Wholesale electricity costs for 2025/26

A final report for the Essential Services Commission | 2 May 2025

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1 Introduction

Frontier Economics has been engaged to advise the Essential Services Commission (ESC) on allowances for wholesale electricity costs for financial year 2025/26 for retailing electricity to small customers, for the purposes of determining the Victorian Default Offer (VDO).

1.1 Background

The ESC is required to determine prices for the VDO to apply from 1 July 2025. To inform this the ESC needs forecasts of retailers' wholesale electricity costs and of retailers' costs of complying with environmental programs for financial year 2025/26.

1.2 Frontier Economics' engagement

Frontier Economics has been engaged by the ESC to provide advice on two aspects of the VDO:

- The wholesale electricity cost (WEC) component of retailers' cost to supply small customers from 1 July 2025.
- The retailers' costs of complying with the Large-scale Renewable Energy Target (LRET) and the Small-scale Renewable Energy Scheme (SRES) in supplying small customers from 1 July 2025.

1.3 This final report

This final report sets out our advice to the ESC on the WEC and costs of complying with the LRET and the SRES, for retailers in each of the five Victorian distribution network areas. This report is structured as follows:

- Section 2 provides an overview of the approach used to estimate wholesale energy costs.
- Section 3 discusses the price profiles and load profiles used in our analysis.
- Section 4 discusses the contract prices used in our analysis.
- Section 5 discusses the contract position used in our analysis.
- Section 6 provides our estimate of the WEC.
- Section 7 provides our estimates of the costs of complying with the LRET and SRES.

In addition to this report, we also provide spreadsheets setting out details of our load and price forecasts, contract positions resulting from our modelling, and calculations for determining the WEC.

1.4 Previous advice to the ESC

We have previously advised the ESC on the WEC and the cost of complying with the LRET and the SRES for financial year 2019/20, for calendar years 2020, 2021 and 2022, and for financial years 2022/23, 2023/24 and 2024/25.[1]

This final report for financial year 2025/26 adopts substantially the same approach for estimating the WEC and the costs of complying with the LRET and the SRES as we adopted for previous reviews. However, in our advice for 2025/26 we have made two changes to the input assumptions that we use in calculating the WEC:

- A change to using a 'load only' profile. In our advice on WEC for previous reviews we have used a 'balance' profile (which is customer's imports of electricity less customer's exports of electricity from rooftop solar panels). For this 2025/26 review we have used a 'load only' profile (which is simply customer's imports of electricity). The reason for this change is discussed in Section 3.
- A change to using five-minute data load and price data. In our advice on WEC for previous reviews we have used half-hourly load and spot price data. For this 2025/26 review we have used five-minute load and spot price data. The reason for this change is discussed in Section 3.

We have also provided the ESC with a draft report setting out our draft advice on the WEC and the cost of complying with the LRET and the SRES for this 2025/26 review.[2] This final report adopts the same approach we adopted for the draft report, but with updated input assumptions. As has always been the case when developing the costs estimates for our final report, we have updated the following key input assumptions:

- Making use of more recent contract price data (up to 16 April 2025).
- Making use of more recent estimates of LGC prices (up to 16 April 2025).

We have not updated the historical load or spot price data that we used for the draft report since we had the full 3 years of historical data (including a full set of 2024 data up to 31 December 2024) at the time we undertook our modelling for the draft report.

1 See, for example: Frontier Economics, *Wholesale Electricity Costs for 2024/25*, A final report for the Essential Services Commission, 9 May 2024. Available on the ESC's website: https://www.esc.vic.gov.au/sites/default/files/documents/Victorian%20Default%20Offer%202024-25%20Consultant%20Report_Frontier%2020240516.pdf

2 Frontier Economics, *Wholesale Electricity Costs for 2025/26*, A draft report for the Essential Services Commission, 24 February 2025. Available on the ESC's website: https://www.esc.vic.gov.au/sites/default/files/documents/Consultant%20Report%20-%20Frontier%20Economics%20-%202025-26%20VDO%20Draft%20Decision%20Paper%20Report.pdf

2 Approach to assessing WEC

Under the settlement rules in the National Electricity Market (NEM), retailers are responsible for purchasing electricity to meet the load of their customers in the wholesale electricity market. A retailer will pay, for each five-minute interval, its customer's electricity load in that interval multiplied by the relevant regional reference price from the wholesale electricity spot market for that interval. For customers in Victoria, the relevant regional reference price is the Victorian regional reference price.

These settlement payments that retailers face can be extremely volatile. Electricity load for small customers can vary significantly from one interval to the next, and electricity spot prices can be anywhere between the Market Price Cap (which for 2025/26 is $20,300/MWh) and the market floor price (which is -$1,000/MWh). Since retailers will typically commit to supply their customers at a specified retail price for a period of time, this volatility in settlement payments can result in retailers paying more for electricity than they receive for that electricity through the retail price they have agreed with their customers. At worst, this exposes the retailers to the risk of financial failure.

To manage the risks associated with volatile load and spot prices, retailers will typically seek to hedge their exposure to spot prices by entering into hedging arrangements. There are several ways that retailers can hedge their exposure to spot prices. The most common are the following:

- Vertical integration through ownership of an electricity generator. A retailer that owns a generator has what is known as a natural hedge: when the spot price is high, the retailer will have to pay the high spot price for its customer's load but, as the owner of a generator, will also receive the high spot price for its electricity generation.
- Power purchase agreements with a generator. Power purchase agreements provide a similar hedging benefit to vertical integration, but they do so through contractual arrangements between a retailer and a generator, rather than through ownership.
- Financial derivatives. There are a range of financial derivatives that are available to retailers (and generators) to hedge their exposure to volatile spot prices. Common contracts include swap contracts (which effectively lock-in a spot price for the counterparties) and cap contracts (which effectively cap the spot price for a retailer). These are traded both on the stock exchange and over-the-counter between participants.

Retailers' energy purchase costs are typically taken to be the average cost to a retailer of purchasing electricity from the wholesale market for its customers, taking into account both the retailer's settlement payments to the Australian Energy Market Operator (AEMO) and the financial outcomes from the retailer's hedging arrangements.

Regulatory practice in Australia has typically focused on estimating the energy purchase cost for a benchmark retailer. In doing so, regulators have typically assumed that the benchmark retailer will make use of exchange-traded financial derivatives to hedge its exposure to spot prices. The assumption that a benchmark retailer will use exchange-traded financial derivatives is typically based on the following reasoning:

- Any retailer of a reasonable size should be able to hedge its exposure to wholesale spot prices using exchange-traded financial derivatives, while vertical integration and entering power purchase agreements can be impractical for retailers with a smaller retail position in a market or with a less certain retail position.
- Prices for exchange-traded financial derivatives are transparent since they are traded on the ASX. In contrast, the costs of building generation plant or entering into power purchase agreements are less transparent. Similarly, prices of over-the-counter (OTC) hedging contracts are not generally publicly available. Using these other pricing benchmarks, either in place of, or in addition to, ASXEnergy contracts would reduce the transparency of the estimated WEC.

In practice, some retailers in the NEM do adopt a mix of hedging strategies, including vertical integration and power purchase agreements and purchasing over-the-counter (OTC) hedging contracts, which are traded through brokers. Retailers that are able to vertically integrate or enter into power purchase agreements, and choose to do so, presumably do so because they expect these strategies will offer advantages that financial derivatives cannot; by excluding vertical integration and power purchase agreements from consideration, therefore, regulators will, if anything, tend to overstate the costs that these retailers with a broader range of options will face, or understate the risk management that these retailers can achieve.

We follow this typical approach of assessing the WEC that retailers face based on an estimate of the cost that a prudent retailer would face in supplying electricity to their customers, having regard to the hedging contracts that a prudent retailer is likely to enter into. The hedging contracts that we base this analysis on are quarterly base swaps and quarterly $300 caps, traded on ASXEnergy.

To estimate WEC in this way, we need to answer four questions:

- What is the expected load profile of the retailer's customers?
- What is the expected spot price profile that retailers will face?
- What is the cost of financial hedging contracts?
- What kind of hedging position is a prudent retailer likely to adopt?

From the answers to these questions, we can calculate the WEC that a retailer would face.

We address these questions in the sections that follow.

3 Price and load profiles

This section addresses the first two questions we need to answer to estimate WEC:

- What is the expected load profile of the retailers' customers?
- What is the expected spot price profile that retailers will face?

We deal with these questions together because we believe it is important to forecast spot prices and load in a way that accounts for the correlation between prices and load. After all, this correlation is a key driver of the risks that retailers face.

In our previous advice to the ESC on the WEC, we have made use of *half-hourly* profiles for the load profile and the spot price profile. This originally reflected the fact that settlement intervals in the NEM were half-hourly intervals, which meant that the payments retailers made to AEMO for their customers' consumption were based on half-hourly prices. However, since 1 October 2021, settlement in the NEM has been based on *five-minute* settlement intervals. Given this, we now have available to us 3 years of historical data for the period since the introduction of five-minute settlement, and therefore 3 years of historical data on five-minute prices and load. For this final report we have made use of this five-minute data – including five-minute load data provided by AEMO.[3]

3.1 Historical data on five-minute price and load

Our modelling of the WEC requires projections of five-minute spot prices in Victoria and five-minute customer load to be supplied by retailers in Victoria.

In our view, the best source of data about five-minute patterns of spot prices, five-minute patterns of customer load, and the correlation between the two, is historical data. The historical data on spot prices and load will reflect all the complex factors that drive both spot prices and customer load, and the interactions between them, which are difficult to accurately capture at the five-minute level using forecasting models. These historical data on prices and load can then be scaled to account for any trends in prices and load over the forecast period.

AEMO provides the ESC with Manually Read Interval Meter (MRIM) five-minute data on load for small customers in Victoria. In our previous advice to the ESC on the WEC, AEMO has provided interval meter data on customer consumption less customer exports from rooftop solar PV (we refer to this data as the 'balance' profile). When the ESC commenced its determination of the VDO, this 'balance' profile data was all that was available. More recently, however, AEMO has also been able to provide interval meter data on customer consumption only (we refer to this data as the 'load only' profile). AEMO is now able to provide 3 years of historical data for the load only profile. This newly available load only data requires a decision on whether to continue to use the balance profile to determine the WEC, or to switch to using the load only profile to determine the WEC.

3 We note that the five-minute load data provided by AEMO – the details of which are discussed further below – has constant load for each five-minute interval within a given half-hour interval. In other words, while the data is provided on a five-minute basis, there is no additional information on the profile of load within an individual half-hour period.

3.1.1 Using the load only profile

In our view, setting the WEC component of retailers' costs for the VDO using the load only profile will provide a better estimate of the cost to retailers of supplying customers under the VDO than using the balance profile. The VDO is a price for customers' imports of electricity so using a load profile that is based on customers' imports of electricity will provide the best estimate of retailers' costs for the VDO. Using a load profile that nets off exports from imports (the balance profile) results in a mismatch between the profile used to estimate retailers' costs and the profile to which the VDO price applies. The result of this mismatch is that the WEC component of the VDO may not match retailers' costs; when electricity prices are lower than average during the day (as is currently the case) this mismatch will result in a WEC component of the VDO that provides for over-recovery of retailers' costs.

Alongside our draft report for this 2025/26 review, we provided a separate note to the ESC setting out in more detail our reasons for our view that using the load only profile will provide a better estimate of the cost to retailers of supplying customers under the VDO.[4] That separate note also sets out the reason for our advice that changing from using a balance profile to a load only profile would not necessitate any other changes to the VDO, and the reasons that our views on the appropriate load profile does not change if there is no longer a mandated feed-in tariff (FiT).

3.1.2 Stakeholder submissions on the load only profile

In response to the ESC's draft report for this 2025/26 review, and our own draft report and note on the load only profile, some stakeholders have made submissions on the use of the load only profile for the purposes of setting the WEC for the VDO. We provide our responses to these submissions in the sections that follow.

Stakeholder submission – a prudent retailer would not exclude solar exports when purchasing contracts and therefore solar exports should not be excluded from the load profile used to calculate the WEC

The AEC and ENGIE submitted that a prudent retailer would not exclude solar exports when purchasing future wholesale electricity contracts and that settlements are based on the net balance of imports and exports. As a result, these stakeholders contend that using the load only profile risks underestimating costs and risks to retailers.

It is true that settlements are based on the net balance of imports and exports, and our view is that a prudent retailer is likely to purchase contracts based on their overall customer load, including solar exports (although this is a matter for each retailer to decide). However, in our view, the fact that retailers are settled based on the net balance of imports and exports across all their customers, and that it is likely that a prudent retailer would seek to hedge that same load, does not mean that the WEC for the VDO should be based on that load.

Ultimately, retailers are settled based on the total load of all their customers in the NEM, and there is a wholesale cost that is associated with settlement of that total load. But this doesn't mean that the wholesale cost of all of the individual loads that make up that total load is the same, or that the retail price to all those individual loads should also reflect the same wholesale cost. To take a very

4 Frontier Economics, "Advice on load profile to use for the VDO", A note for the ESC, 12 February 2025.

simple example, consider a retailer with a residential customer in the AusNet area and a small business customer in the CitiPower area. In our view it is logical to:

- recognise that the retailer will be settled for the total load of the residential customer in the AusNet network area and the small business customer in the CitiPower network area, and is likely to seek to hedge that combined load,
- identify different WECs for these customers and set different VDOs for these customers.

While these customers are both served by a single retailer, they impose different costs on the retailer and should expect to face different prices from the retailer. In our view, this same logic applies to the VDO and the FiT: it is logical to recognise that a retailer will be settled both for a residential customer's imports and a residential customer's exports, and likely will seek to hedge that combined load, but nevertheless to identify different WECs for these loads and set different prices for loads. Indeed, these different prices *are* the VDO and the FiT. For the same reason that we think it is appropriate to set a VDO for residential customers in the AusNet network area based only on the load for those customers, and a VDO for small business customers in the CitiPower network area based only on the load for those customers, we think it is appropriate to set the VDO based only on the import profile and the FiT based only on the export profile. As our note to the ESC on the load profile sets out in more detail, they approach will avoid over-recovery of costs at times of low prices during the day.

Stakeholder submission – wholesale costs for solar exports can't be recovered through the FiT

1st Energy submitted that retailers cannot recover the wholesale electricity costs of solar exports through the FiT.

While not specifically related to our estimate of the WEC for the VDO, we do note that the approach for estimating the WEC for the FiT as part of our advice to the ESC on its FiT reviews is specifically designed to ensure that the WEC reflects the wholesale market payments that retailers make as a result of their customers' solar exports. The approach to estimating the WEC for the FiT determines the weighted average wholesale spot price at times of solar exports, which reflects the average price that retailers will face when AEMO determines settlement payments for these solar exports. For this reason, other than the issue of a floor of zero on the FiT (discussed below) we do not see why retailers would be unable to recover the wholesale costs of solar exports through the FiT.

Stakeholder submission – retailers may face costs that they cannot recover if the load only profile is used for the VDO and the FiT has a floor of zero

Alinta, AGL, Engie, Energy Locals and Red Energy / Lumo Energy submitted that growing solar exports at times of negative prices may mean that retailers are unable to recover the costs of solar exports if the FiT has a floor of zero.

Our view is that a regulatory floor of zero for the FiT does have the potential to prevent retailers from recovering through the FiT the costs that they face due to solar exports. If this is the case, then our view is that there is good reason for retailers to be able to recover these costs through other means. One option would be an additional component of the VDO to reflect unrecovered costs of solar exports. This option would, however, result in all customers (including customers without solar) subsidising part of the cost that retailers face due specifically to their solar customers.

Red Energy / Lumo Energy submit that this approach would have the same effect as continuing to calculate the WEC for the VDO using the balance profile. However, this is not the case. Calculating the WEC for the VDO using the balance profile means that the cost of the solar export profile is reflected in the WEC for the VDO regardless of whether these costs can be recovered through the FiT. As discussed above, this can lead to over-recovery of costs. The alternative of including an additional component of the VDO, only to the extent that the costs of solar exports cannot be recovered through the FiT, can more specifically target the amount of unrecovered costs by retailers and so better avoid any over-recovery of costs.

Stakeholder submission – the unrecovered costs of solar exports (due to a floor of zero on the FiT price) could be estimated using the negative of the prevailing LGC price

GloBird Energy submitted that since large scale renewable generation tends to offer their generation to the market at or around the negative of the prevailing LGC price, this price could be used as an estimate of the wholesale price when solar exports occur and therefore, be used to determine the unrecovered costs of solar exports.

Our view is that this would be an overly simplistic approach to calculating the unrecovered costs of solar exports. It is true that large scale renewable generators will often bid in to the NEM at a price that is equal to the negative of the prevailing LGC price (because they would be prepared to pay up to that amount to generate electricity in order to be able to produce and sell LGCs). But this is not the only driver of wholesale prices at times of solar exports. Indeed, the reason that the WEC that we have calculated for solar exports in advising the ESC on its FiT reviews is not equal to the negative of the prevailing LGC price is that spot prices aren't always negative when solar is being exported and when prices are negative they are not always at the level of the negative LGC.

Our view is that the established approach to calculating the WEC for solar exports – as used in advising the ESC on its FiT reviews – is a better approach. That approach uses the observed correlation between spot prices and solar exports to estimate the WEC for the FiT.

Stakeholder submission – using the balance profile means that the wholesale impact of exports is captured in one calculation

GloBird Energy submitted that "calculating wholesale electricity cost based on gross load (imports only) instead of net load (accounting for rooftop solar exports) complicates the process through necessitating two pricing determinations to be undertaken (one for imports and one for exports) whereas, using the net load, the wholesale impact of customers' exports would have been captured in the one calculation."

Our view is that using a load only profile does not complicate the pricing determination.

In the event that both retail tariffs and feed-in tariffs (FiTs) are regulated – as is currently the case for Victoria – two pricing determinations are required regardless of what load profile is used for the VDO. Under our proposed approach the VDO determination would make use of the load only profile and the FiT determination would make use of the export profile.

In the event that retail tariffs are regulated, but FiTs are deregulated, then under our proposed approach a single determination is required regardless of what load profile is used for the VDO. Under our proposed approach the VDO determination would make use of the load only profile and since there would be no FiT determination there would be no need for a determination making use of the export profile.

In the event that retail tariffs are regulated, FiTs are deregulated, but there is a regulatory restriction on charging a negative FiT, there may be a need to calculate a WEC for both the import profile and the export profile: the export profile would be used to determine the VDO and the export profile would be used to determine the extent to which retailers face costs due to customer exports that cannot be recovered through FiTs (because of the floor of zero on the FiT price). In our view, in this case, these separate calculations of the WEC for the import tariff and the WEC for the export tariff are important to enable the ESC to determine the amount of unrecovered costs of solar exports and to determine how these unrecovered costs should be recovered.

Stakeholder submission – the example if our note on the load only profile does not account for the full cost difference

Red Energy / Lumo Energy submitted that the example we presented in our note on the load only profile does not seem to account for the cost of buying additional cap contracts for the balance profile.

Red Energy / Lumo Energy correctly point out that retailers would be expected to opt for more cap contracts and less swap contracts to hedge the risk of the peakier balance profile. This is reflected in the example that we presented. However, the additional contract premiums that are paid for these cap contracts are, in our simple example representing a single day, only a small proportion of the additional cost of the balance profile. The larger amount of the additional cost of the balance profile is due to the increase in *average* settlement payments for the balance profile (due to the balance profile occurring at times of higher average prices).

3.1.3 Conclusion on load profile

Reflecting our views on the appropriate load profile to use to determine the WEC, the approach that we have adopted for this final report is to use the 'load only' profile. Thus, the historical data that we use is:

- For prices, the five-minute spot prices for the Victorian regional reference node, as published by AEMO.
- For customer load, five-minute interval meter load data that AEMO has directly provided to the ESC on customers with annual consumption less than 40MWh for each of the five distribution network areas in Victoria. AEMO has provided separate five-minute load data for residential customers with annual consumption less than 40MWh and for business customers with annual consumption less than 40MWh. The data that we use is the 'load only' profile.

We use this interval meter data directly provided by AEMO because it closely coincides with the customer groups to which the VDO will apply:

- For residential customers, the VDO will apply to all residential customers. The data provided by AEMO is only for residential customers with annual consumption less than 40MWh, but since very few residential customers will have annual consumption greater than 40MWh this is unlikely to make a material difference to the estimated WEC.
- For small business customers, the VDO will apply to small business customers, with small business customers defined as customers with aggregate consumption less than 40 MWh per annum. The data provided by AEMO aligns with the applicability of the VDO.

3.2 Selecting appropriate historical data

When using historical data on prices and load in this way, a useful starting point is to choose data on prices and load from an historical period that we think is likely to be most consistent with the forecast period. For example, the closure of coal-fired power stations may have substantial impacts on price levels and volatility. Likewise, the increasing adoption of rooftop solar PV is likely to materially affect load factors and prices over time.

In past reviews, we had over six years of half-hourly load and spot price data to select from as the basis for our Monte Carlo analysis. Since the 2023/24 VDO, we have been using the three most recent years of data as the basis for the Monte Carlo analysis, given it is likely the most representative of current and future trends of load and spot prices in the forecast year.

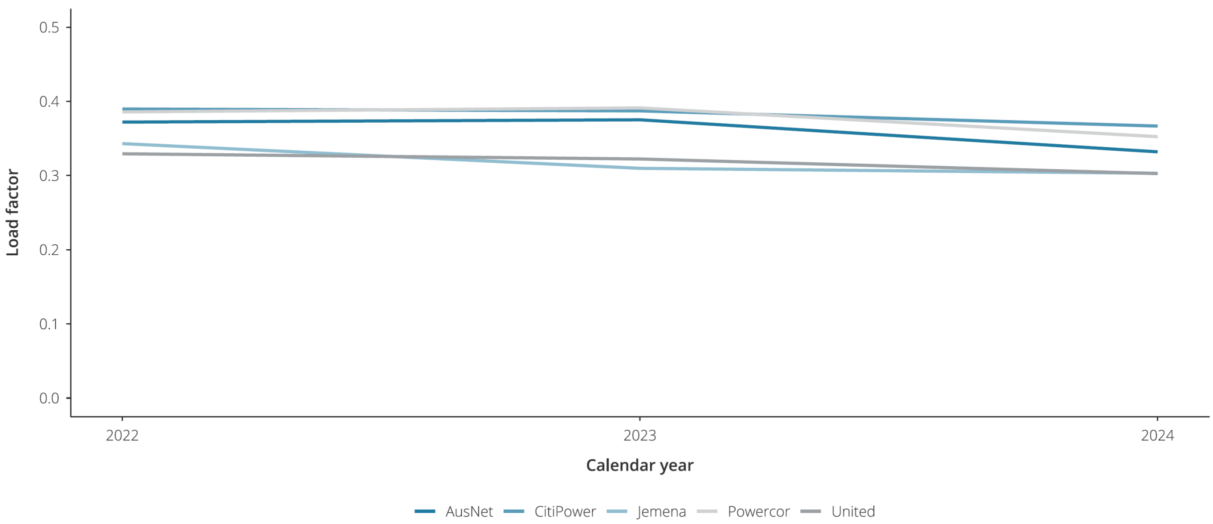
With the change to the data to the 'load only' profile we only have data from 1 July 2021 to 31 December 2024, a period of three and a half years.

Analysis of data

Figure 1 shows the annual load factor for the residential data for each Victorian DNSP for the last three calendar years. From this figure we can see that the residential load factor is relatively stable between 0.3 and 0.4 over this period. In our view, there is not a clear trend towards a significantly higher or lower load factor over time.

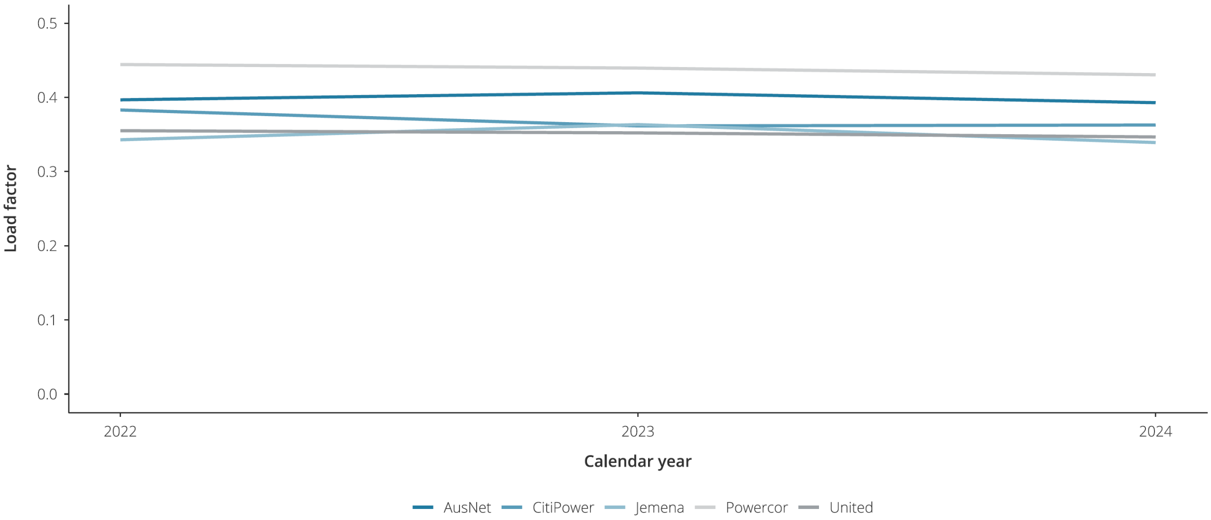
Figure 2 shows the annual load factor for the business data for each Victorian DNSP for the last three calendar years. As with the residential load factor, the business load factor is relatively stable over the past three calendar years. And, as with the residential load factor, in our view there is not a clear trend towards a significantly higher or lower load factor over time.

Figure 1: Load factor for residential customers



Source: Frontier Economics analysis of AEMO data

Figure 2: Load factor for business customers

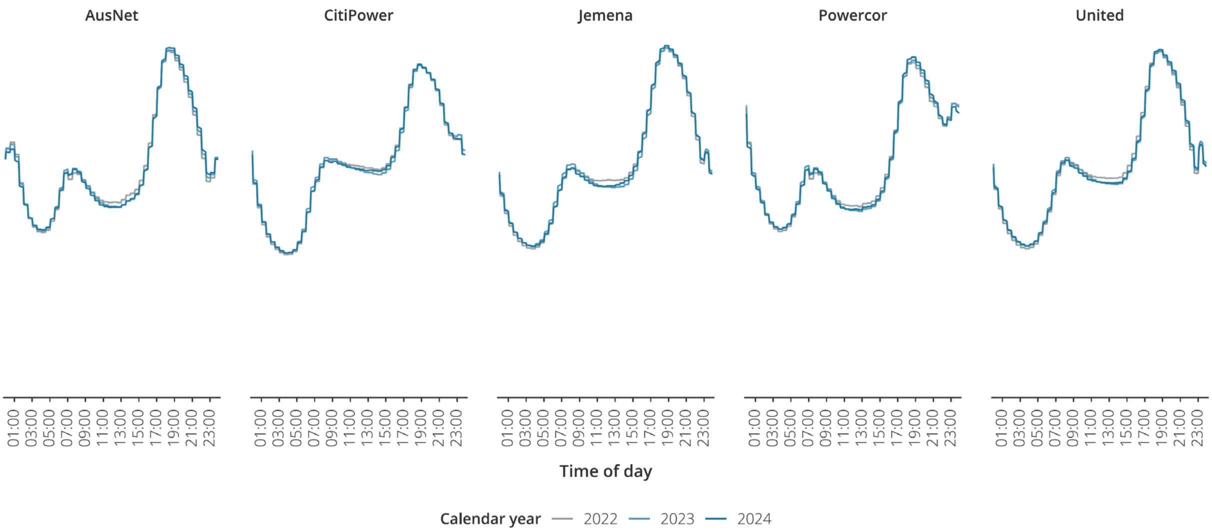


Source: Frontier Economics analysis of AEMO data

Figure 3 and **Figure 4** show the average daily load profile for residential and business customers respectively for each Victorian DNSP for the last three calendar years, normalised to the same annual consumption to highlight differences in the timing of daily consumption. In previous reviews, we noted the trend of lower relative daytime consumption and higher relative evening consumption. Now that we are using the 'load only' profile, the trend in load profile in the last three years is less pronounced than previous reviews.

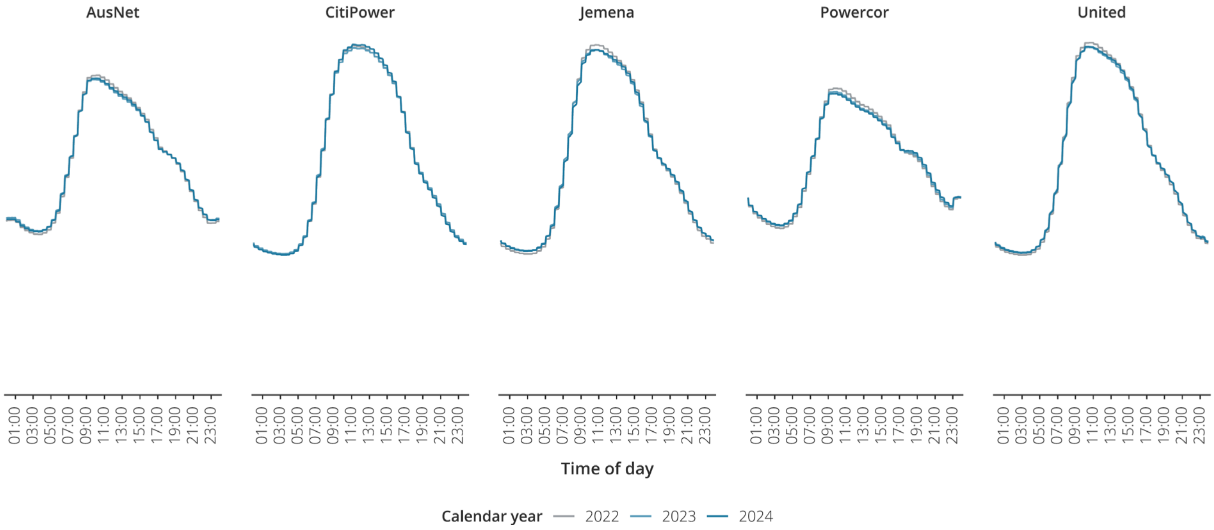
That being said, the residential customer relative daytime consumption is lower in the most recent calendar year (2024). For business customers, we can see a similar pattern in the most recent calendar year, with relatively lower consumption during the day and higher consumption at other times.

Figure 3: Average daily profile for residential customers



Source: Frontier Economics analysis of AEMO data

Figure 4: Average daily profile for business customers



Source: Frontier Economics analysis of AEMO data

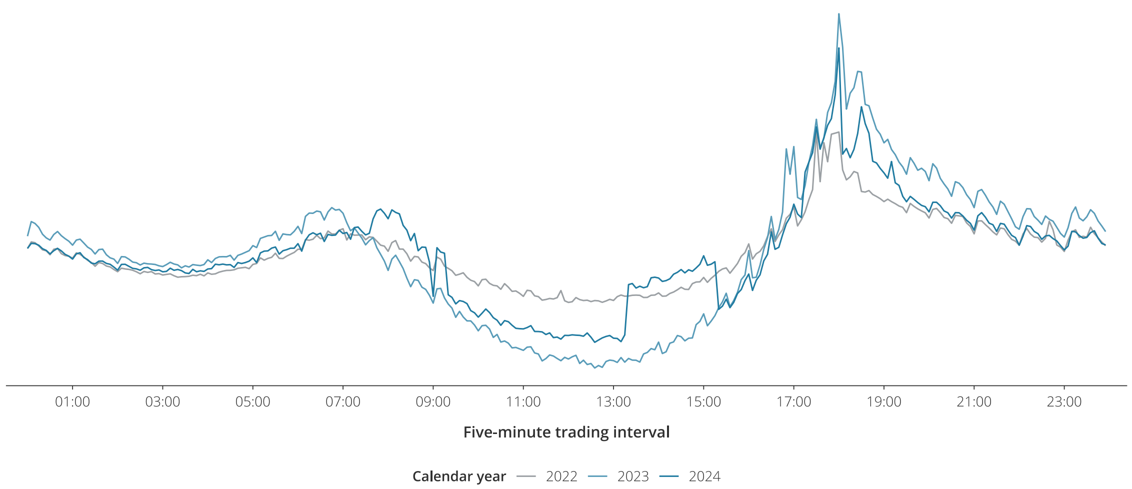
Figure 5 shows the average daily profile for Victorian spot prices for the last three calendar years, the same period as the available load data. We have normalised spot prices in the three calendar years to the same average annual price to highlight differences in the timing of daily prices.

It is no surprise to see that there is greater variability in daily patterns of spot prices than there is in daily patterns of customer load. However, despite this variability, in each year we do see similar patterns of low overnight prices, a price spike tending to occur in the morning, and further high prices tending to occur in the mid-afternoon to evening. Prices tend to be lowest during the middle of the day, reflecting high levels of solar generation during these periods.

The spike in early afternoon average spot prices in 2024 is largely due to a spot price spike on 13 February 2024, which saw spot prices rise to the market price cap of $16,600 for 24 5-minute trading intervals between 1:15PM and 3:15PM[5].

[5] https://www.aer.gov.au/system/files/2024-04/AER%20-%20Prices%20above%20%245%2C000%20MWh%20-%2013%2C%2021%20and%2027%20February%202024%20%28Victoria%2C%20Tasmania%20and%20South%20Australia%29.pdf

Figure 5: Average daily profile for Victorian spot prices



Source: Frontier Economics analysis of AEMO data

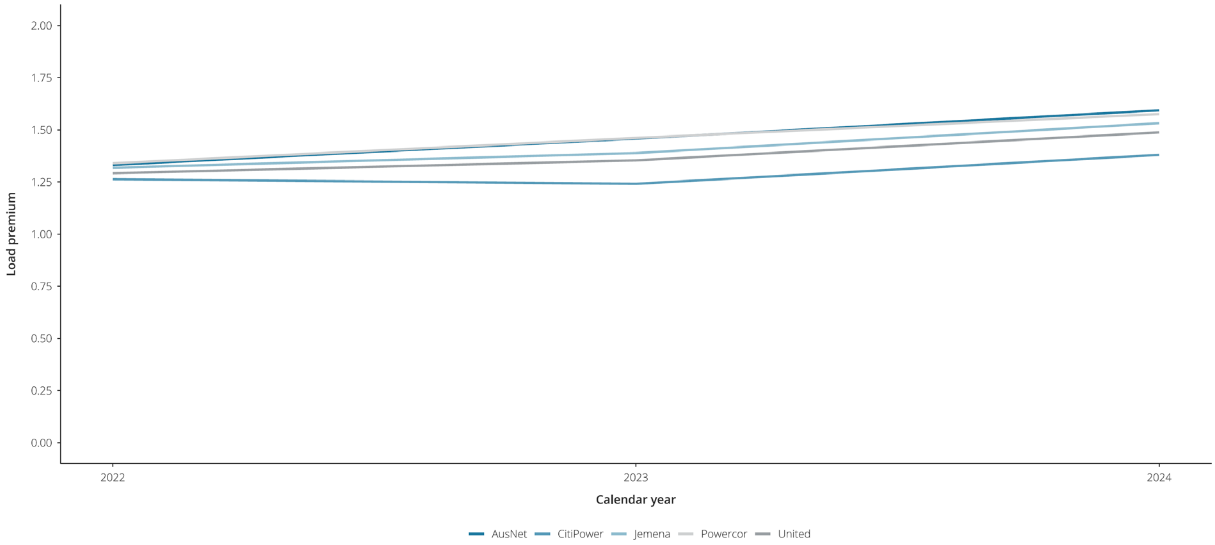
Figure 6 and **Figure 7** combine the historical customer load data and spot price data to report the load premium (calculated as the load-weighted price divided by the time-weighted price) for each customer type, for each Victorian DNSP and for each of the last three calendar years.

In our experience, the load-weighted spot price (and, by extension, the load premium) is a reasonable guide to the WEC.

We can see from **Figure 6** that for residential customers the load premium has steadily increased over the past three calendar years.

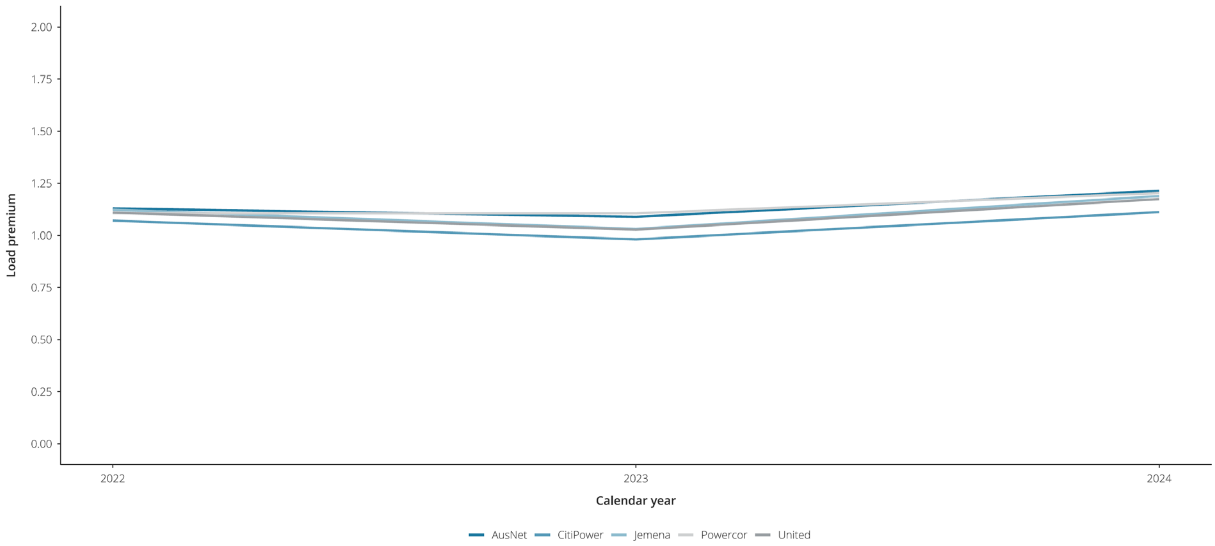
We can see from **Figure 7** that for business customers the load premium has remained reasonably consistent for the past three calendar years.

Figure 6: Load premium for residential customers, based on Victorian spot prices



Source: Frontier Economics analysis of AEMO data

Figure 7: Load premium for business customers, based on Victorian spot prices



Source: Frontier Economics analysis of AEMO data

Based on the analysis of historical five-minute load and five-minute spot prices set out above, our approach for this report is to use all three years of available data for our analysis. That is, we include data from these three years in a Monte Carlo simulation when forecasting five-minute load and five-minute prices. Using three years of available data is consistent with the approach we took in the 2024/25 VDO.

3.3 Projecting five-minute load and spot prices

As discussed, rather than take a single one of the calendar years from 2022 to 2024 as representative of outcomes in 2025/26, we perform a Monte Carlo simulation on the three years of five-minute load and spot price data. In our view there are two benefits of using a Monte Carlo analysis:

- Any single year will be subject to unique market conditions that are unlikely to be repeated. This creates the risk that any single year may not be representative of conditions that might be expected in the future. However, using a Monte Carlo approach based, in this case, on three years of data increases the likelihood of basing our analysis on a representative set of conditions.
- Using a Monte Carlo analysis allows us to create a distribution of market conditions, providing some insight into the expected distribution of the WEC.

The Monte Carlo simulation is used to generate a year of five-minute data by randomly drawing one day of data, from the pool of available historical days, for each day of the forecast year. This random drawing of data is done from a pool of like days (where days are classified according to day type – weekday/weekend – and quarter). The Monte Carlo simulation is then performed 500 times to get a distribution of simulated years, which allows us to choose a simulated year from within this distribution to use in the modelling.

For example, a single simulated year will be generated as follows:

- The first day of 2025/26 is 1 July 2025, which is a Tuesday. Since this is a Tuesday in Q3, the five-minute load and spot price data for the first day of 2025/26 will be determined by randomly drawing a day's worth of sequential five-minute data from all the Q3 weekdays that occurred in 2022 through to 2024.
- The second day of 2025/26 is 2 July 2025, which is a Wednesday. Since this is a Wednesday in Q3, the five-minute load and spot price data for the second day of 2025/26 will be determined by randomly drawing a day's worth of sequential five-minute data from all the Q3 weekdays that occurred in 2022 to 2024.
- And so on for the 365 days that make up 2025/26, having regard, for each day, to its type and its quarter.

This process is then repeated 500 times to generate 500 simulated years for each of the customer types and distribution areas, each year made up entirely of historical outcomes in 2022 through to 2024.

For each of these simulated years, load and prices are drawn at the same time (i.e. from the same historical day) so that the correlation between load and prices is maintained.

Once we have completed this Monte Carlo simulation, we make a last adjustment to the consumption data, normalising each of the simulated years to 1 GWh of annual consumption. This maintains the load shape and correlation between load and prices, but each year now has a uniform annual consumption.

We also make a further adjustment to the project five-minute spot prices. We consider that historical five-minute spot prices provide the best source of information about patterns of five-minute spot prices and how these are correlated with five-minute load, but historical spot prices are not necessarily a good predictor of the future average level of Victorian spot prices. There is no reason, for instance, that Victorian spot prices over 2022 through to 2024 will, on average, be the same as Victorian spot prices for 2025/26. In our view, the best available public information about the average level of Victorian spot prices for 2025/26 is the contract prices published by ASXEnergy. These contract prices – particularly the prices of base swaps – provide the market's view on what will be the average spot price for 2025/26. Given this, for each simulated year, we assume that the average level of prices is consistent with ASXEnergy futures prices. Specifically, for each simulated year we scale the five-minute prices so that the time-weighted average price in each quarter is equal to the relevant quarterly base swap prices for 2025/26 from ASXEnergy[6] (less an assumed contract premium of 5 per cent on the underlying prices). We use the 40-day average of ASXEnergy contract prices for quarterly base swap prices (up to 16 April 2025) as representing the market's current view of spot prices for each quarter of 2025/26.[7] This approach to generating five-minute price forecasts results in:

- The appropriate average level of spot prices (i.e. the time-weighted quarterly average price is consistent with ASXEnergy prices).
- The appropriate five-minute profile of spot prices (i.e. the five-minute profile of prices, and load, are consistent with historical outcomes).

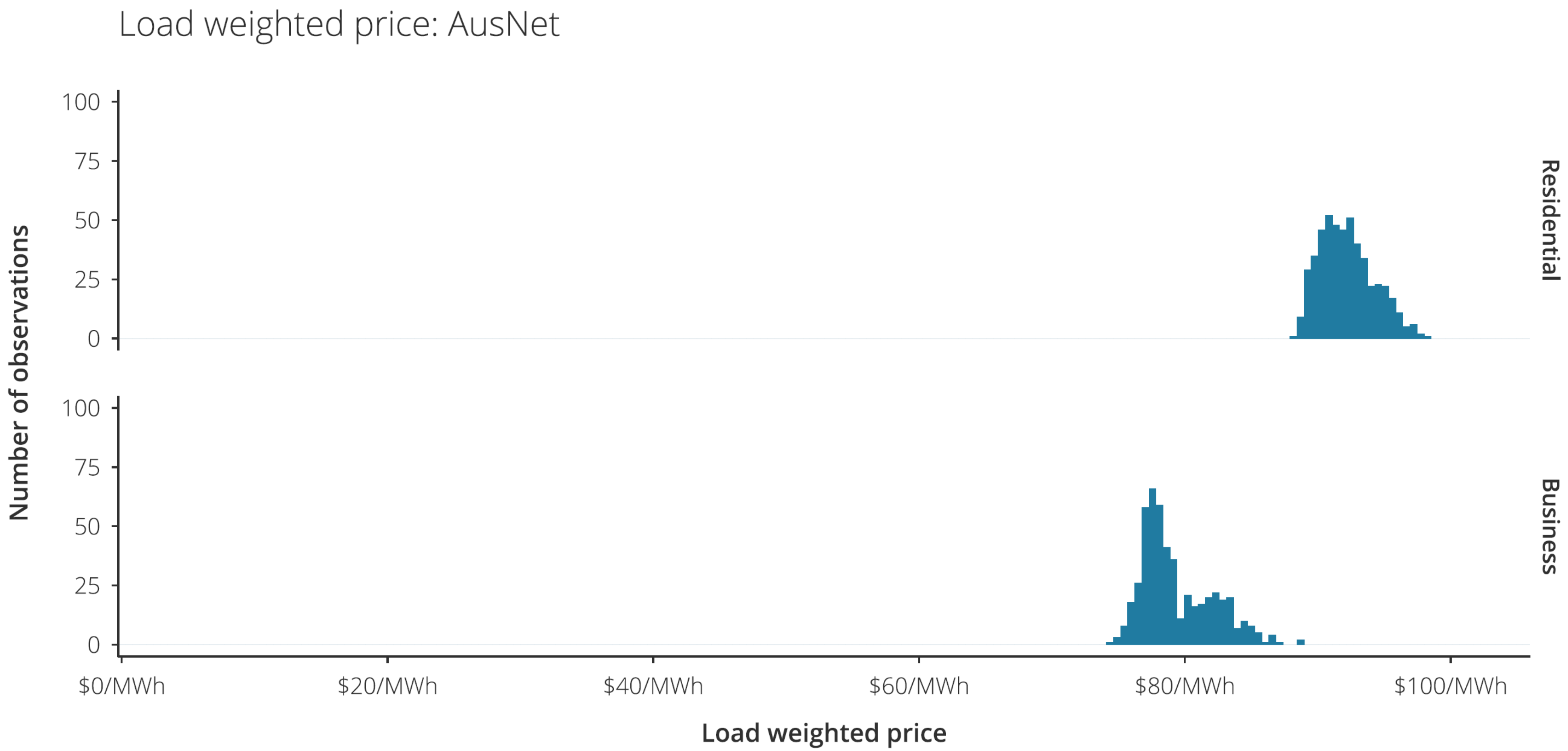
Analysis of data

An indication of the results of our Monte Carlo simulation can be provided by calculating the load-weighted price for each of the 500 simulated years. As we discussed, in our experience the load-weighted price is a reasonable guide to the WEC. **Figure 8** through **Figure 12** show the distribution of load-weighted prices for each of the 500 simulated years from our Monte Carlo analysis, for each distribution area and for each customer type. As discussed, the average spot price in each of these simulated years is the same – based on the 40-day average ASXEnergy base swap price – but the five-minute profile of both spot prices and load are different. It should be clear from **Figure 8** through **Figure 12** that the Monte Carlo simulation has resulted in a distribution of load-weighted prices driven by differences in the five-minute patterns of spot prices and load.

6 An alternative approach would be to attempt to scale five-minute prices having regard to each of base swaps and cap prices. However, the scaling process would require subjective judgements about how to simultaneously scale to each of these prices. Given there would be little on which to base these subjective judgements our preference is to scale only to base swap prices, which is a mechanical process. We note, however, that the calculation of the WEC does use both swap and cap contract prices from ASXEnergy.

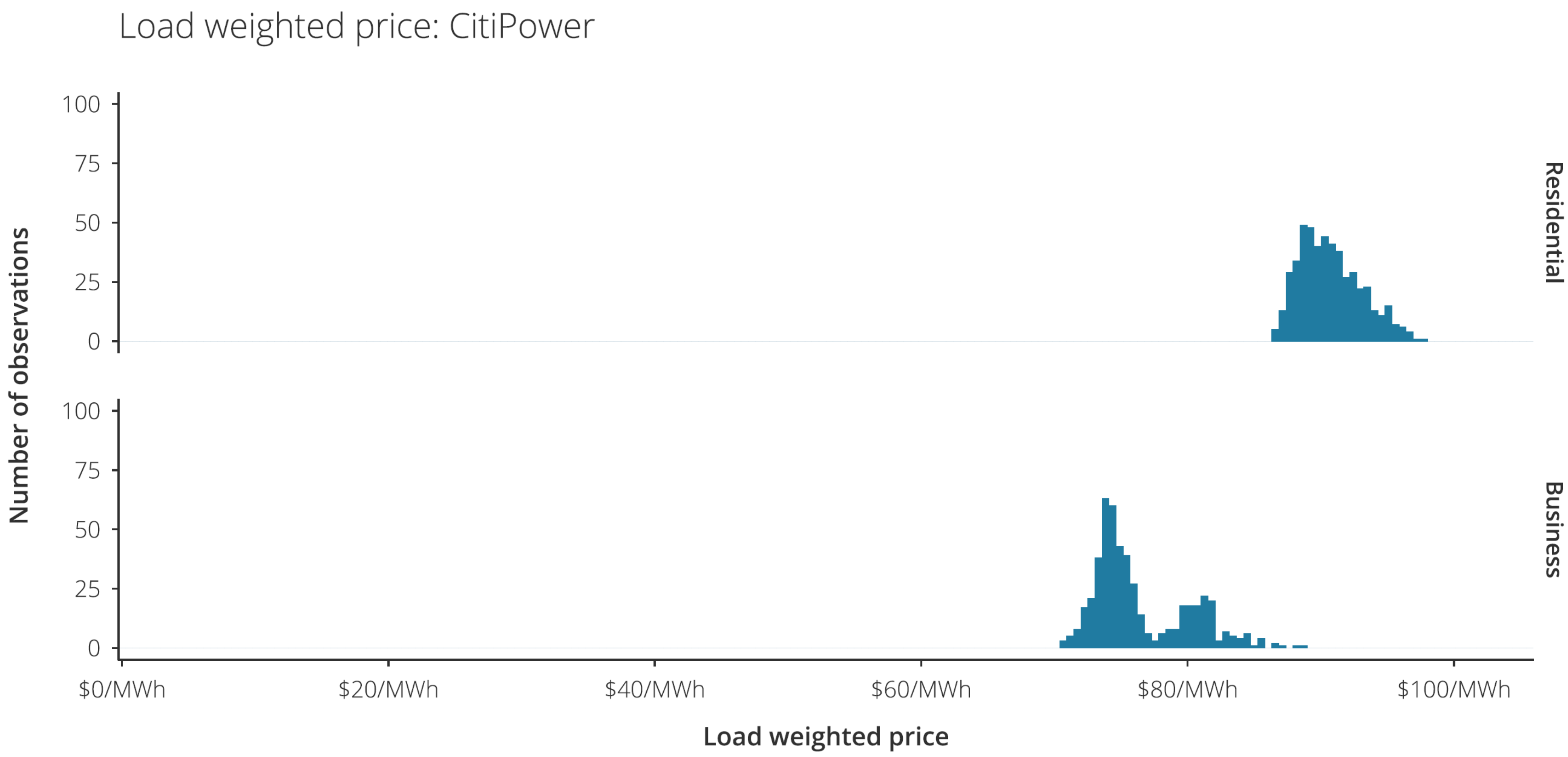
7 We note that there is a difference in the averaging period that we use for estimating spot prices for 2025/26 and the averaging period we use for calculating contract prices to be used in estimating the WEC for the VDO. As discussed, we use the most recent 40-day average ASXEnergy prices as the best guide to the market's view on spot prices that will occur in 2025/26. However, based on instructions from the ESC, we use 12-month trade weighted average ASXEnergy prices to set the contract price for retailers when determining the WEC. In our view, there is no necessity for these averaging periods to be consistent. One way to think about the WEC that we are calculating using this approach is that we are estimating the contract payments that a retailer would face if that retailer had purchased its contracts for 2025/26 over the last 12 months (at the same time as trade occurs on ASXEnergy) and uses those contracts to hedge the risk it would face based on current expectations of spot prices.

Figure 8: Distribution of load-weighted price for simulated years for residential and business load – AusNet



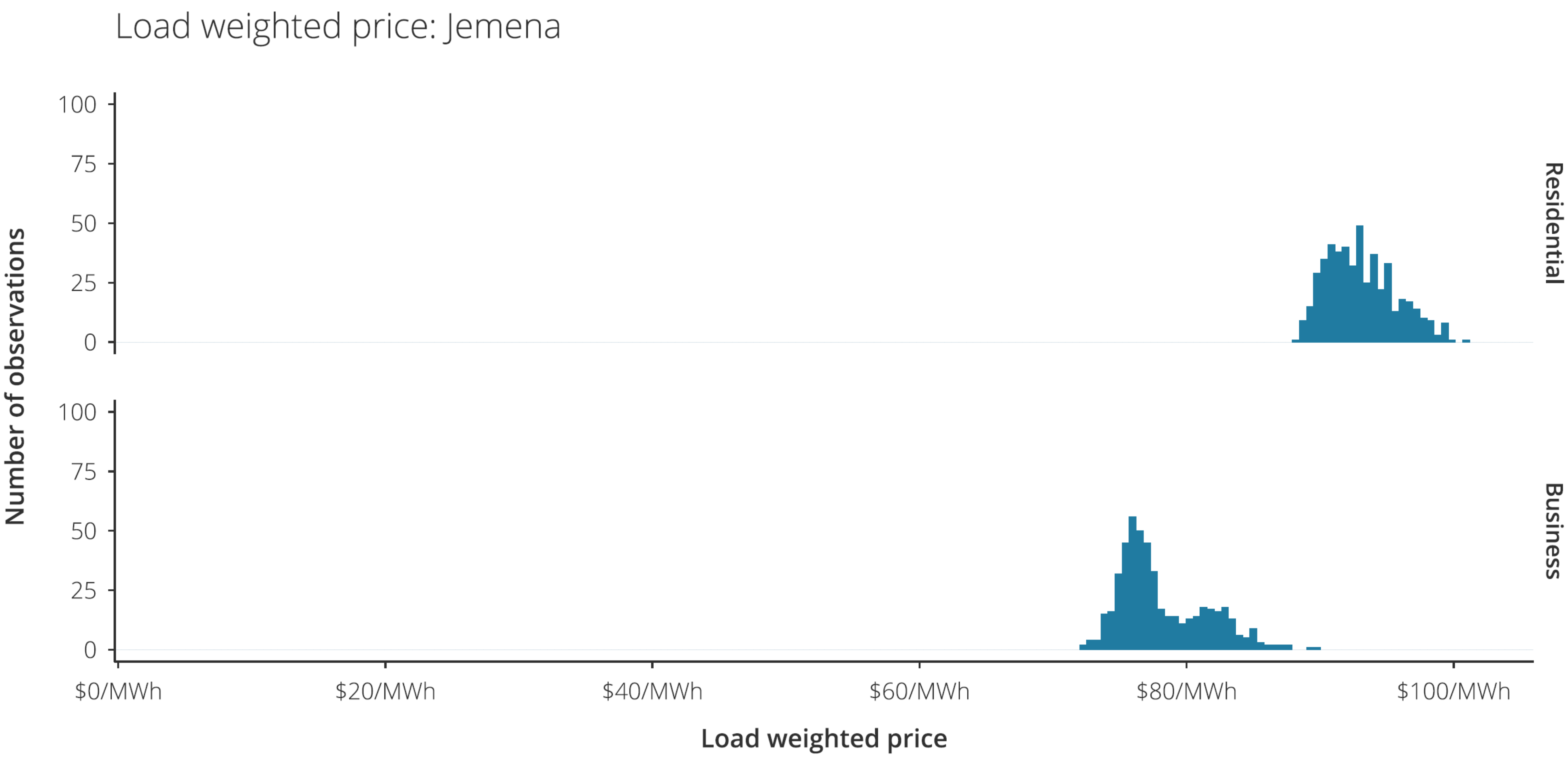
Source: Frontier Economics

Figure 9: Distribution of load-weighted price for simulated years for residential and business load – CitiPower



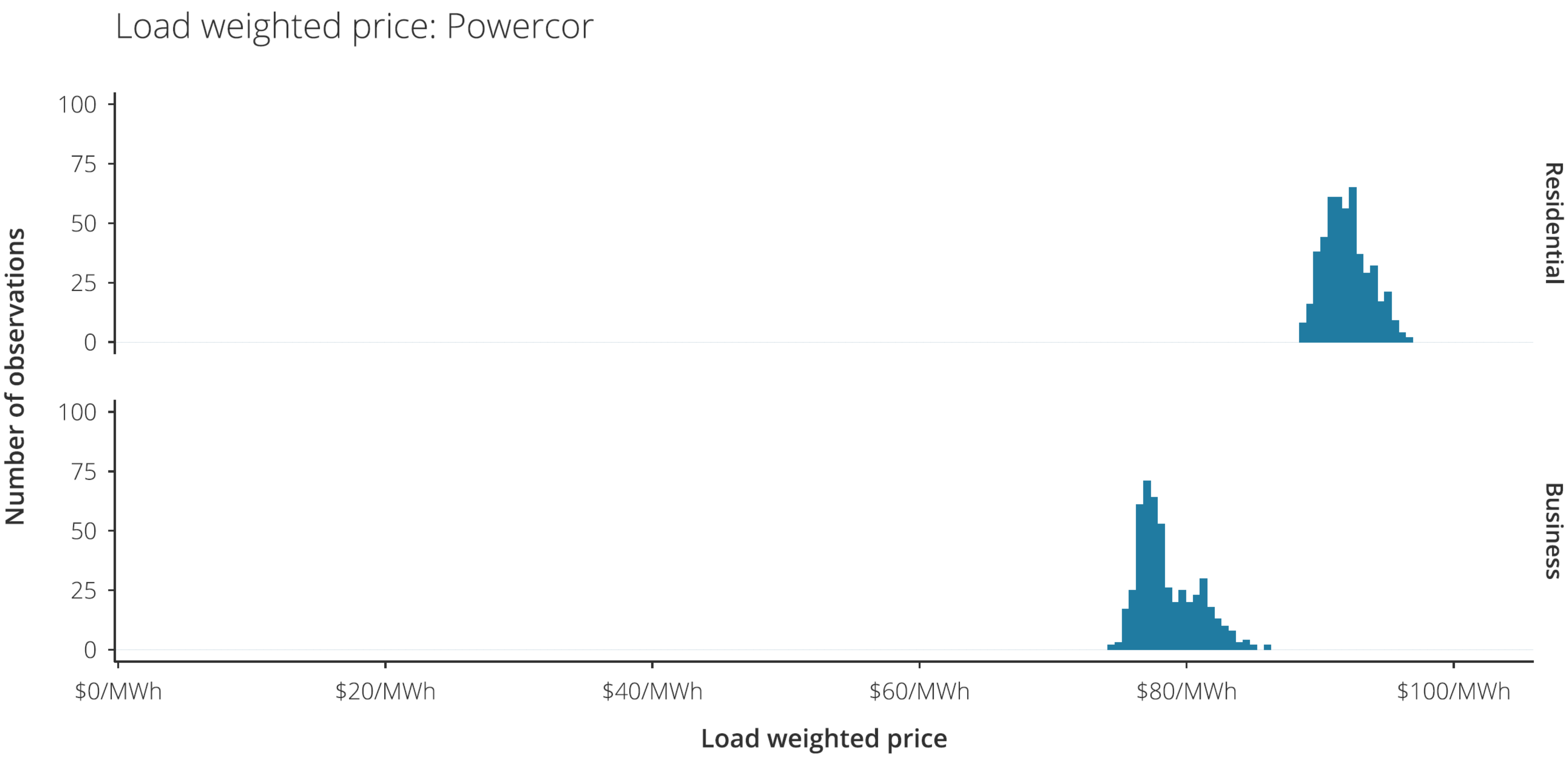
Source: Frontier Economics

Figure 10: Distribution of load-weighted price for simulated years for residential and business load – Jemena



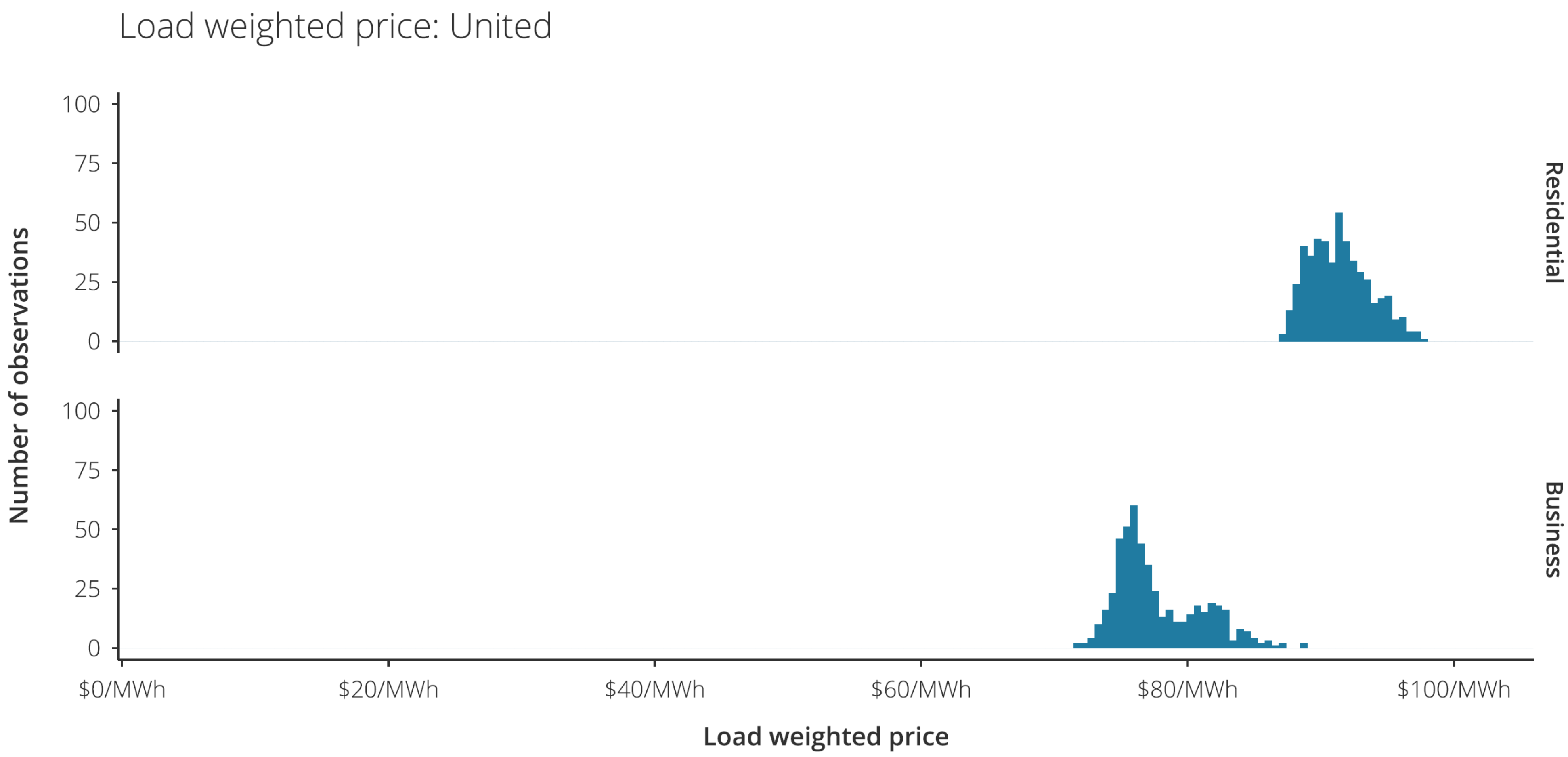
Source: Frontier Economics

Figure 11: Distribution of load-weighted price for simulated years for residential and business load – Powercor



Source: Frontier Economics

Figure 12: Distribution of load-weighted price for simulated years for residential and business load – United



Source: Frontier Economics

4 Contract prices

This section addresses the third question we need to answer to estimate the WEC:

- What is the cost of financial hedging contracts?

As discussed, our approach to assessing the WEC that retailers face is based on an estimate of the cost that a prudent retailer would face in supplying electricity to their customers, having regard to the hedging contracts that a prudent retailer is likely to enter into. The hedging contracts that we base this analysis on are ASXEnergy contracts. The contracts that we consider for hedging retailers' positions are:

- Base swaps for each quarter.
- Base $300 caps for each quarter.

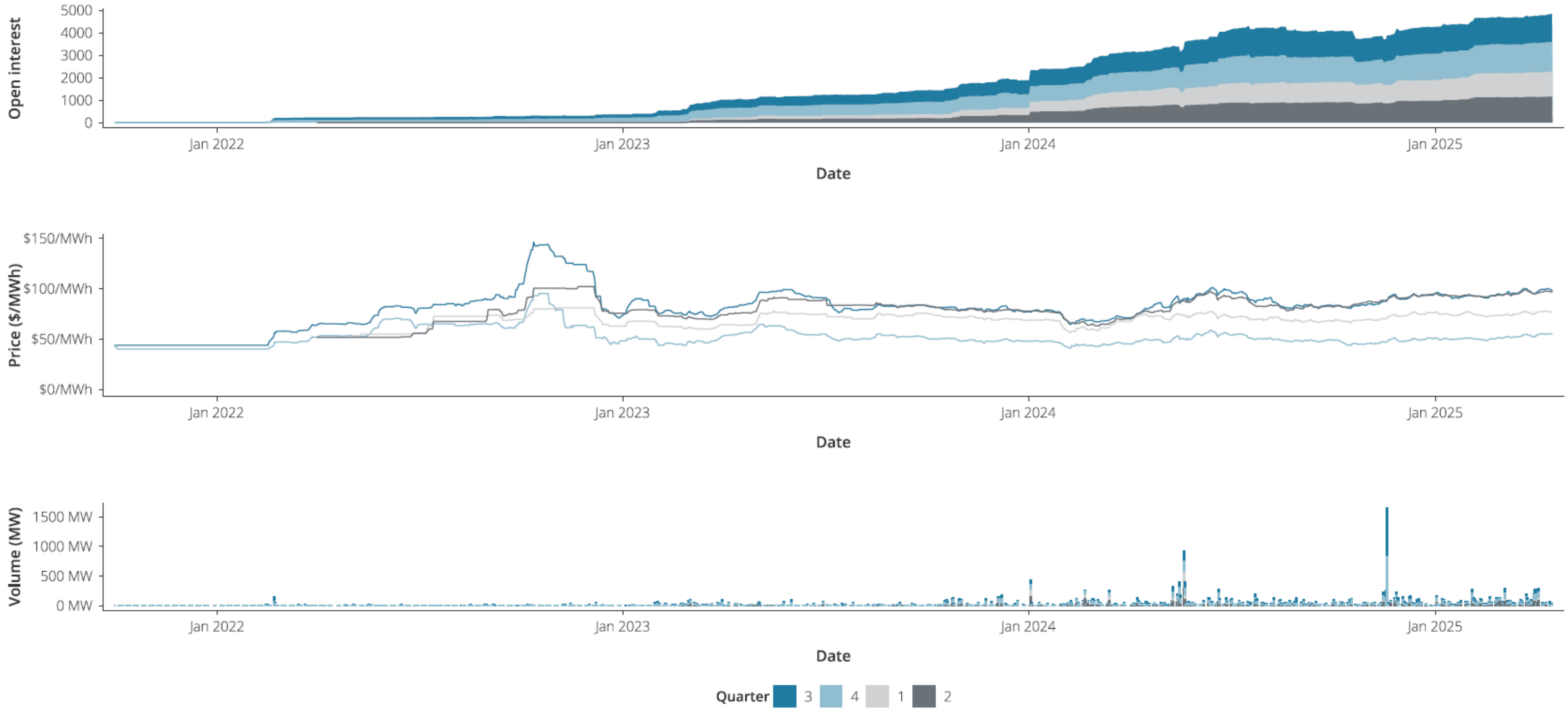
These contracts trade for several years in advance. Prices are published by ASXEnergy for each contract for each trading day.

Contract price data

Figure 13 and **Figure 14** set out the relevant trading data for base swaps and caps, for each quarterly product. The trading data that is presented is open interest (which measures the total volume of contracts in the market), the settlement price and the trading volume.

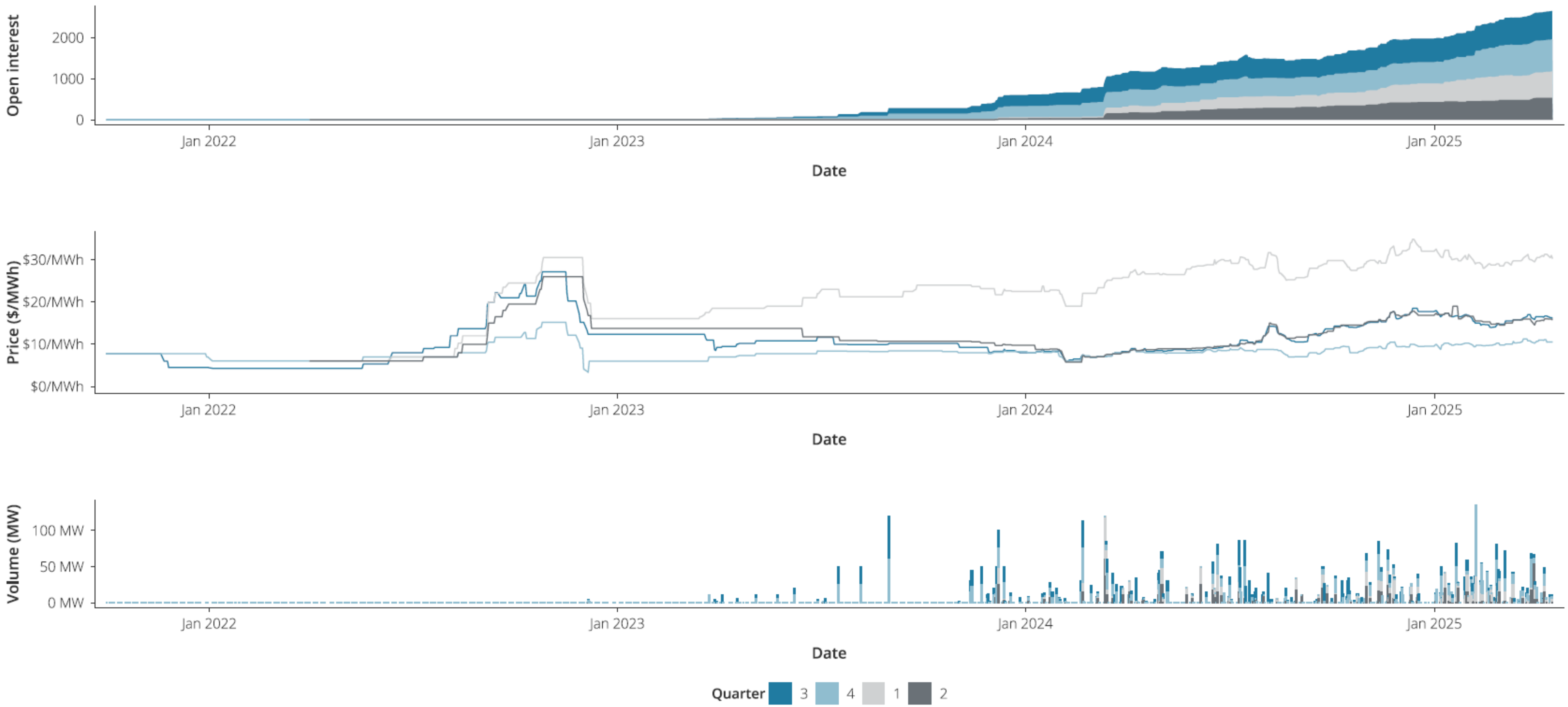
We can see from **Figure 13** and **Figure 14** that base swap and cap contracts for 2025/26 are currently trading regularly. Indeed, we can see that trade in these contracts is occurring on most trading days (note that the daily volume of trades of base swap contracts is masked somewhat by the scale of **Figure 13** being set to show the very high volume of trades on the option settling date). The regular trade in these contracts suggests that the daily prices provide a genuine indication of the market's view of future prices.

Figure 13: Victorian base swaps – open interest, prices and volumes for 2025/26



Source: Frontier Economics analysis of ASX data

Figure 14: Victorian base $300 caps – open interest, prices and volumes for 2025/26



Source: Frontier Economics analysis of ASX data

To determine the WEC we use this historical contract price data to determine the cost of ASXEnergy contracts. Our view is that economic decisions in competitive markets will be based on the market value of contracts (and we consider 40-day average prices a good proxy for this market value), regardless of when those contracts are purchased. If a retailer has purchased contracts in the past at prices above the current market price, we would expect that competition from existing or new entrant retailers would force the retailer to make retail price offers based on the current cost of purchasing contracts; to do otherwise would be to risk losing customers to competitors able to enter or expand by purchasing contracts at the current cost and making retail price offers based on those current costs. Similarly, if a retailer has purchased contracts in the past at prices below the current market price, we would expect that maximising shareholder value would require them to make retail price offers based on the current cost of purchasing contracts; making retail price offers based on lower historical contract costs would result in less profit than simply selling the contracts again at the current contract price.

However, there may be good reasons that a regulator will choose to base regulated prices on something other than 40-day average contract prices. For instance, a longer averaging period, such as 12 months or 24 months, would be expected to provide regulated prices that are more stable over time and would also likely result in regulated prices that are more reflective of incumbent retailers' actual historical costs (since most retailers will buy contracts over a period of time leading up to the settlement year). The ESC has asked us to use 12-month trade weighted contract prices in estimating the WEC. We calculate the 12-month trade weighted contract price for each contract by taking an average of the daily settlement price for that contract over the last 12 months, but weighting each daily settlement price by the share of the total volume of trade over the last 12 months that happened on that day. This means that the settlement price on a day on which no trade occurred is given a weighting of zero in calculating the 12-month trade weighted contract price, while the settlement price on the day on which the most trades occurred in the last 12 months is given the highest weighting.

Consistent with the 2024/25 final report, a high portion of trading volume occurs on the date that base swap options are settled, which for 2025 Q3 and Q4 base swap options was 19 November 2024. This is evident in the spike in the volume panel of **Figure 13**. Under a trade-weighted approach, including this volume would skew the average price towards the price on the option settling day. Since we do not assume that retailers enter into options as part of their hedging strategy, we have removed the data from that day from the calculation of the trade-weighted contract price for Q3 and Q4 2025 contracts. Note that no adjustment is required for Q1 and Q2 2026 base swaps as those option contracts settle in May 2025, which occurs after the sample period we use for contract prices (which extends to 16 April 2025).

Adopting the approach described above results in the ASXEnergy contract prices that are shown in **Table 1**, for contract prices up to 16 April 2025.

Table 1: 12-month trade weighted average ASXEnergy derivative prices for Victoria (2025/26 dollars)

	Product	Status	Year	Quarter			
				Q3	Q4	Q1	Q2
TRADE WEIGHTED	$300 Caps	Base	2025/26	$13.50	$9.54	$29.85	$13.48
	Swaps	Base	2025/26	$90.54	$50.26	$73.21	$89.94

Source: Frontier Economics analysis of ASXEnergy data.

5 Contract position

This section addresses the final question we need to answer to estimate WEC:

- What kind of hedging position is a prudent retailer likely to adopt?

We use our portfolio optimisation model – *STRIKE* – to determine the efficient mix of hedging products that a prudent retailer would likely adopt. *STRIKE* calculates an efficient frontier, which represents the contracting positions that provide the lowest energy purchase cost for a given level of risk (as measured by standard deviation).

STRIKE applies a Minimum Variance Portfolio (MVP) approach to the task of hedging a retailer's exposure to wholesale spot prices. *STRIKE* incorporates an estimate of a retailer's exposure to the wholesale spot market, which is determined by the retailer's load and wholesale spot prices. There is an expected return and a variance associated with this. *STRIKE* also incorporates the types of hedging products that are typical in the electricity industry. These contracts – swaps and caps – generate cashflows that also have an expected return and a variance. Instead of assessing the expected return and associated risk for each asset in isolation, *STRIKE* applies the concepts of portfolio theory to evaluate the contribution of each asset to the risk of the portfolio as a whole. Based on this approach, *STRIKE* calculates efficient hedging strategies.

In order to determine a hedging position for the purposes of estimating the WEC for each customer type in each distribution area in Victoria, we make use of the following inputs in *STRIKE*:

- Forecast spot prices and load, as discussed in Section 3. As we discussed, we have developed 500 simulated years of five-minute spot prices and load for 2025/26. There is a distribution of outcomes within these 500 simulated years. Our view is that an efficient retailer's hedging position should have regard to the uncertainty associated with what kind of year 2025/26 will be. For example, will 2025/26 be a year with high prices and high load corresponding, so that the load-weighted price is high, or will 2025/26 be a year with low prices and high load corresponding, so that the load-weighted price is low? To account for this uncertainty, we input 7 simulated years into *STRIKE*, representing those simulated years that represent the 99th, 95th, 75th, 50th, 25th, 5th and 1st percentile when the 500 simulated years are ranked according to load-weighted price.
- Contract prices, as discussed in Section 4. We present results for 12-month trade weighted contract prices.

As discussed, *STRIKE* calculates an efficient frontier, which represents the contracting positions that provide the lowest energy purchase cost for a given level of risk. The contract position that we use to calculate the WEC is based on the most conservative contracting position on the efficient frontier, which is the point on the efficient frontier with the lowest risk (but highest cost).

Outlined in **Figure 15** to **Figure 24** are the resulting contract positions at the conservative point for 2025/26, for each load profile and for each distribution area. For each quarter (the vertical panels), the charts show the following:

- The distribution of five-minute load for the 288 five-minute intervals of the day (shown by the box plots, including the dots representing outliers, in the 'Load' panel).

- The distribution of five-minute spot prices for the 288 five-minute intervals of the day (shown by the box plots, including the dots representing outliers, in the 'Spot price' panel). The price chart is truncated at a spot price of $800/MWh to aid visibility of price outcomes.
- The quantity of swaps and caps at the conservative point of the efficient frontier (shown by the coloured areas in the 'Load' panel).

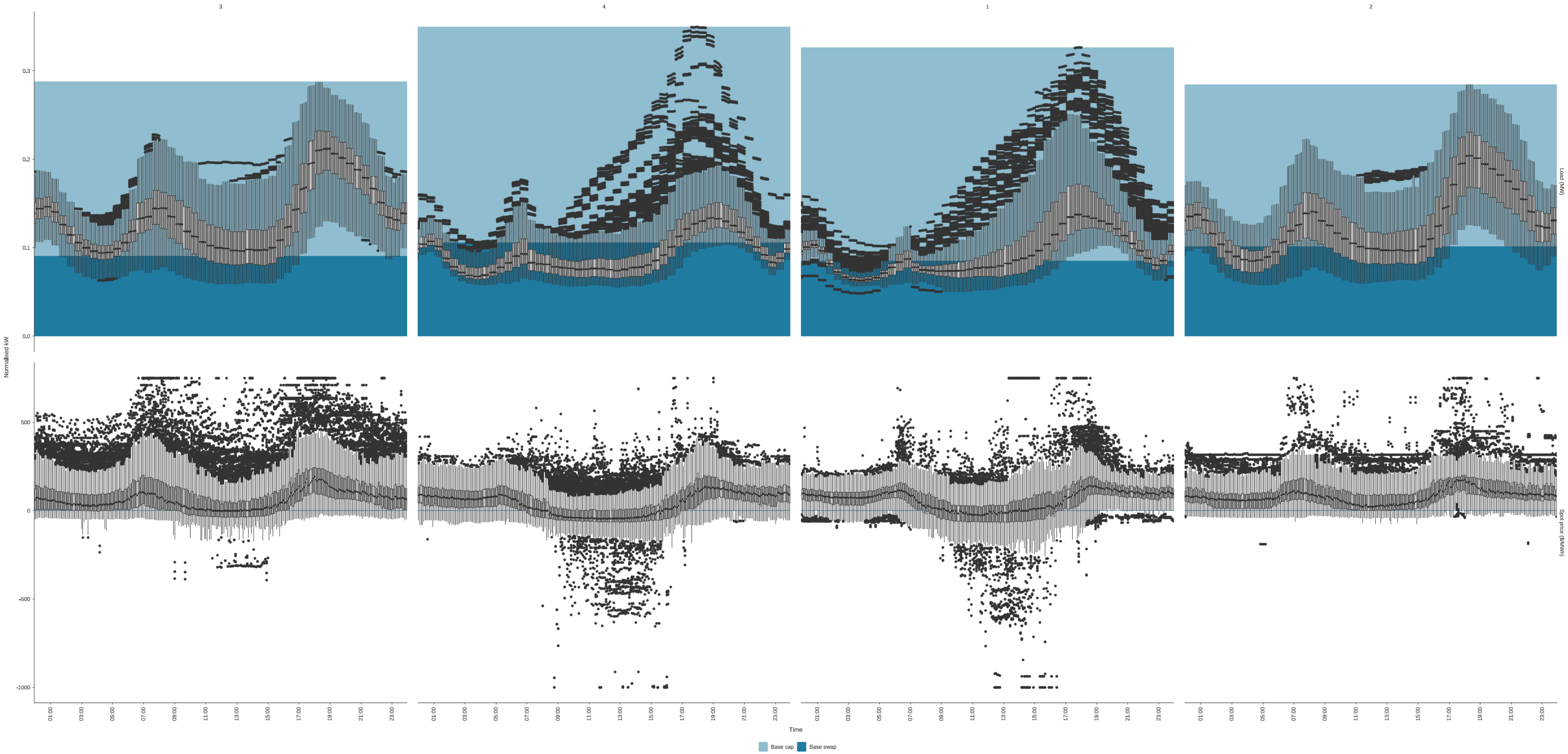
In general, the contract position at the conservative point involves:

- purchasing swaps to cover (approximately) average demand
- purchasing caps, on top of that, to cover (approximately) to peak demand.

As seen in **Figure 15** to **Figure 24**, the contract position at the conservative point generally results in complete coverage of the highest demand five-minute intervals, but may not always do so. The reason that there can remain some residual pool exposure even at the conservative point is that *STRIKE* balances the costs and risks of remaining exposed to the spot price at these highest demand intervals against the costs and risks associated with being over-contracted. Signing additional contracts is neither costless nor riskless, and while being exposed to the spot price during a small number of high demand trading intervals can result in large payments, being over-contracted for a large number of lower demand trading intervals can also result in large payments. Some retailers may have a preference for additional contract cover to meet forecast peak demand in all cases, but we note that the volatility allowance (discussed in Section 6.2) is intended to reflect the residual risk at the conservative point and could be used to purchase additional cap cover.

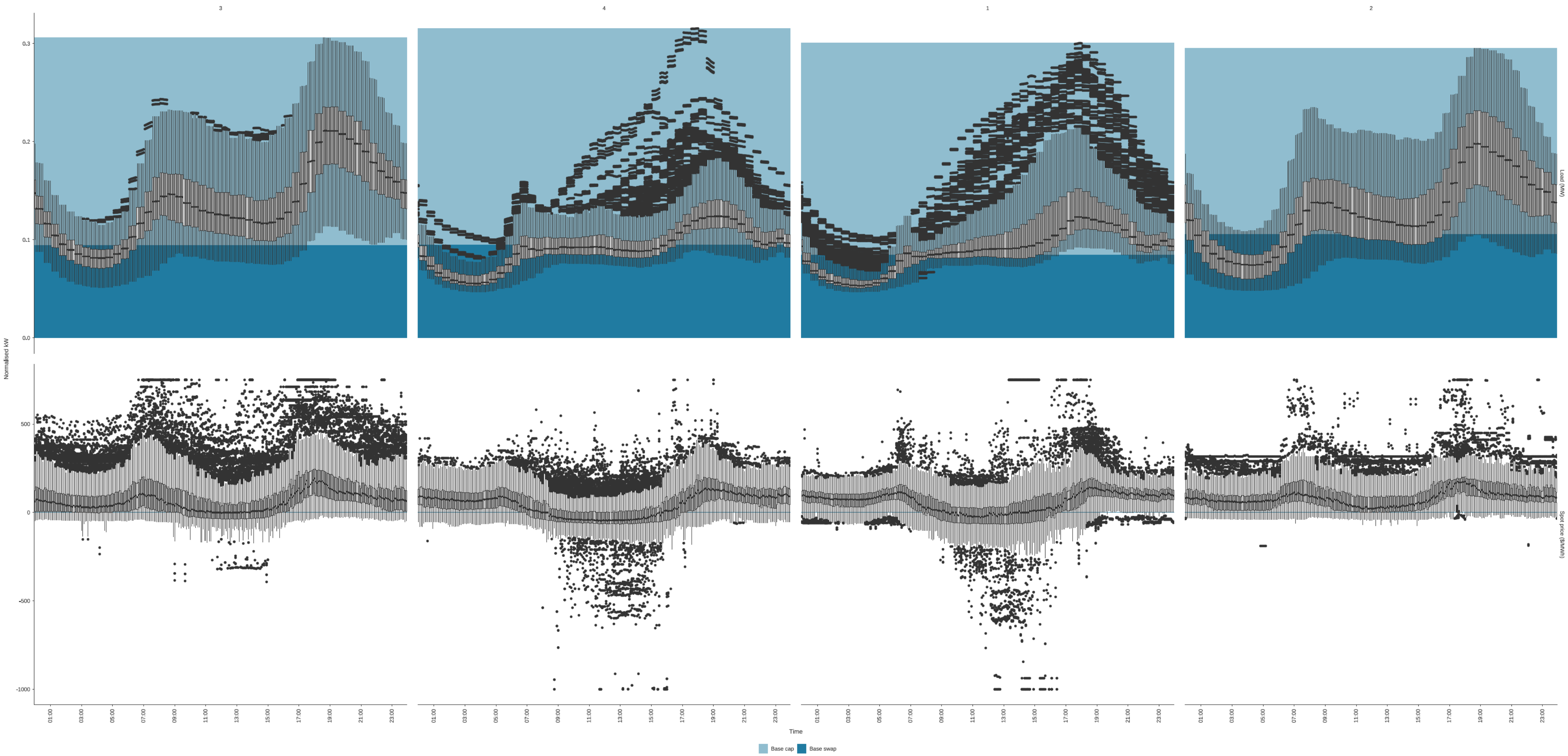
It should also be noted that the conservative point on the efficient frontier reflects the contract position that achieves the lowest risk given the projected state of the world that is input into *STRIKE*. In the event that different states of the world were input into *STRIKE*, the model would find a different contract position that achieves the lowest risk. In particular, if it were assumed, for instance, that next year will have an unusually large number of high price events that coincided with high load, then the model would certainly find a different contract position that achieves the lowest risk. Load forecasts and price forecasts (and their correlation) are important to the costs that retailers face in supplying regulated customers. We use the best available information to develop load forecasts and price forecasts that are consistent with the observed peakiness of historic load and historic prices (and the observed correlation between) so that the *STRIKE* contract position is based on a good estimate of future conditions.

Figure 15: Contract position for AusNet residential load, ASXEnergy contract prices



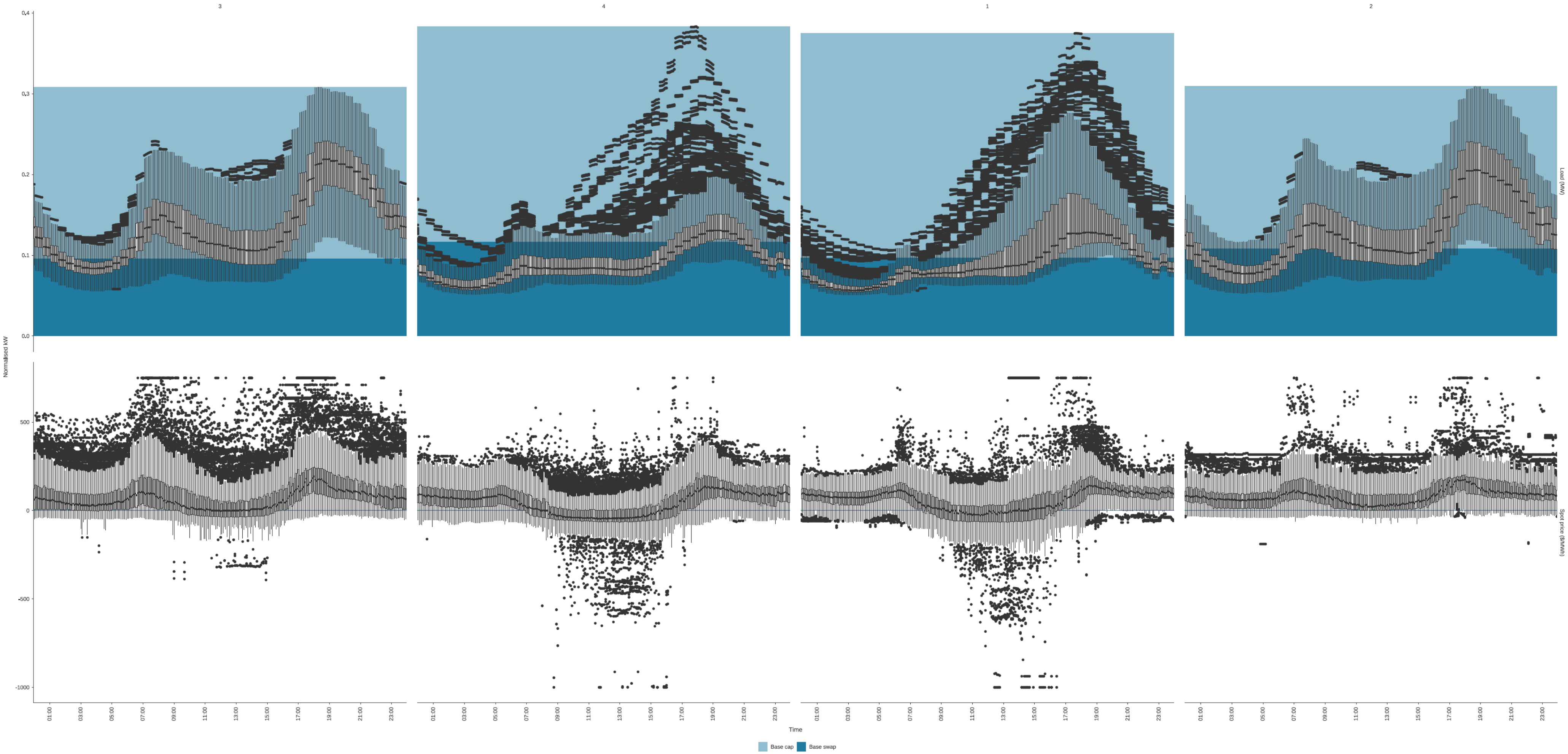
Note: Spot price chart truncated at a spot price of $800/MWh.

Figure 16: Contract position for CitiPower residential load, ASXEnergy contract prices



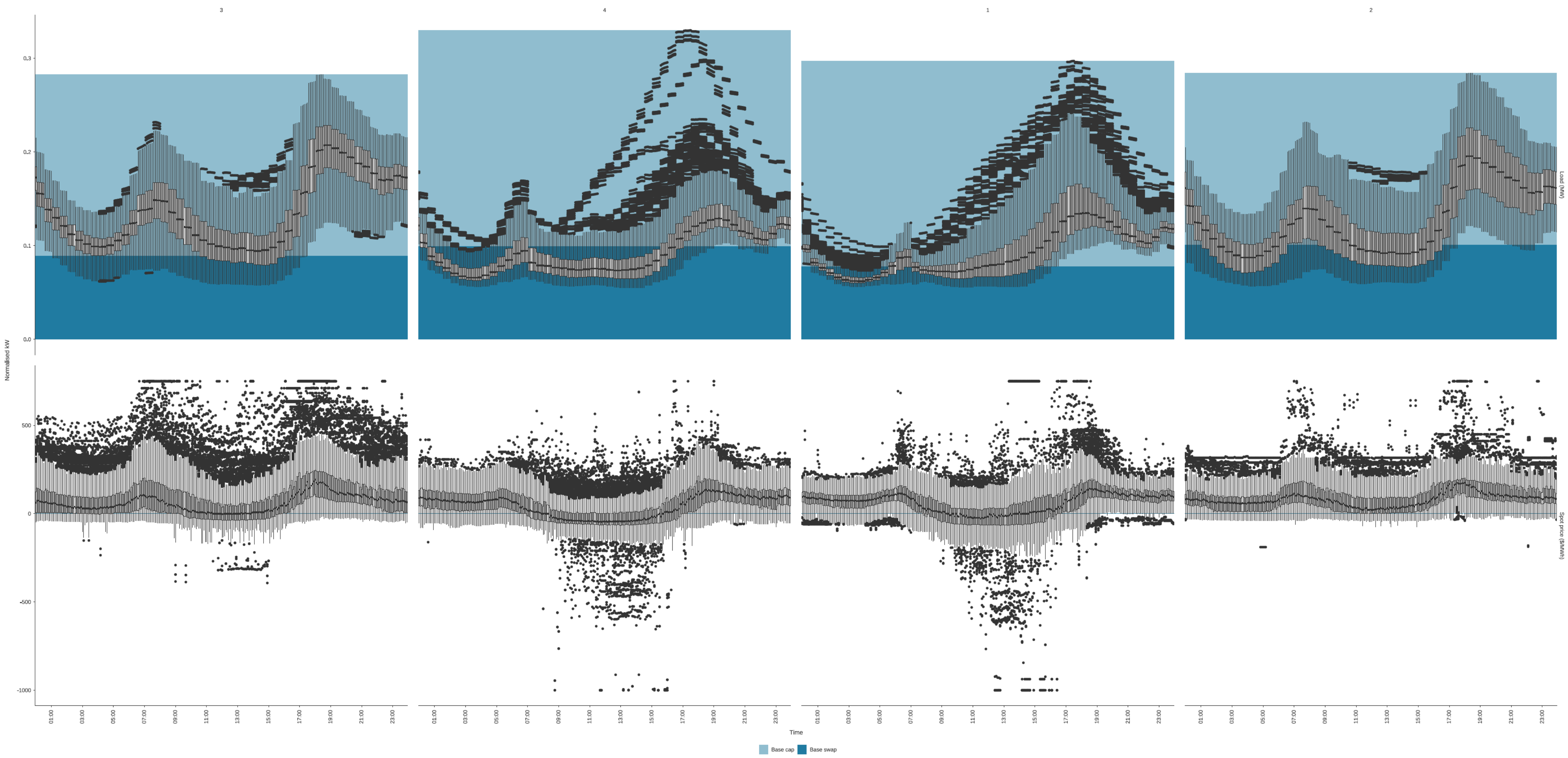
Note: Spot price chart truncated at a spot price of $800/MWh.

Figure 17: Contract position for Jemena residential load, ASXEnergy contract prices



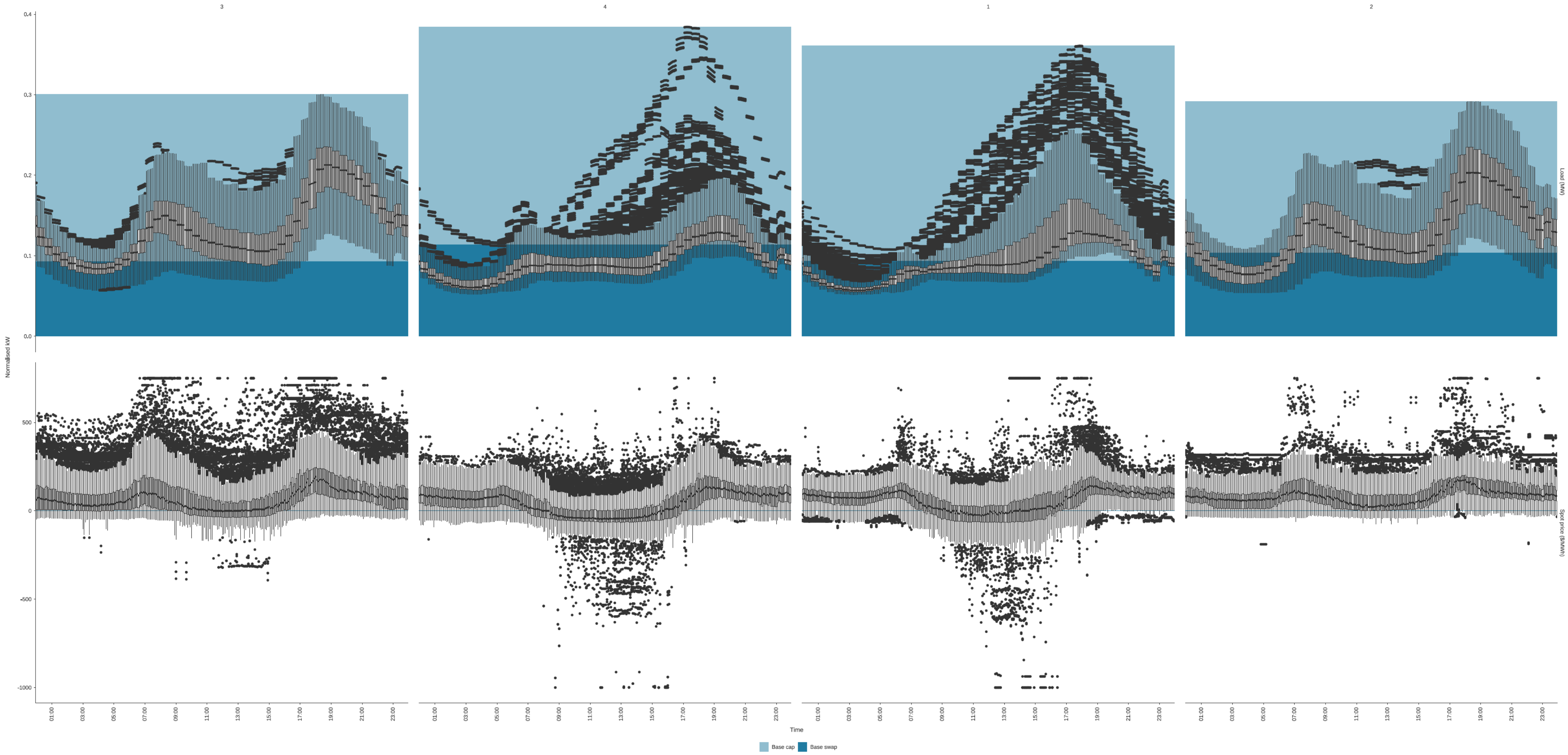
Note: Spot price chart truncated at a spot price of $800/MWh.

Figure 18: Contract position for Powercor residential load, ASXEnergy contract prices



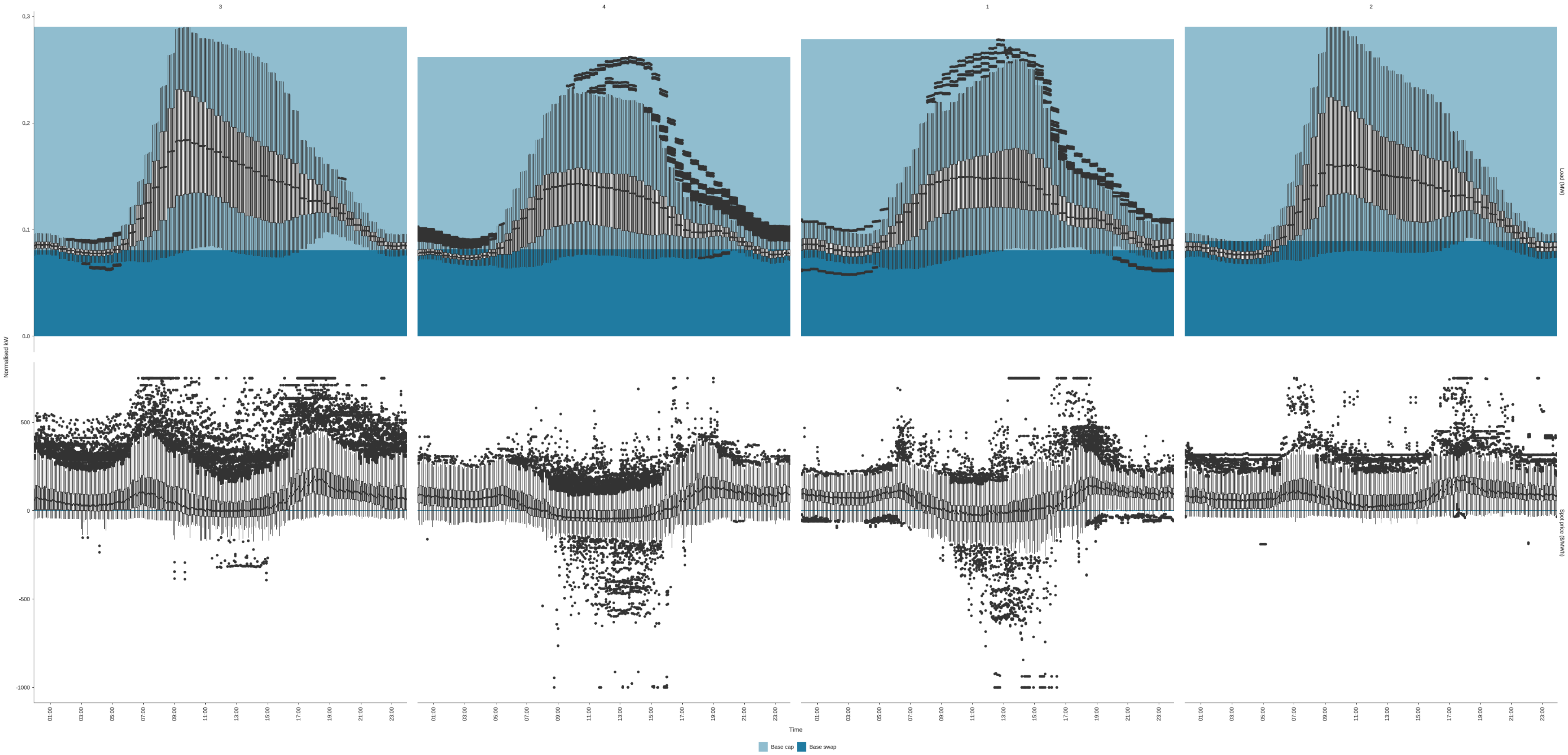
Note: Spot price chart truncated at a spot price of $800/MWh.

Figure 19: Contract position for United residential load, ASXEnergy contract prices



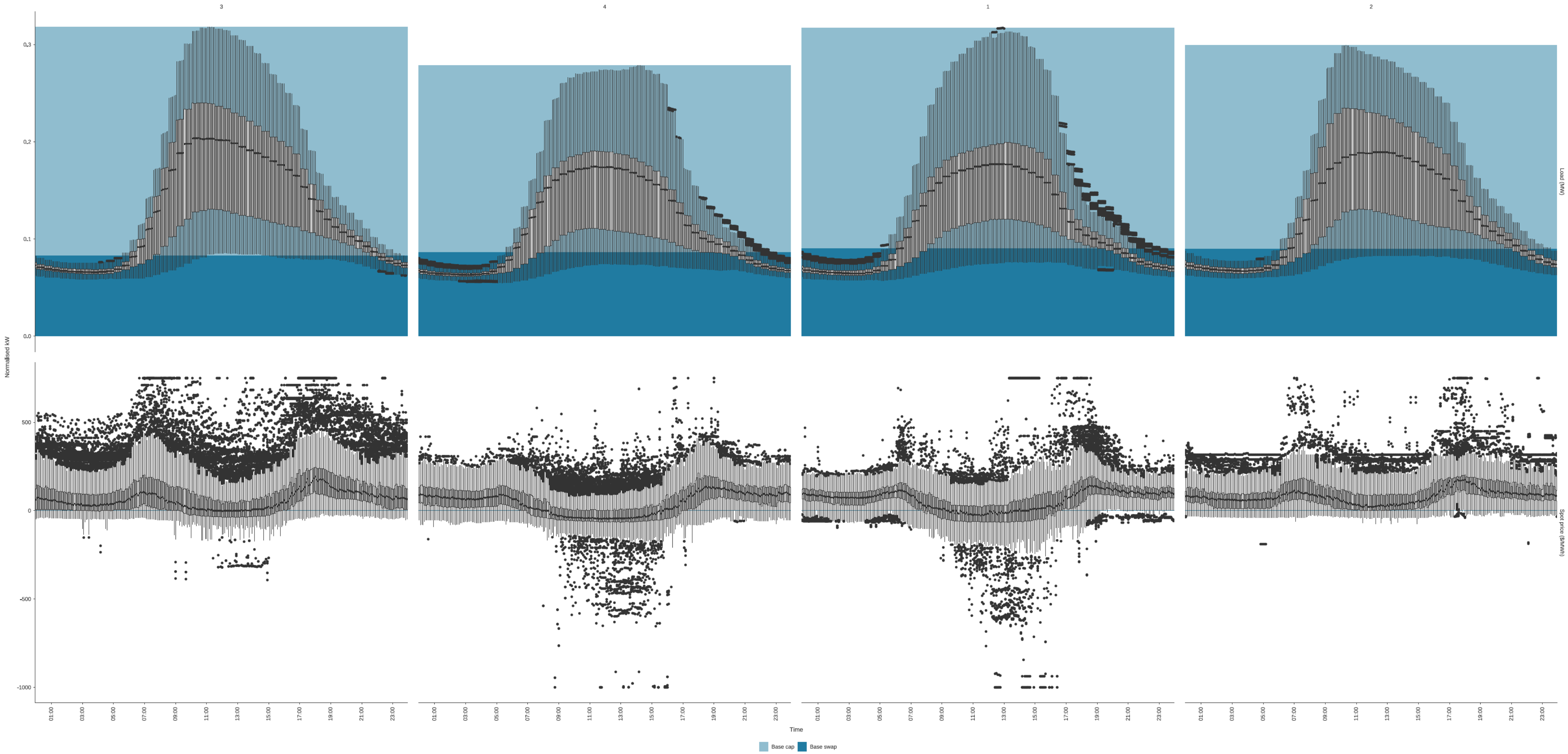
Note: Spot price chart truncated at a spot price of $800/MWh.

Figure 20: Contract position for AusNet business load, ASXEnergy contract prices



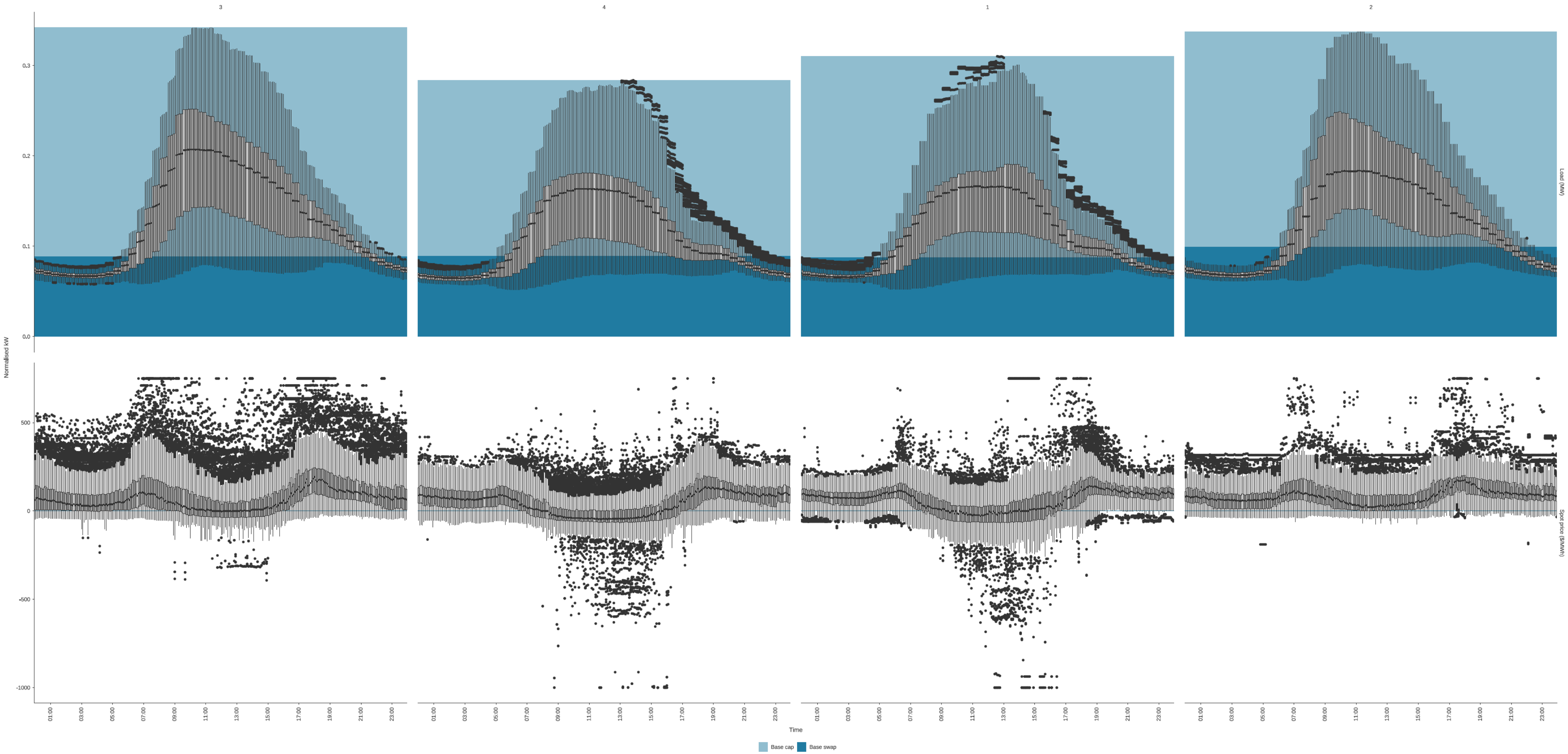
Note: Spot price chart truncated at a spot price of $800/MWh.

Figure 21: Contract position for CitiPower business load, ASXEnergy contract prices



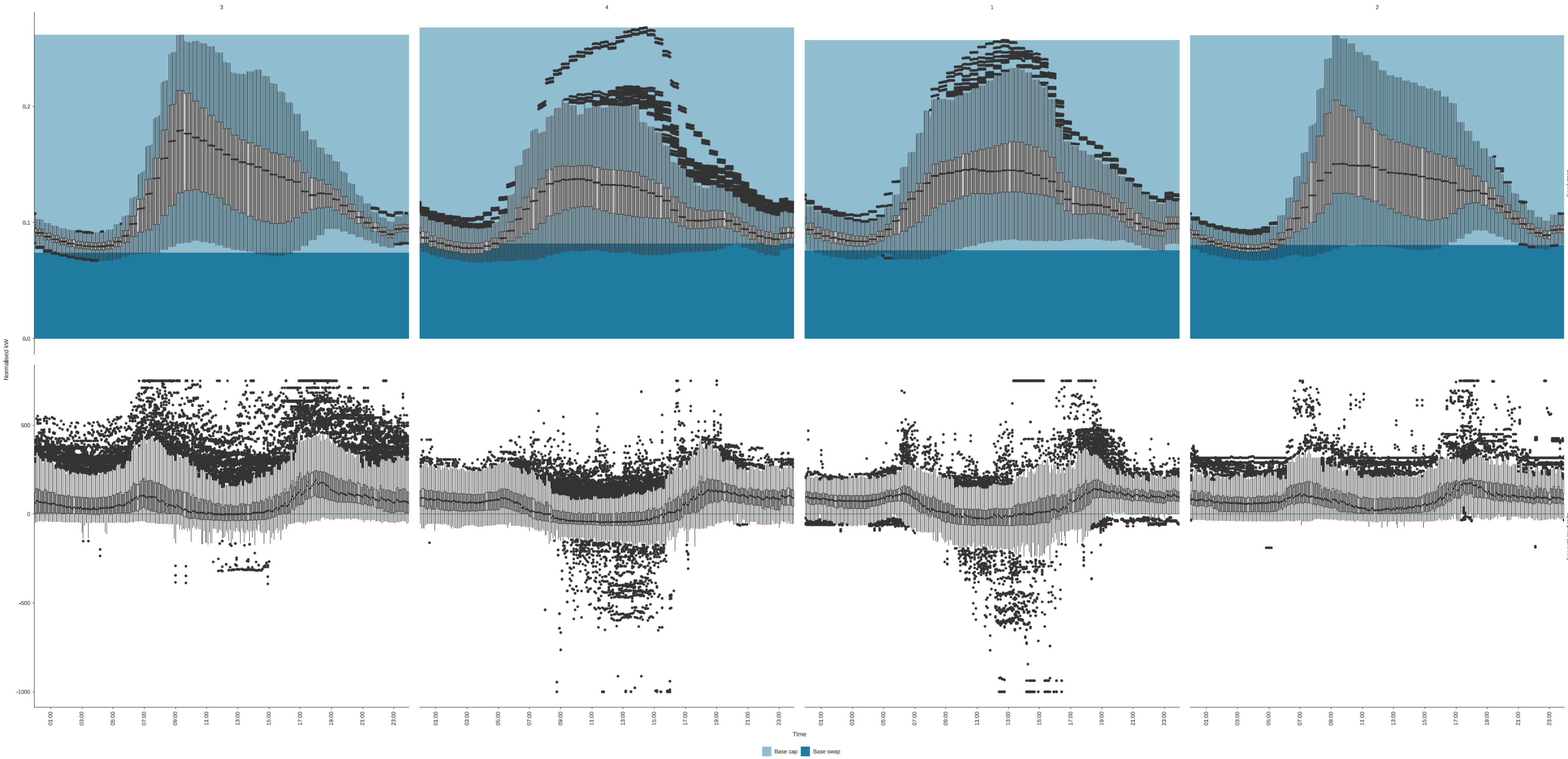
Note: Spot price chart truncated at a spot price of $800/MWh.

Figure 22: Contract position for Jemena business load, ASXEnergy contract prices



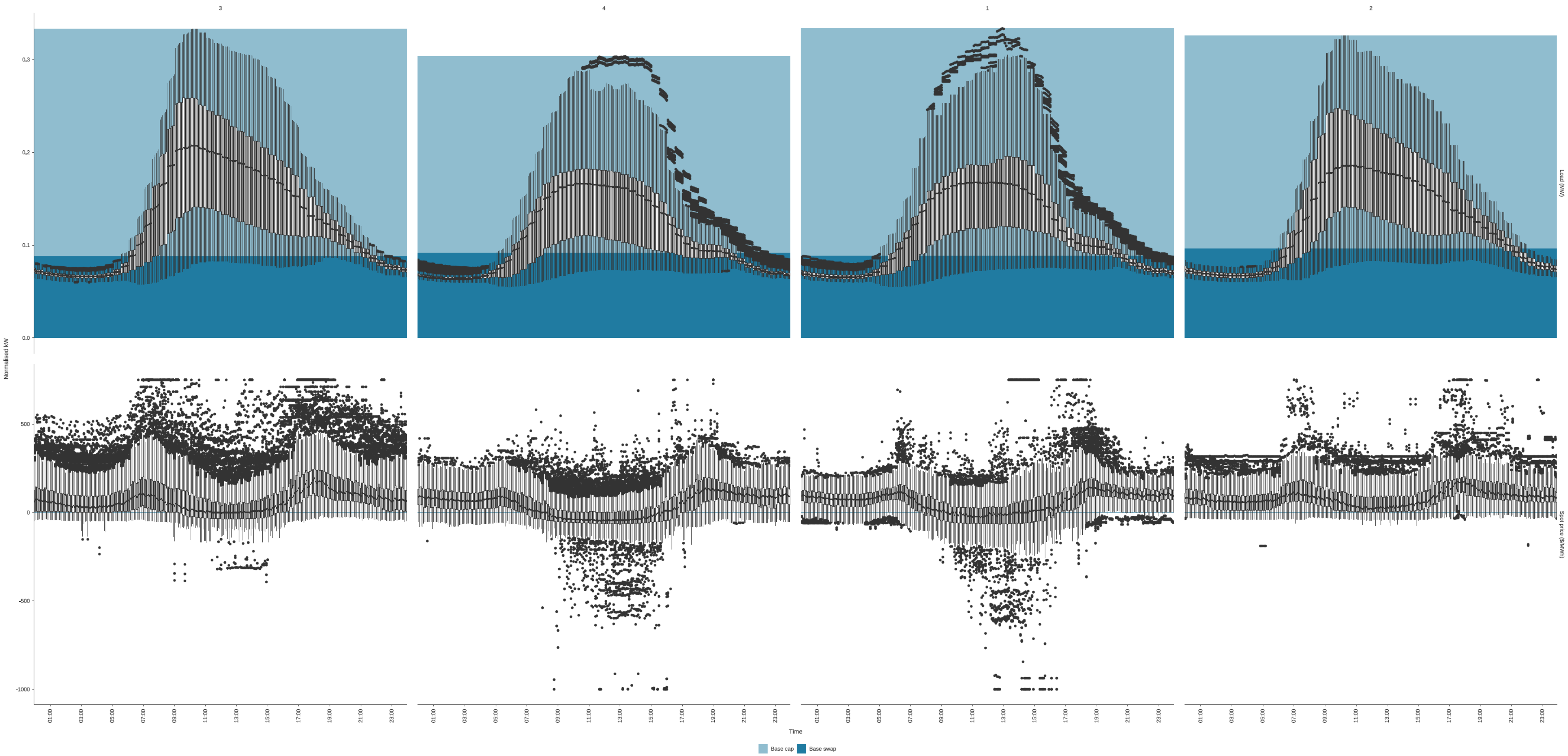
Note: Spot price chart truncated at a spot price of $800/MWh.

Figure 23: Contract position for Powercor business load, ASXEnergy contract prices



Note: Spot price chart truncated at a spot price of $800/MWh.

Figure 24: Contract position for United business load, ASXEnergy contract prices



Note: Spot price chart truncated at a spot price of $800/MWh.

6 Wholesale electricity costs

Based on the data and modelling discussed in Section 3 through Section 5, this section reports the WEC that we have estimated.

6.1 Wholesale electricity costs

We estimate the WEC by calculating settlement payments and differences payments resulting from the five-minute spot prices and load, contract prices and contract position that we have developed.

Results

The WECs that we have estimated are based on five-minute spot prices and load from the median simulated year (when these years are ranked according to WEC). The WECs that we have estimated are based on 12-month trade weighted average ASXEnergy contract prices up to 16 April 2025. The WECs that we have estimated are based on the contract position from the conservative point on the efficient frontier for each DNSP.

These WECs are set out in **Table 2**.

Table 2: Modelled market-based wholesale electricity cost result

Entity	Wholesale electricity costs ($/MWh, real $2025/26)	
	Residential	Business
AusNet	$116.17	$100.16
CitiPower	$113.00	$98.75
Jemena	$119.87	$101.28
Powercor	$114.60	$98.22
United	$117.58	$102.49

Source: Frontier Economics

6.2 Volatility allowance

As discussed, the WECs that we have estimated are based on five-minute spot prices and load from the median simulated year. The volatility allowance is intended to compensate retailers for the residual risk to which they are exposed, even when contracted at the conservative point. The volatility allowance is calculated based on the cost of holding working capital to fund cashflow shortfalls that could arise in years when the actual WEC is higher than we have estimated for the median simulated year. The working capital requirement is based on the difference between the WEC that we have estimated for the median simulated year and the WEC for the most costly simulated year for each distribution area. We then estimate the cost of holding sufficient working capital by applying a WACC of 7.5 per cent.

The volatility allowances calculated using this framework are set out in **Table 3**.

Table 3: Modelled volatility allowance

Entity	Volatility Allowance ($/MWh real $2025/26)	
	Residential	Business
AusNet	$0.42	$0.41
CitiPower	$0.38	$0.50
Jemena	$0.40	$0.53
Powercor	$0.41	$0.39
United	$0.39	$0.50

Source: Frontier Economics

7 LRET and SRES

In addition to estimating the WEC, our scope of work also includes estimating the costs that a retailer will face as a result of the following schemes:

- the Large-scale Renewable Energy Target (LRET)
- the Small-scale Renewable Energy Scheme (SRES).

This section reports our estimate of these costs.

We have also been asked by the ESC to include a true-up of last year's estimates of the costs of complying with the LRET and SRES, following the release of updated data on the RPP and STP, respectively.

7.1 LRET

The LRET places a legal liability on wholesale purchasers of electricity to proportionately contribute towards the generation of additional renewable electricity from large-scale generators. Liable entities support additional renewable generation through the purchase of Large-scale Generation Certificates (LGCs). The number of LGCs to be purchased by liable entities each year is determined by the Renewable Power Percentage (RPP), which is set each year by the Clean Energy Regulator. LGCs are created by eligible generation from renewable energy generators.

In order to calculate the cost to a retailer of complying with the LRET, it is necessary to determine the RPP for the retailer (which determines the number of LGCs that must be purchased) and the cost of obtaining each LGC.

Renewable Power Percentage

The RPP establishes the rate of liability under the LRET and is used by liable entities to determine how many LGCs they need to surrender to discharge their liability each year.

The RPP is set to achieve the renewable energy targets specified in the legislation. The Clean Energy Regulator is responsible for setting the RPP for each year.

The *Renewable Energy (Electricity) Act 2000* states that where the RPP for a year has not been determined it should be calculated as the RPP for the previous year multiplied by the required GWh's of renewable energy for the current year divided by the required GWh's of renewable energy for the previous year. This calculation increases the RPP in line with increases in the renewable energy target but does not decrease the RPP to account for any growth in demand.

The Clean Energy Regulator has published a RPP for 2025 of 17.91%.[8] Using this 2025 RPP, and applying the default calculation, results in the same RPP for 2026 of 17.91%, and an estimated RPP for 2025/26 that is also 17.91%.

8 Available at https://cer.gov.au/schemes/renewable-energy-target/renewable-energy-target-liability-and-exemptions/renewable-power-percentage. Accessed 20 Feb 2025.

Cost of obtaining LGCs

We have used a market price for LGCs to determine the cost of complying with the LRET. The market price for LGCs is determined by taking a 12-month trade weighted average of LGC prices for trades settled in 2025/26, reported by Demand Manager.[9] This 12 month trade weighted average LGC price to 16 April 2025 is $35.17 per certificate ($2025/26).

Cost of complying with the LRET

Based on the RPP and the LGC price discussed above, the cost of complying with the LRET is $6.30/MWh ($2025/26).

Previous year LRET true-up

We have been asked by the ESC to include a true-up to the cost of complying with the LRET as calculated in the 2024/25 VDO. The true-up represents the difference between the estimated RPP for 2025 that was used in the 2024/25 calculation of the cost of complying with the LRET, and the actual RPP for 2025 that is now available.

Holding the LGC futures price used in the 2024/25 calculation constant, the adjustment to the RPP for 2024/25 from 18.48% to 18.20%[10] results in a true-up of negative $0.14/MWh.

Table 4: Cost of complying with LRET, adjusted for the 2024/25 true-up

	Units	Cost ($/MWh, real 2025/26)
2025/26 cost of complying with LRET	$/MWh	$6.30
2024/25 true-up	$/MWh	-$0.14
2025/26 cost of complying with LRET, adjusted	**$/MWh**	**$6.16**

Source: Frontier Economics analysis

7.2 SRES

The SRES places a legal liability on wholesale purchasers of electricity to proportionately contribute towards the costs of creating small-scale technology certificates (STCs). The number of STCs to be purchased by liable entities each year is determined by the Small-scale Technology Percentage (STP), which is set each year by the Clean Energy Regulator. STCs are created by eligible small-scale installations based on the amount of renewable electricity produced or non-renewable energy displaced by the installation.

9 Available at: http://www.demandmanager.com.au/. Accessed 6 Feb 2025.

10 Where 18.20% represents the average of the 2024 RPP of 18.48% and the 2025 RPP of 17.91%.

Liable entities can purchase STCs on the open market or through the STC Clearing House. There is a guaranteed price of $40/STC through the Clearing House, but certificates may take some time to clear, delaying payment to sellers of STCs.

In order to calculate the cost to a retailer of complying with the SRES, it is necessary to determine the STP for the retailers (which determines the number of STCs that must be purchased) and the cost of obtaining each STC.

Small-scale Technology Percentage

The STP establishes the rate of liability under the SRES and is used to determine the number of STCs that liable entities are required to surrender each year. The STP is determined by the Clean Energy Regulator.

The STP is calculated in advance based on:

- the estimated number of STCs that will be created for the year[11]
- the estimated amount of electricity that will be acquired for the year
- the estimated number of all partial exemptions expected to be claimed for the year.

The STP is to be published for each compliance year by March 31 of that year. The Clean Energy Regulator is also required to publish a non-binding estimate of the STP for the two subsequent compliance years by March 31.

The binding STP for 2025 and non-binding STP for 2026 are set out in **Table 5**. This results in an estimated STP for 2025/26 that is 12.84%.

Table 5: STPs published by the Clean Energy Regulator

Binding/Non-binding	Estimate/Forecast year	STP
Binding	2025	13.89%
Non-binding	2026	11.79%
Midpoint	**2025/26**	**12.84%**

Source: Clean Energy Regulator

Cost of obtaining STCs

For the purposes of this report, we assume that the cost of STCs is equal to this STC Clearing House price of $40/STC ($2025/26).

Historically, the reported spot price of STCs has typically been at, or close to, this price of $40/STC.

11 This is determined by the Clean Energy Regulator. In recent years it has estimated it based on the simple average of STC forecasts made by consultants to the Clean Energy Regulator.

Cost of complying with the SRES

Based on the STC price discussed above, and the average of the binding 2025 STP and non-binding 2026 STP, the cost of complying with the SRES is $5.14/MWh ($2025/26).

Previous year SRES true-up

We have been asked by the ESC to include a true-up to the cost of complying with the SRES as calculated in the 2024/25 VDO. The true-up represents the difference between the estimated STP for 2025 that was used in the 2024/25 calculation of the cost of complying with the SRES, and the actual STP for 2025 that is now available.

The adjustment to the STC from 18.70% to 17.58%[12] results in a true-up of negative $0.45/MWh.

Table 6: Cost of complying with SRES, adjusted for the 2024/25 true-up

	Units	Cost ($/MWh, real 2025/26)
2025/26 cost of complying with SRES	$/MWh	$5.14
2024/25 SRES true-up	$/MWh	-$0.45
2025/26 cost of complying with SRES, adjusted	**$/MWh**	**$4.69**

Source: Frontier Economics analysis

12 Where 18.78% represents the midpoint between the binding 2023 STP of 16.29% and the binding 2024 STP of 21.26%.

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