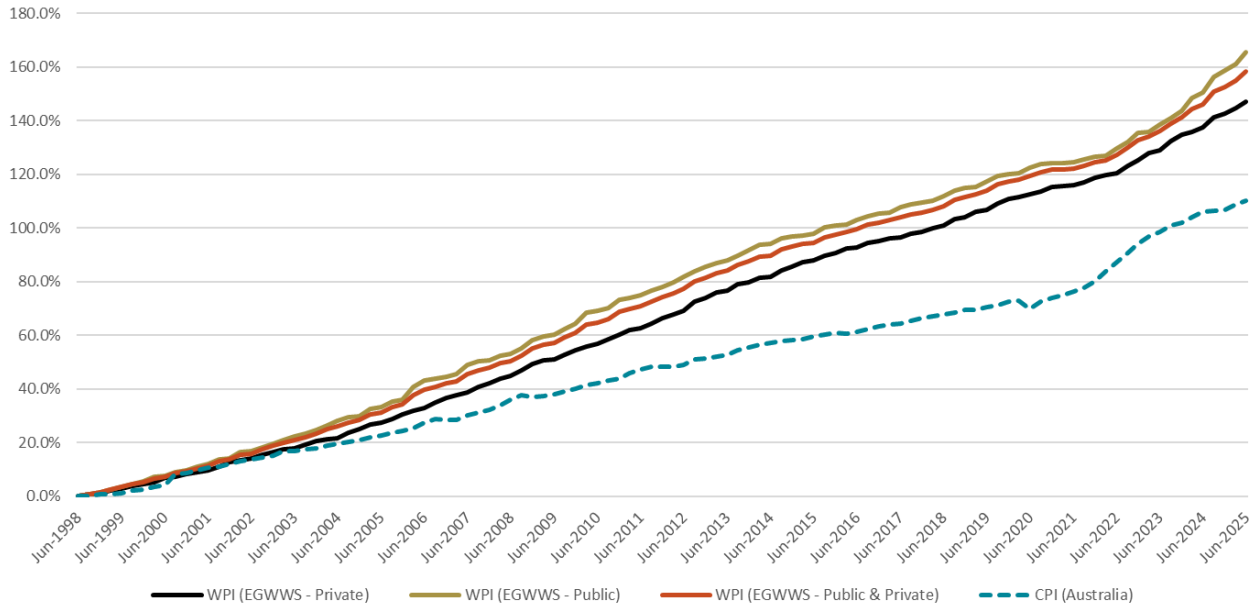
[6] AER, *Draft distribution determination: Aurora Energy Pty Ltd 2012-13 to 2016-17*, November 2011, p 95.

[7] AER, *Final decision – appendices: Victorian electricity distribution network service providers – Distribution determination 2011-2015*, October 2010, p 245.

(Australia) industry in figure 2.1,[8] and the annual rate of change in the CPI (Australia) and the WPI for Victoria in figure 2.2.[9]

Although the two measures at times follow a similar pattern, there are distinct differences in the growth of these indices. In general, and on average over the period from June 1998 to June 2025, the growth in the WPI is higher than that of the growth in the CPI. This is demonstrated in figure 2.1 through the cumulative change in the CPI (Australia) being distinctly lower than that of the WPI (EGWWS, Australia).

Figure 2.1: Cumulative changes in the CPI (Australia) and the WPI (EGWWS, Australia) over time



Source: ABS, Consumer price index, series A2325846C; ABS, Wage price index, series A2603869C, A2602919W and A2603489A.

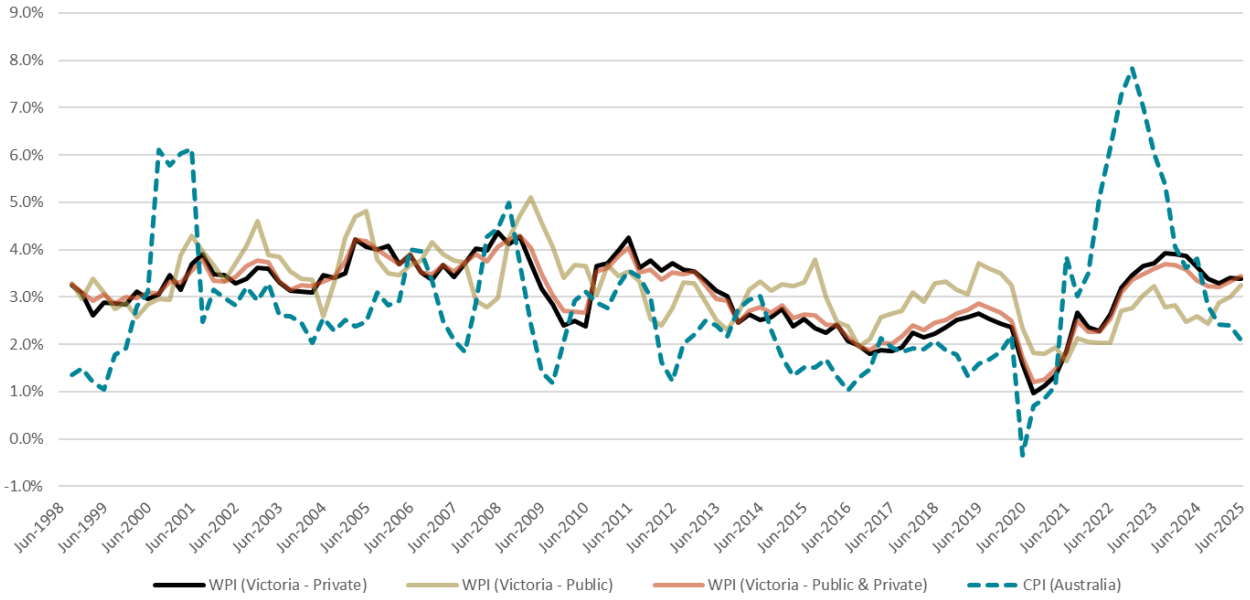
Although for distinct time periods the general trend of changes in the CPI and the WPI are observed as similar, the actual percentage growth often differs substantially between the series. This provides further evidence that the appropriate measure to use to escalate unit labour costs when forecasting labour costs is some form of specific labour price measurement, rather than reflecting zero real escalation, ie, based only on growth in CPI.

Figure 2.2 demonstrates that the annual rate of change in the CPI (Australia) is often below that of the WPI (Victoria). However, this is not always the case. For example, between 2000 and 2001 and between 2021 and 2023 the growth in the CPI (Australia) was substantially higher than that of the WPI for the EGWWS industry and the WPI for Victoria, across sector classifications (ie, public, private or both).

[8] We use the WPI for the EGWWS industry for Australia because the ABS does not publish data for the WPI for the EGWWS industry in the state of Victoria.

[9] We use the WPI for the state of Victoria in place of the WPI for the EGWWS industry in Victoria because the ABS does not publish data for the WPI for the EGWWS industry in Victoria. The use of the WPI for Victoria is to provide further comparison to the trends observed in the growth of the WPI for the EGWWS industry in Australia as presented in figure 2.1.

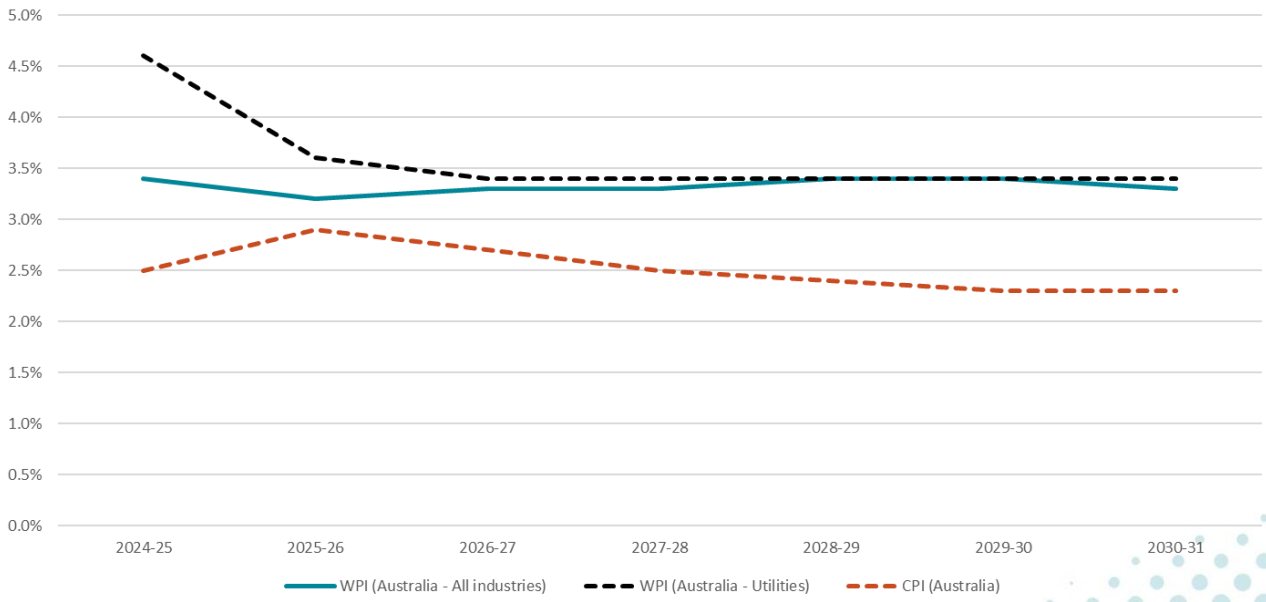
Figure 2.2: Changes in the CPI (Australia) and the WPI (Victoria) over time



Source: ABS, Consumer price index, series A2325846C; ABS, Wage price index, series A2609309R, A2608359V and A2608929K.
Note: changes are calculated as the percentage change from the corresponding quarter of the previous year.

Expectations of the future change in the CPI and the WPI are also distinctly different. Forecasts by the independent consultant commissioned by the AER to inform its draft decision for Jemena are presented in figure 2.3 and figure 2.4.

Figure 2.3: Forecasts of year-average percentage growth in WPI and CPI for Australia

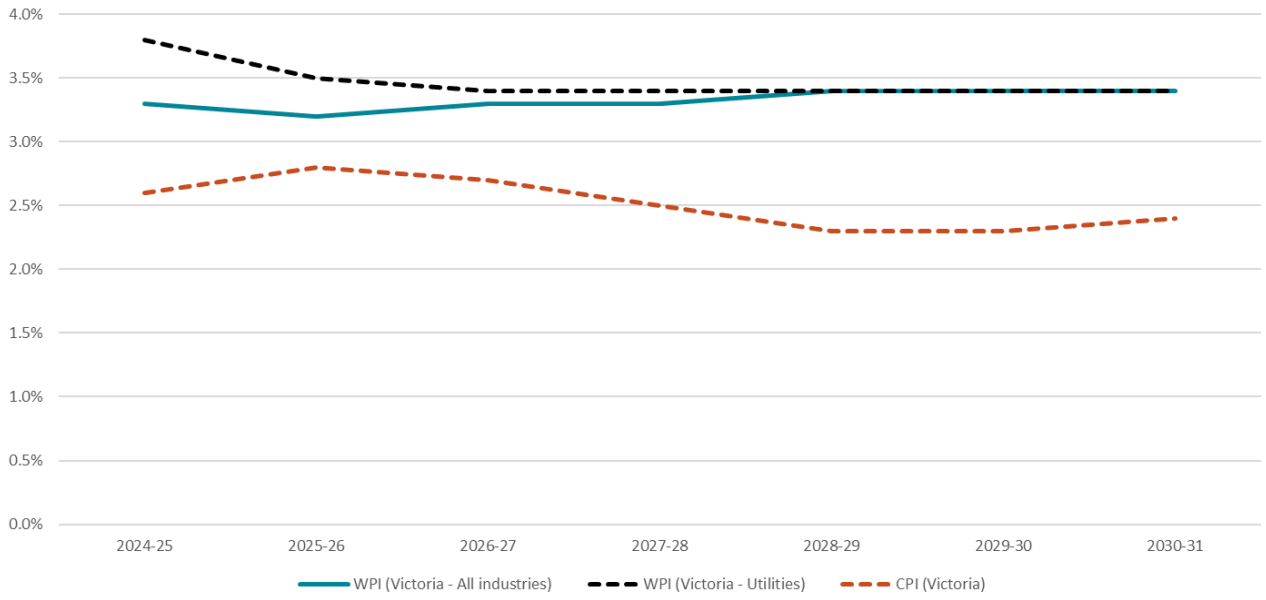


Source: Deloitte Access Economics, Labour price growth forecasts: Prepared for the Australian Energy Regulator, July 2025, pp 10-11.

Although the ABS does not publish data for the WPI for each industry by state, the AER's independent consultant provides forecasts for the utilities industry (ie, EGWWS) by state. Both figure 2.3 and figure 2.4 show that expectations of the future change in the WPI are above that of expectations of the future change in

the CPI. Additionally, the expectations of the future change in the WPI for the utilities industry exceed those of WPI across all industries.

Figure 2.4: Forecasts of year-average percentage growth in WPI and CPI for Victoria



Source: Deloitte Access Economics, Labour price growth forecasts: Prepared for the Australian Energy Regulator, July 2025, pp 10-11.

2.3 Regulatory precedent for escalation of unit labour costs

The two most common approaches to measuring the change in unit labour costs are the WPI and average weekly ordinary time earnings (AWOTE).

The AER's long-standing position is that the WPI is the most appropriate benchmark for the escalation of unit labour costs for DNSPs, because it provides a more accurate measure for escalation of unit labour costs by holding fixed the composition of labour.

Although there are multiple approaches to measuring what the change in the unit price of a "basket of labour" is, two measures have been referred to in regulatory precedent, ie:

- the WPI; and
- average weekly earnings (AWE) or specifically, AWOTE.

The WPI is a Laspeyres-type index that covers wage and salary costs, measuring the change in the price of labour between some current period and a specified base period, holding the quantity and quality of labour services constant.[10]

The WPI was previously published as a component of the labour price index (LPI), until the LPI was discontinued in 2012 due to work program reductions and the WPI continued as the main measure of wage

[10] Australian Bureau of Statistics (ABS), *Chapter 2- Purposes and uses of the wage price index*, available at: https://www.abs.gov.au/statistics/detailed-methodology-information/concepts-sources-methods/wage-price-index-concepts-sources-and-methods/2012/chapter-2-purposes-and-uses-wage-price-index, accessed: 4 November 2025.

growth with the name of the series changed to the WPI from the 2012 September quarter to reflect the reduced scope of the collection of data.[11]

AWE provides a measure of the level of average gross weekly earnings associated with employees, in which three main series are published:[12]

- AWOTE for full-time adult employees;
- average weekly total earnings for full-time adult employees (comprising weekly ordinary time earnings plus weekly overtime earnings); and
- average weekly total earnings for all employees

The appropriate measure to use when forecasting labour costs has been debated in the past,[13] but the AER's long-standing position is that the WPI is the most appropriate measure. In its 2011 draft determination of Aurora Energy Pty Ltd (Aurora Energy), the AER discussed both the LPI (and therefore, the WPI) and AWOTE. The AER stated that it:[14]

> …considers forecast growth in AWOTE does not reasonably reflect a realistic expectation of the change in labour costs. It considers LPI forecasts, adjusted for productivity effects, most reasonably reflect labour costs during the forthcoming regulatory control period.

The AER supported this conclusion by identifying that the AWOTE measure is not strictly a price index. This is because the composition of labour is not held constant and it *'captures composition productivity effects, worker productivity effects and other effects'*[15] such that *'the LPI provides a more accurate measure of labour price change (by holding labour composition fixed) than does AWOTE'*.[16]

As outlined in the expenditure forecast assessment guideline for electricity distribution, the AER's general approach to assess a DNSP's forecasts is to be applied to both capital expenditure and operating expenditure proposals.[17] The AER's general approach involves consideration of whether adjustments are required for real price escalation.[18] Pertaining specifically to labour price changes, the AER's preferred approach is to use the WPI, with the labour price measure being consistent with the treatment of forecast productivity changes.[19]

In the AER's 2011-15 determination for Victorian DNSPs the AER accepted that:[20]

> …the real labour cost escalators applied to all internal employees should be based solely on EGW labour price movements…

[11] Due to the WPI previously being published as a component of the LPI prior to 2012, official documents discussing the appropriate wage growth measure often refer directly to the LPI. This is understood in the context of measure wage growth as referring to the WPI. ABS, *Wage price index, Australia methodology: Appendix – labour price index*, available at: https://www.abs.gov.au/methodologies/wage-price-index-australia-methodology/jun-2020, accessed: 5 November 2025 and ABS, *Wage price index : Concepts, sources and methods – Chapter 3 – Historical background*, available at: https://www.abs.gov.au/statistics/detailed-methodology-information/concepts-sources-methods/wage-price-index-concepts-sources-and-methods/2012/chapter-3-historical-background, accessed: 5 November 2025.

[12] ABS, *Average Weekly Earnings, Australia methodology*, available at: https://www.abs.gov.au/methodologies/average-weekly-earnings-australia-methodology/may-2025 - survey-output, accessed: 5 November 2025.

[13] See: AER, *Final decision – appendices, Victorian electricity distribution network service providers: Distribution determination 2011-2015*, October 2010, pp 231-264.

[14] AER, *Draft distribution determination: Aurora Energy Pty Ltd 2012-13 to 2016-17,* November 2011, p 99.

[15] AER, *Draft distribution determination: Aurora Energy Pty Ltd 2012-13 to 2016-17,* November 2011, p 99.

[16] AER, *Draft distribution determination: Aurora Energy Pty Ltd 2012-13 to 2016-17,* November 2011, p 100.

[17] AER, *Expenditure forecast assessment guideline for electricity distribution*, October 2024, p 4.

[18] AER, *Expenditure forecast assessment guideline for electricity distribution*, October 2024, p 7.

[19] AER, *Expenditure forecast assessment guideline for electricity distribution*, October 2024, p 8.

[20] AER, *Final decision – appendices: Victorian electricity distribution network service providers – Distribution determination 2011-2015*, October 2010, p 252.

In making this statement the AER made note of analysis provided by CitiPower and Powercor, which highlighted that if the composition of the internal labour force in a DNSP is similar to that present within the industry specific labour price measure (ie, WPI or AWOTE for the EGWWS industry) then the changes in the internal labour force would be adequately reflected in the respective labour price measure.[21]

The AER's general approach has been to provide for the escalation of labour costs, with the escalation of these costs being made by reference to the change of the WPI for the EGWWS industry for the specific state in which the DNSP is located.[22]

This approach has been applied to final determinations for the operating expenditure of Jemena for the 2021-26 regulatory period.[23] Similarly, the AER has applied the same general approach to the final determinations for internal labour forecasts of Jemena's capital expenditure for the 2021-26 regulatory period.[24]

More recently, in the AER's final decision of Energex's 2025 to 2030 determination, the AER considers that using the forecast WPI growth to escalate labour costs is a sound assumption even when Energex *'indicated that its wage growth over the current period is in line with the CPI'*.[25]

2.4 Escalation of contract unit labour costs

The type of labour undertaken by individuals employed by DNSPs and contracted by DNSPs is inherently similar and can realistically be expected to be supplied within the same labour markets.

DNSPs compete with firms to secure labour including each other, other electricity network businesses, and electricity contracting firms and other businesses. Evidence from the current labour market in Victoria indicates that there have been skill shortages for electricity related occupations since at least 2021.

The reasons underpinning the use of WPI growth for the EGWWS industry to account for the real escalation of employed unit labour costs equally apply to contract unit labour costs. Since both relevant contractor firms and DNSPs can realistically be expected to compete for skilled labour within the same labour markets, it follows that it would not be realistic to expect any material divergence to arise in the long term between the level of pay and the rate of increase of pay as between relevant contractor firms and DNSPs.

Following from the discussion in sections 2.2 and 2.3, this section discusses contracted labour and its relationship to internal labour.

Contract labour used by DNSPs are supplied within the same industry as that of employed labour used by DNSPs. Specifically, both types of labour used by DNSPs are supplied within the EGWWS industry. Since both types of labour are captured by the same industry, two key statements can be made:

- both employed labour and contracted labour used by DNSPs can realistically be expected to be supplied within the same labour markets that serve the EGWWS industry; and
- the WPI for the EGWWS industry captures wage price movements in both employed labour and contracted labour used by DNSPs.

[21] AER, *Final decision – appendices: Victorian electricity distribution network service providers – Distribution determination 2011-2015*, October 2010, p 251.

[22] See: AER, *Final decision: Jemena distribution determination 2021 to 2026 – Attachment 6: Operating expenditure*, April 2021, pp 42-43.

[23] AER, *Final Decision: Jemena distribution determination 2021 to 2026 – Attachment 6: Operating expenditure*, April 2021, pp 42-43.

[24] AER, *Final Decision: Jemena distribution determination 2021 to 2026 – Attachment 5: Capital expenditure*, April 2021, p 11.

[25] AER, *Final Decision: Energex Electricity distribution determination 2025 to 2030 – Attachment 6: Operating expenditure*, April 2025, p 15.

2.4.1 Employed labour and contracted labour used by DNSPs can realistically be expected to be supplied within the same labour markets

The type of labour undertaken by individuals directly employed by the DNSPs and by individuals that are contracted by the DNSPs is inherently similar and exists within the same industry. Workers employed directly by DNSPs and workers employed by relevant contractor firms both work within the electricity industry and provide labour relating to the provision of electricity services.

Further, workers employed directly by DNSPs and those employed by relevant contractor firms both execute work functions under the same policies and procedures, and adhere to the same safety standards. Both types of workers must adhere to industry wide standards established by the licensing requirements for electrical works under the Electricity Safety Act 1998 and the Electricity (Registration and Licensing) Regulations 2020 and the Victorian Electricity Supply Industry (VESI) skills and training guideline.[26]

Although employed labour and contracted (and subcontracted) labour used by DNSPs can realistically be expected to be supplied within the same labour markets and may be provided at similar unit labour costs, there nonetheless exist economic rationales for why a DNSP would seek to obtain contract labour as opposed to employed labour. For example, when undertaking non-recurrent projects, the DNSP may need additional labour outside of its usual requirements. In such circumstances, it would be beneficial to increase the volume of labour for only the duration of the project in which additional labour was required by means of contract labour, rather than of employed labour. Similarly, a DNSP may seek to obtain contract labour as opposed to employed labour would be due to the relative flexibility of contract labour – contract labour may be available at short notice while employed labour is generally not.

DNSPs compete for labour with each other and other electricity network businesses, electricity contracting firms, electricity generator and other businesses. It is evident that individual DNSPs are unable to dictate terms in relevant labour markets.

Further, in Victoria, electricity-specific skills are in demand with an imbalance between the labour market demand and the supply of workers. Table 2.1 presents the occupational shortage classification for occupations within the electricity industry for Victoria from 2021 to 2025.

Table 2.1: Skill shortage for relevant electricity related occupations over time for Victoria

Occupation code	Occupation name	2021	2022	2023	2024	2025
312311	Electrical Engineering Draftsperson	Shortage	No shortage	No shortage	Shortage	No shortage
312312	Electrical Engineering Technician	Shortage	No shortage	Shortage	No shortage	Metro shortage
342211	Electrical Linesworker / Electrical Line Mechanic	Shortage	Shortage	Shortage	Shortage	Shortage
342212	Technical Cable Jointer	Shortage	Shortage	No shortage	Shortage	Shortage

Source: Australian Government, Jobs and Skills Australia, Occupation Shortage List, available at: https://www.jobsandskills.gov.au/data/occupation-shortage/occupation-shortage-list, accessed: 10 November 2025.

An occupation is classified as having a shortage: [27]

[26] *Electricity Safety Act 1998* (Vic), Authorised Version No. 087, Authorised Version incorporating amendments as at 22 October 2025; *Electricity Safety (Registration and Licensing) Regulations 2020* (Vic), S.R. No. 136/2020; and VESI, *Skills and training guideline*, July 2024, p 5.

[27] Australian Government, Jobs and Skills Australia, *Occupation shortage list – what do the ratings mean*, available at: https://www.jobsandskills.gov.au/data/occupation-shortage/occupation-shortage-list, accessed: 10 November 2025.

> …when employers are unable to fill or have considerable difficulty filling vacancies for an occupation or significant specialised skill needs within that occupation, at current levels of remuneration and conditions of employment and in reasonably accessible locations.

The existence of a skill shortage can place upward pressure on wages in the relevant industry facing the shortage. As employers seek to compete for scarce labour, the level of remuneration increases to attract workers with additional workers eventually entering the specialised market as a result of the higher level of remuneration. This further highlights how unit labour prices will face various growth pressures that contribute to expectations of future unit labour prices being distinctly different to general price levels as measured by CPI. Skill shortages are expected to continue past 2025, applying continued upward pressure to unit labour cost growth.[28]

As presented in table 2.1, shortages in occupations within the electricity industry in Victoria are prevalent. Not only does this mean there is currently an insufficient level of skilled labour to meet existing labour demand, but that firms within the electricity industry are likely to be competing more intensely to obtain the relevant skilled labour than if there were not labour shortages present.

Since both relevant contractor firms and DNSPs can realistically be expected to compete for skilled labour within the same labour markets, it follows that it would not be realistic to expect any material divergence to arise in the long term between the level of pay and the rate of increase of pay as paid between relevant contractor firms and DNSPs. Deviations in the labour price between employers can and often do exist at specific points in time. However, these would be expected to converge over the long run.

Further, consistent with fundamental economic principles, any short-term fluctuations of wages in any labour market will result in shifts in the supply of labour such that these short-term fluctuations would be expected to tend to converge back towards a labour market equilibrium wage. This means that deviations between wage growth, if any, of employed labour and contract labour cannot reasonably be expected to persist in the long run.

In addition, with the presence of EBAs between DNSPs and labour unions in the electricity industry, contractor firms would not be able to provide remuneration materially below the levels or rate of growth as defined in the EBAs. Under the Fair Work Act 2009, a DNSP must pay a casual worker no less than the full rate of pay applicable to an employed worker under the EBA.[29]

2.4.2 The WPI for the EGWWS industry is the most appropriate measure for the escalation of contracted labour

We discuss in section 2.4.1 above that employed labour and contract labour for DNSPs can realistically be expected to be supplied within the same labour markets. Although the ABS does not currently publish a WPI specifically for the electricity industry, it does publish a WPI for the EGWWS industry, which includes the electricity industry. As a result, wage dynamics present within relevant employed and contracted labour for the electricity industry are captured within the WPI for the EGWWS industry.

For the same reasons that the WPI for the EGWWS sector is the most appropriate measure to use to escalate total labour costs for operating expenditure and internal labour costs for capital expenditure, it is also the most appropriate measure to use to escalate contracted labour costs for capital expenditure.

In our opinion, the use of WPI for the EGWWS sector as the basis for the expected escalation of total labour costs for contracted capital expenditure reasonably reflects the capital expenditure criteria set out in the NER.

[28] Infrastructure Australia, *Infrastructure Market Capacity: 2025 Report*, November 2025, pp 43-45.

[29] *Fair Work Act 2009*, s 306F.

3. Draft decision on escalation of contract labour

In this section we address directly the most recently available reasoning that the AER provides in support of its decision to use expected CPI growth as the best estimate of forecast escalation for the unit labour costs for Jemena's network capital expenditure.

We explain in section 1.2 that the NER require the AER to accept the forecast of a DNSP's required capital expenditure forecast if it is satisfied that the total forecast capital expenditure reasonably reflects each of the capital expenditure criteria.[30]

The AER does not explain in its draft decision for Jemena why it is not satisfied that the proposed escalation of labour costs within the Jemena's forecast total capital expenditure results in a forecast of capital expenditure that reasonably reflects the capital expenditure criteria.

In this section, we show that the AER's assumption that a DNSP can manage short-term contracts such that it limits any escalation of contracted labour costs, and therefore any escalation of contracted unit labour costs, to the rate of CPI growth does not constitute a realistic expectation of future labour costs. This basis for a forecast of capital expenditure therefore does not reasonably reflect the capital expenditure criteria.

In our opinion, on the basis of our analysis pertaining to the contracted unit labour cost escalation given economic principles and relevant evidence, that forecasting contracted labour costs in line with WPI growth for the EGWWS industry, consistent with the AER's approach for operating expenditure and employed labour for capital expenditure, provides a realistic expectation of these labour cost inputs and reasonably reflects the capital expenditure criteria.

3.1 Basis for the AER's draft decision

In its draft decision for Jemena's regulatory proposal, the AER does not apply real escalation to total labour costs for capital expenditure, implying that any real escalation of unit labour costs of contract labour is not accounted for.

In its final decision of SA Power Networks 2020-25 distribution determination, the AER provides three reasons for applying zero real escalation to contracted labour costs for capital expenditure. These reasons do not necessarily represent a standard approach taken by the AER since it has come to different conclusions in other decisions.

In its draft decision for the capital expenditure in Jemena's proposal for the 2026-2031 regulatory period, the AER states that given it does not apply real escalation to contract labour costs, it therefore applies zero real cost escalation for the labour component of Jemena's proposed capital expenditure.[31]

The AER does not provide further reasoning as to why it does not apply real escalation to contract labour costs within its draft determination for Jemena's regulatory proposal. Our review of historical determinations by the AER indicates one key determination in which the AER provides further reasoning as to why it does not apply real escalation to contract labour costs.

[30] NER, clause 6.5.7(c)(1).

[31] AER, *Draft decision: Jemena electricity distribution determination 1 July 2026 – 30 June 2031 – Attachment 2 – Capital expenditure*, September 2025, p 13.

In the AER's draft decision of SA Power Networks 2020 to 2025 distribution determination, with respect to the escalation of contract labour costs, the AER states that consistent with previous determinations it does not allow *'contract labour price growth, unless the growth is evidenced in a distributor's contracts'*.[32]

In its final decision of SA Power Networks 2020 to 2025 distribution determination, the AER maintains its draft decision to apply CPI growth as the best estimate of the forecast escalation of contracted labour costs.[33] The AER notes the following three reasons for this decision:[34]

- given the typically short-term nature of contracts related to capital expenditure, over the five-year regulatory period SA Power Networks has the ability to manage overall contractor costs in line with CPI growth since these costs may fluctuate due to excess labour or labour shortages;
- forecasting unit labour cost growth for contracted services, absent taking into account productivity growth, would likely overstate the growth in the price of contracted services; and
- the absence of material evidence to support the premise that SA Power Networks incurred unit labour cost increases for contracted labour services in line with WPI growth in the regulatory period preceding that of the period in the determination.

Out of the three reasons the AER provides, the first two are supported neither by statements of economic principle nor by empirical evidence. That is, the first two reasons noted above are currently unsubstantiated.

For the third reason, pertaining to the necessity of material evidence, the AER notes that labour parity conditions present in SA Power Networks' enterprise agreement only apply to labour hire and not to contracted or subcontracted services engaged on defined projects.[35]

These reasons provided by the AER in SA Power Networks 2020 to 2025 distribution determination do not necessarily represent a standard approach the AER takes regarding the real escalation of contract labour costs, given that for other decisions the AER has reached different conclusions.[36]

Notwithstanding, in the remainder of this section we consider and address the three reasons stated by the AER in its decision to use CPI growth as the best estimate of the forecast growth in the cost of contracted labour in SA Power Networks 2020-25 regulatory determination. Specifically, in:

- section 3.2 we address the AER's argument that a DNSP has the ability to manage overall contract labour costs in line with CPI growth;
- section 3.3 we address the AER's argument that forecasting unit labour cost growth absent taking into account productivity growth would likely overstate the growth in the price of contracted services; and
- section 3.4 we address the AER's perceived requirement of material evidence to support the notion that the price for contracted services can be reasonably expected to increase in line with WPI growth.

[32] AER, *Draft Decision: SA Power Networks Distribution Determination 2020 to 2025 – Attachment 5: Capital expenditure*, October 2019, pp 20-21.

[33] AER, *Final Decision: SA Power Networks Distribution Determination 2020 to 2025 – Attachment 5: Capital expenditure*, June 2020, p 65.

[34] AER, *Final Decision: SA Power Networks Distribution Determination 2020 to 2025 – Attachment 5: Capital expenditure*, June 2020, pp 65-66.

[35] AER, *Final Decision: SA Power Networks distribution determination 2020 to 2025 – Attachment 5: Capital expenditure*, June 2020, pp 65-66.

[36] For example, the AER's decision on the determination for alternative control services (ACS) for Energex Electricity's 2025 to 2030 regulatory proposal and the AER's 2011-15 determination for Victorian DNSPs. See: AER, *Draft Decision: Energex Electricity distribution determination 2025 to 2030 – Attachment 16 – Alternative control services*, September 2024, pp 1-10; AER, *AER – Final Decision – Energex – 2025-30 distribution determination revenue proposal – 11.01 – Public lighting capex and opex forecasting model – April 2025*, sheet: 'Cost Escalations' cells: B25:F25; and AER, *Final decision – appendices: Victorian electricity distribution network service providers – Distribution determination 2011-2015*, October 2010, p 254.

3.2 Ability to manage contract labour cost escalation

Although DNSPs have an ability to manage their short-term costs, an assessment of prudent and efficient expenditure requires consideration of the DNSPs' long-term cost in achieving the expenditure objectives. This is paired with the requirement that proposed expenditure must reflect realistic expectations of forecast costs.

Given that employed labour and contracted labour can realistically be expected to be supplied within the same labour market, the simultaneous assumptions that employed and contracted unit labour costs escalate at the rate of WPI growth and CPI growth, respectively, cannot be sustained. This difference would also imply that contractors, in the long-term, are able to employ the same labour as DNSPs at a materially different (and lower) unit cost than can be achieved by DNSPs, or than is available to the market in equilibrium. These expectations are unrealistic.

Further, escalating contract labour costs at a rate different to employed labour costs when both types of labour can realistically be expected to be supplied within the same labour market could result in allowed contract labour costs that do not reflect the efficient costs of achieving the capital expenditure objectives.

Since DNSPs are price takers in the labour market, it is unreasonable to assume that DNSPs could contract in the short-term to limit the escalation of contract labour costs to CPI growth. The unit labour cost as at the specific point in time when the contract is struck would reflect any real escalation of unit labour costs. Additionally, if a DNSP sought to contract at some earlier point in time when unit labour costs were low, expectations of future unit labour costs would be included in the agreement.

Similarly, it follows that there exists no evidence presented by the AER or reasoned basis explaining how DNSPs would be capable of limiting the escalation of contracted unit labour costs to the rate of CPI growth.

The above reasons indicate that the AER's draft decision approach for forecasting contract labour capital expenditure does not reasonably reflect the capital expenditure criteria.

This section addresses the AER's proposition that DNSPs have the ability to manage the escalation of contract unit labour costs such that it equals CPI growth. Specifically, we address:

- the argument that DNSPs are able to manage any labour cost escalation such that it is different to that of the relevant industry's WPI growth; and
- the argument that the different rate in which labour cost escalation is managed at, is CPI growth.

3.2.1 Ability to ensure contract labour is escalated at a different rate than the relevant industry's WPI growth

In its expenditure forecast assessment guidelines, the AER states that its general approach to reviewing expenditure forecasts assumes that *'the efficiency criterion and the prudence criterion in the NER are complementary'*,[37] noting that:[38]

> …prudent and efficient expenditure reflects the lowest **long term** cost to consumers for the most appropriate investment or activity required to achieve the expenditure objectives. [Emphasis added].

This approach highlights that although DNSPs have an ability to manage their short-term costs, an assessment of what is considered prudent and efficient expenditure relates to the DNSPs' long-term cost to

[37] AER, *Expenditure forecast assessment guideline for electricity distribution*, October 2024, p 6.

[38] AER, *Expenditure forecast assessment guideline for electricity distribution*, October 2024, p 6.

achieve the expenditure objectives. This is paired with the requirement that proposed expenditure must reflect realistic expectations of forecast costs.[39]

We explain in section 2.4 above that escalating contract unit labour costs in line with CPI growth does not constitute a realistic expectation of future costs. Instead, the change in the WPI provides a more realistic expectation of future contract unit labour costs. It follows then that escalating contract labour costs in line with CPI would not reflect the efficient costs of achieving the capital expenditure objectives, and would therefore, be inconsistent with achieving the capital expenditure objectives of the NER.

Further, the assumption that contract labour costs increase at a rate materially different to that of employed labour costs in the long run, when realistic expectations of the growth in these categories of costs are similar, would be expected to give rise to unintended outcomes such that it could lead DNSPs to favour internal labour over contract labour even when contract labour is the least cost option.

The AER's contention that DNSPs can effectively manage short term contracts such that the escalation of labour costs remains in line with CPI growth does not take into account the long term costs of contracted labour and provides an inconsistent view of what is considered as a realistic expectation of forecast costs.

This is because the AER currently escalates employed unit labour costs for capital expenditure at the rate of WPI growth, while its draft decision proposes to escalate contract unit labour costs for capital expenditure at the rate of CPI growth. By maintaining both positions, the AER must assume that one of the following two propositions is true, ie, that:

- the long-term expected escalation of contract unit labour costs for capital expenditure is at the rate of CPI growth; or
- the long-term expected escalation of contracted unit labour costs for capital expenditure is at the rate of WPI growth for the EGWWS industry, but short-term contracting allows DNSPs to keep this growth in line with CPI growth.

We address the consequences of each of these propositions in more detail below.

Long-term escalation of contract labour costs

The AER states that contracting in the short term can allow for the escalation of contract labour costs to be limited to that of the CPI growth rate. In our opinion, this position is unreasonable as a matter of economic logic and therefore does not represent a realistic expectation of forecast labour costs.

If escalation of contract labour costs could be limited to that of the CPI growth rate, then it would similarly be reasonable to assume that all firms engaging with contracted labour could shift to short-term contracting in order to limit the escalation of contracted labour costs to the rate of CPI. If every firm can do this, then over the long run contracted labour costs must only escalate at the rate of CPI. This in turn gives rise to a result that the long run escalation of contracted unit labour costs differs from the long run escalation of employed labour costs, since there is no basis to assume a distinction in the long run rate of productivity improvement between these sources of labour.

We discuss in section 2.4.1 above that employed labour and contracted (and subcontracted) labour are realistically expected to be supplied within the same labour markets. The AER's assumption that the unit cost of contracted labour is expected to escalate at a rate lower than the unit cost of employed labour over the forthcoming regulatory period cannot therefore be sustained. The AER's assumption that the cost of contracted labour is expected to escalate at a rate lower than the cost of employed labour over the forthcoming regulatory period cannot therefore be sustained.

Demonstrating this point, although a DNSP may enter into short-term agreements with contractors, these contractors themselves employ the relevant units of labour. This implies that contractors, in the long-term,

[39] NER, clause 6.5.7(c)(1)(iii).

are able to employ the same labour as DNSPs at a materially different (and lower) unit cost than can be achieved by DNSPs. Over the long run such differences cannot be sustained.

Using short-term contracting to limit the long-run growth of contract labour costs

The AER may assume that long-term unit labour costs escalate in line with WPI but that DNSPs can use short-term contracts to limit the escalation of total contract labour costs to that of CPI growth. This proposition depends on a further assumption that DNSPs can maintain contract unit labour costs at a level that is below the long-term equilibrium price.[40]

This further assumption implies that DNSPs have an ability to consistently obtain a better unit labour cost over the long run than that of the market equilibrium. In our opinion this is an unrealistic expectation that, in turn, would not give rise to a realistic expectation of forecast labour costs and would not take into account the long-term costs required to achieve the expenditure objectives. Further, as noted above, the reality experienced by the DNSPs directly contrasts this scenario. Agreements between DNSPs and contractors are typically multi-year and not only several months.[41]

A contention that DNSPs are capable of managing their contracts in the short term with contractor firms to limit any escalation of contracted labour costs to that of CPI growth is also without a reasoned basis. Contractors are employers themselves and must therefore pay market prices to obtain the relevant required labour. Subsequently, if contractors were to engage in short-term contracts with DNSPs, the price for labour would be in line with the relevant labour markets for that given point in time. If the DNSP were to contract at some future point of time, that agreement would also account for the price of labour at that point in time, or the contractor firm's expectation of the price of labour at that point in time. It would be reasonable to assume that the contractor firm's expectation of the price of labour at a future point in time would be in line with their expectations of the future wage growth in the industry they employ labour from; put simply, their expectations of WPI growth for their respective industry.

The proposition that a DNSP could potentially form an agreement with a contractor firm when labour prices are low and therefore secure lower rates over a specified period of time appears to depart from the reality that DNSPs experience. It assumes substantially more flexibility to shift labour costs over time than is likely to be available.

In reality, DNSPs do not consistently contract and renegotiate with contractor firms. Agreements with contractor firms are either several years long and subject to extension or are for a specified length of time dependant on a capital project.[42] This can also depend on the terms of the agreement with the contractor firm, for example, whether the contractor also provides contracted labour that the DNSP has categorised as operating expenditure.

3.2.2 Ability to ensure contract labour costs escalate in line with CPI growth

The AER does not explain why, through short-term contracting, a DNSP would be capable of limiting the growth of its contracted labour costs to the rate of CPI. In our opinion, it is unrealistic to expect that DNSPs can manage their contract labour costs for capital expenditure such that they escalate in line with CPI growth.

We explain in section 2.4 above that CPI is not representative of future realistic expectations of wage growth. Additionally, even if the AER were to assume that productivity improvements differ between employed labour

[40] This arises under the assumption in section 2.1 that any productivity improvements would equally impact employed labour and contracted labour.

[41] See for example: Jemena, *Contract Variation/Extension to Jemena Electricity Service Agreement (JESA)*; Jemena and Zinfra Pty Ltd, *Jemena Electricity Services Agreement*, clause 3.

[42] See for example: Jemena, *Contract Variation/Extension to Jemena Electricity Service Agreement (JESA)*; Jemena and Zinfra Pty Ltd, *Jemena Electricity Services Agreement*, clause 3.

and contracted labour, then escalating the former in line with WPI growth and the latter in line with CPI growth would still not accurately represent any differences in productivity improvements.[43]

Although the AER has previously adopted CPI growth as the rate at which to escalate labour costs, this was due to CPI forecasts falling between what the AER defined as lower and upper bounds for forecast LPI. For example, in the AER's 2012-13 to 2016-17 final determination of Aurora Energy, it stated that:[44]

> …the AER considers forecast LPI growth adjusted for labour productivity improvements represents a lower bound forecast of labour cost growth, and forecast LPI increases unadjusted for labour productivity represent an upper bound.

In reference to the AER being satisfied that Aurora Energy's escalation of labour costs equal to the increase in the CPI reflects a realistic expectation of labour costs, the AER specifically noted that:[45]

> …[f]orecast labour cost increases of CPI are consistent with [the lower and upper bounds] because CPI increases, on average over the regulatory control period, lie between Deloitte Access Economics' forecasts of these two labour cost measures.

This highlights that although the AER was satisfied with using the increase in the CPI to escalate forecast labour costs, this was because forecasts of CPI were between an 'upper' and 'lower' bound for forecast changes in the LPI.

It follows then, that the change in the CPI should only be considered to reflect a realistic expectation of future labour costs over the specified regulatory period if forecasts lie between forecast WPI growth adjusted for labour productivity and forecast WPI unadjusted for labour productivity.

Further, for the reasons discussed in section 2.4, it is not a realistic expectation that labour costs, whether employed or contracted, would increase in line with CPI growth and not with WPI growth for the most relevant industry within which the business operates.

3.3 Relevance of productivity improvements

It is reasonable to assume that productivity improvements would impact all workers in a labour market, on average, at an equal level. This is consistent with the AER's current approach for forecasting labour costs within operating expenditure.

It follows then that the only difference in the escalation of contracted labour costs and employed labour costs arises from a difference in the real escalation of contracted unit labour costs and employed unit labour costs.

As discussed in section 2.4.1 above, contracted labour and employed labour can realistically be expected to be supplied within the same labour market. Subsequently, there is no reason why the contracted unit labour cost should not be escalated in line with that of employed unit labour cost, ie, at the rate of WPI growth to reflect realistic expectations of future changes to unit labour costs.

The construction of the WPI ensures that the quantity and quality of labour services are held constant alongside holding fixed the composition of labour. Specifically, the WPI measures pure price movements including movements due to inflation, cost of living, enterprise or agency agreements, award rises, minimum wage rises, individual contracts and salary reviews. As a result, the WPI takes into account wage growth due to labour productivity growth and compositional changes by ensuring these are removed

[43] The AER refers to productivity growth as a sector-wide measure. See: AER, *Draft decision: Jemena distribution determination 2021 to 2026 – Attachment 6: Operating expenditure*, September 2020, p 20.

[44] AER, *Final distribution determination: Aurora Energy Pty Ltd 2012-13 to 2016-17*, April 2012, p 33.

[45] AER, *Final distribution determination: Aurora Energy Pty Ltd 2012-13 to 2016-17*, April 2012, p 33.

from the WPI measure, ie, the WPI is a measure of wage growth that is expressed to be 'net of' such productivity improvements.

Given this, forecasting labour price growth using WPI growth accounts for productivity improvements. Subsequently, no adjustment to the WPI for changes in labour productivity is required. It follows that forecasting labour price growth using WPI growth is unlikely to overstate the growth in the price of contracted labour.

We explain in section 2.1 above that labour productivity improvements can arise at both an individual level and an industry-wide level. Productivity improvements at the individual level arise due to changes in a worker's level of human capital while improvements at the industry-wide level arise from improvements in the ability to harness that human capital, eg, through improvements in technology.

As labour productivity increases, so too may the price of labour, since productivity increases mean that a unit of labour is able to produce a greater volume of output. We are unaware of any basis on which to assume that productivity improvements, if any, would impact employed labour and contracted labour differently. At an industry-wide level, any productivity improvements will be experienced by all types of labour and at an individual level, on average all workers within a specific labour market will experience similar productivity improvements over time.

If there exists no material difference between the impact of productivity improvements on employed labour costs and contracted labour costs, then the implicit assumptions arising due to the different treatment between employed labour costs and contracted labour costs for capital expenditure must be at the level of labour prices, ie, the unit price of labour. This assumption is consistent with the AER's current treatment of productivity in the forecast of labour costs within operating expenditure.

We discuss in section 2.4 above that unit labour costs for employed labour and contracted labour should both be escalated at WPI growth to reflect realistic expectations of future changes to unit labour costs. It follows then, that there is no clear reason why unit labour costs for contract labour, and therefore total labour costs for contract labour, should not be escalated in the same approach as employed labour costs.

The use of the WPI to escalate unit labour costs largely addresses the AER's contention that forecasting labour price growth without accounting for productivity growth would '*likely overstate the growth in the price of contracted services*'.[46] The construction of the WPI ensures that the quantity and quality of labour services are held constant alongside holding fixed the composition of the baskets of labour that the WPI measures.[47] Put simply, the WPI measures pure price movements that include movements due to inflation, cost of living, enterprise or agency agreements, award rises, minimum wage rises, individual contracts and salary reviews.[48] As a result, the WPI takes into account wage growth due to labour productivity growth and compositional changes (eg, the distribution of skilled workers in an industry) by ensuring these are removed from the WPI measure, ie, the WPI is a measure of wage growth that is expressed to be 'net of' such productivity improvements.[49]

[46] AER, *Final Decision: SA Power Networks Distribution Determination 2020 to 2025 – Attachment 5: Capital expenditure*, June 2020, p 65.

[47] ABS, *Wage price index: Concepts, sources and methods: Chapter 9 – Quality change*, 2012, available at: https://www.abs.gov.au/statistics/detailed-methodology-information/concepts-sources-methods/wage-price-index-concepts-sources-and-methods/2012/chapter-9-quality-change, accessed: 27 November 2025.

[48] ABS, *Wage price index: Concepts, sources and methods: Chapter 9 – Quality change*, 2012, available at: https://www.abs.gov.au/statistics/detailed-methodology-information/concepts-sources-methods/wage-price-index-concepts-sources-and-methods/2012/chapter-9-quality-change, accessed: 27 November 2025.

[49] The independent consultant commissioned by the AER to provide forecasts of the WPI notes that '*due to the challenges of measuring or excluding productivity effects, and insubstantial portion of productivity may creep into WPI.*' Deloitte Access Economics, *Labour price growth forecasts: Prepared for the Australian Energy Regulator*, 19 July 2018, p 78.

The independent consultant commissioned by the AER to provide forecasts of the WPI no longer provides a productivity-adjusted WPI forecast and notes, similar to the discussion above, that:[50]

> The ABS has advised that the WPI does not measure labour productivity nor compositional changes in the workforce. Movements in these factors will result in changes to overall wages, but are not strictly measured by the WPI.

Specifically, the growth in the WPI does not reflect (ie, is net of) the growth in wages due to improvements in the productivity of individual work or from changes in the skill composition of the workforce.[51] While there may be elements of productivity that are incorporated within the WPI due to the difficulties of measuring and/or excluding productivity effects, the independent consultant commissioned by the AER states that '*[t]his insubstantial portion does not warrant the provision of productivity adjusted WPI estimates.*'[52]

It follows that when forecasting unit labour costs using WPI growth, productivity growth is taken into account. Any real escalation of unit labour costs using WPI growth will largely exclude upward (or downward) pressure to wages resulting from changes in labour productivity. This means that forecasting unit labour costs using WPI growth is unlikely to overstate the growth in the price of contracted services.

3.4 Requirements of enterprise bargaining agreements

The AER has previously discussed the difficulties with reliance on EBA outcomes to establish forecasts of labour expenditure and that the NER are not based on a cost recovery framework.

The best approach is to use WPI growth for the EGWWS industry to determine expected escalation of contracted labour costs so that these estimates account for realistic expectations of growth in contracted unit labour costs.

This section addresses the AER's suggestion that evidence of contract labour price increases in line with WPI from the most recent regulatory period is needed to support the use of WPI growth as the best estimate of forecast growth in the price of contracted labour.[53] This is not consistent with our understanding of how the AER generally applies the regulatory framework set out in the NER with respect to forecast labour costs.

For example, in the AER's determination of Energex's 2025-30 regulatory proposal, when determining the appropriate base year to use for forecasting operating expenditure, the AER states that:[54]

> …[its] requirement under the NER is not based on a cost recovery framework, rather it requires us to select a base year the reasonably reflects the *prudent and efficient costs* a business needs to deliver the required services over the next regulatory period.

This indicates that although the AER must have regard to *'the actual and expected capital expenditure of the Distribution Network Service Provider during any preceding regulatory control periods'*,[55] this is to assist in the AER's assessment of whether the total capital expenditure forecasts reasonably reflect each of the capital expenditure criteria as stated in clause 6.5.7(c)(1) of the NER.

This sentiment is echoed in previous AER decisions, such that it notes that the use of committed EBA increases to forecast costs in the upcoming regulatory period could provide perverse incentives for DNSPs,

[50] Deloitte Access Economics, *Labour price growth forecasts: Prepared for the Australian Energy Regulator*, 19 July 2018, p xi.

[51] Deloitte Access Economics, *Labour price growth forecasts: Prepared for the Australian Energy Regulator*, 19 July 2018, p 77.

[52] Deloitte Access Economics, *Labour price growth forecasts: Prepared for the Australian Energy Regulator*, 19 July 2018, p xi.

[53] AER, *Final decision: SA Power Networks distribution determination 2020 to 2025 – Attachment 5: Capital expenditure*, June 2020, pp 65-66

[54] AER, *Final Decision: Energex Electricity Distribution Determination 2025 to 2030 – Attachment 6: Operating Expenditure*, April 2025, p 15.

[55] NER, clause 6.5.7(e)(2).

would not necessarily reflect efficient labour costs for the industry as a whole and would represent a shift away from incentive based regulation to a framework more akin to cost of service regulation.[56]

With the introduction of the capital expenditure sharing scheme (CESS) in 2013, DNSPs are rewarded based on their outperformance (or underperformance) of their specified capital expenditure allowance.[57] The CESS is designed to ensure that incentives to make capital expenditure efficiencies do not decline over the five-year regulatory control period and to ensure DNSPs are incentivised to undertake efficient capital expenditure.[58] Given this, if unit labour costs are not forecast based on a realistic expectation of costs, the ability of the CESS to provide appropriate incentives can be adversely affected.

It follows that the use of WPI growth to escalate forecast labour costs is consistent with the AER's established approach for reflecting realistic expectations of future labour costs. This is consistent with our discussion in earlier sections regarding the appropriateness of using WPI growth to escalate labour costs.

[56] AER, *Final decision – appendices: Victorian electricity distribution network service providers – Distribution determination 2011-2015*, October 2010, p 252.

[57] AER, *Review of incentives schemes for networks: Final decision*, April 2023, p 14.

[58] AER, *Capital expenditure incentive guidelines for electricity network service providers – Version 4*, August 2025, p 2.

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