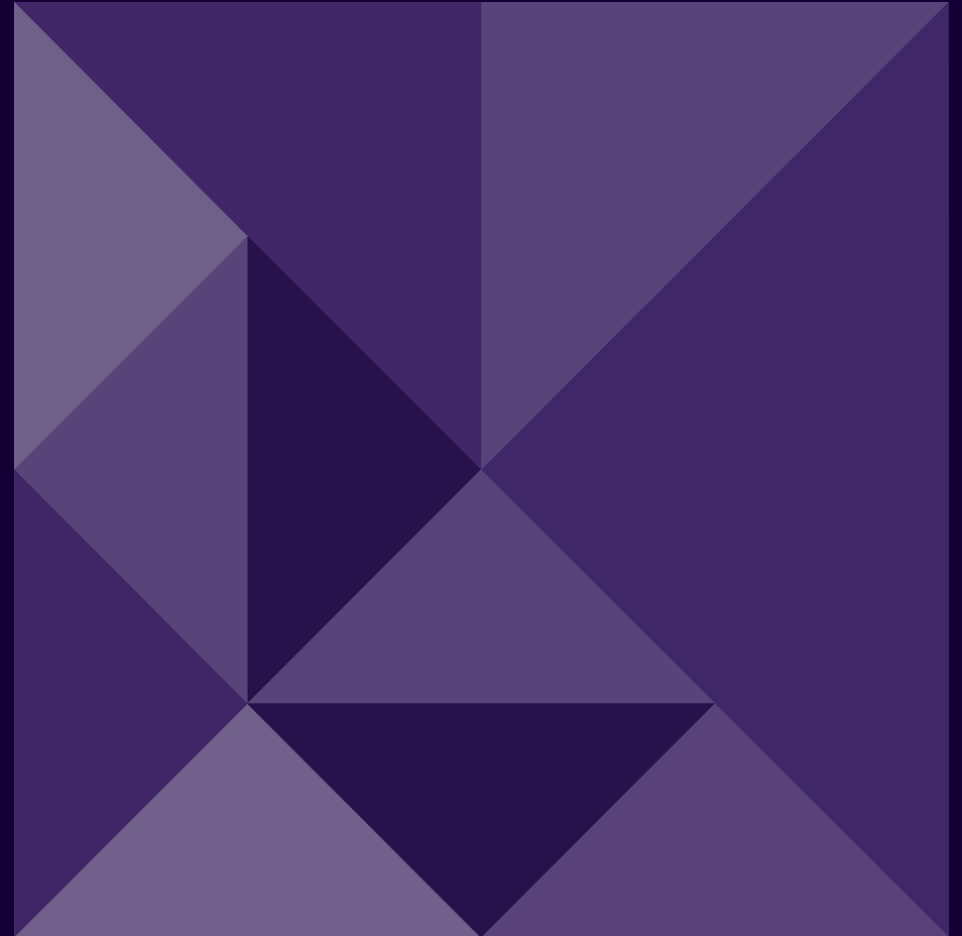


18 April 2023

Report to ElectraNet

Project EnergyConnect

Updated Analysis of Potential
Impact on Electricity Prices in
South Australia



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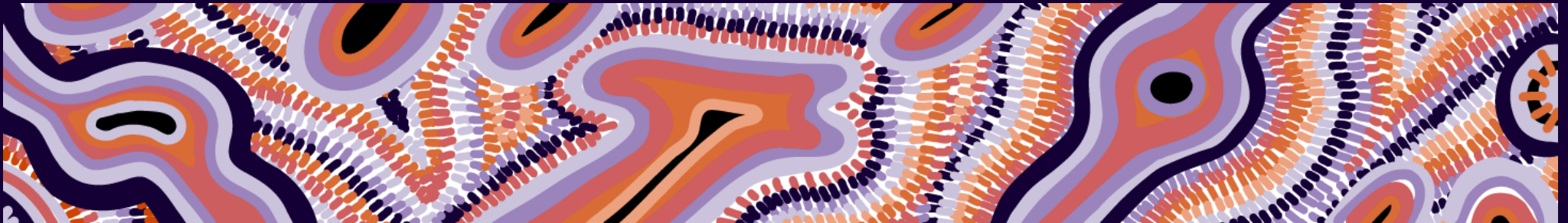
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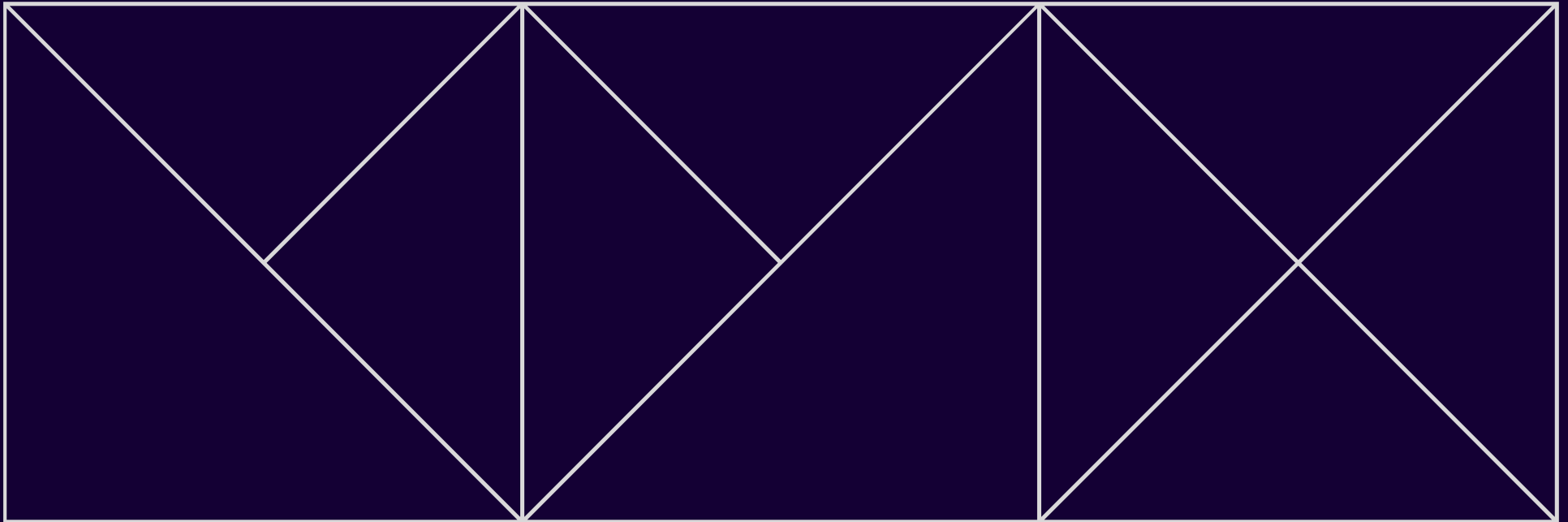


Goomup, by Jarni McGuire

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Executive summary



ACIL Allen was engaged by ElectraNet to estimate the impact that Project EnergyConnect (PEC), a new interconnector between New South Wales and South Australia, would have on wholesale electricity spot prices in the National Electricity Market (NEM) and, therefore, on retail electricity bills for residential and business customers in South Australia.

The modelling was conducted using *PowerMark*, ACIL Allen’s proprietary model of the NEM’s wholesale spot market and was based on our latest independent Reference case projection of the NEM.

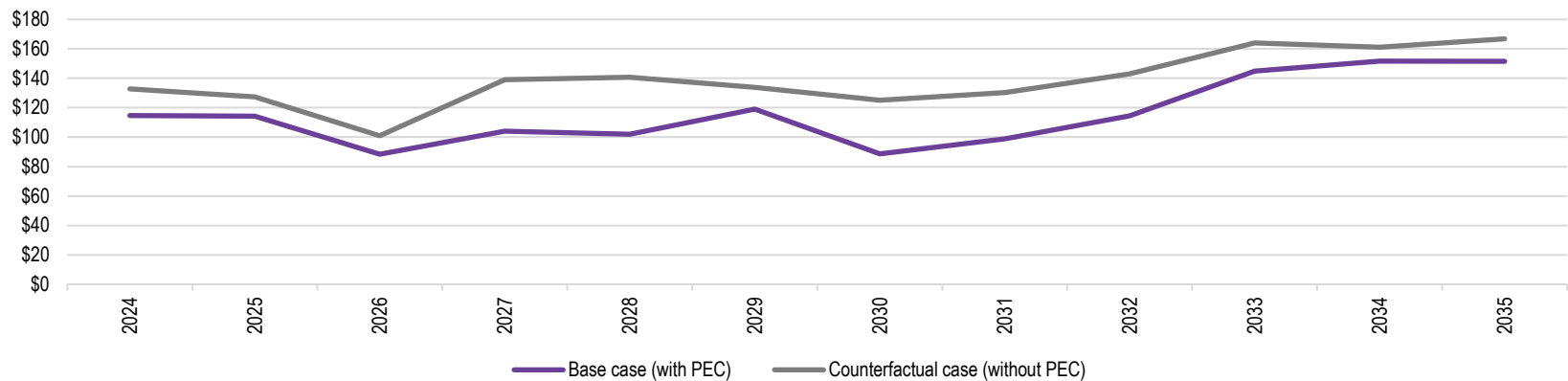
The modelling results are presented in nominal terms as requested by ElectraNet. The modelling results are presented for the period of 2024 to 2035.

PEC was assumed to have bi-directional transfer capacity of 800 MW between New South Wales and South Australia and contributes to an aggregate transfer limit of 1,400 MW between the two regions across PEC and the existing Heywood interconnector.

PEC was assumed to reach a capacity of 150 MW by 1 July 2024 and to operate at full capacity of 800 MW by 1 July 2026.

The modelling indicates that PEC is projected to place downward pressure on wholesale spot prices of electricity in South Australia – reducing the load weighted price (LWP) on average by about \$23/MWh for the period of 2024 to 2035. This is illustrated in Figure ES 1.

Figure ES 1 Projected load weighted wholesale spot price (\$/MWh, nominal) - with and without Project EnergyConnect

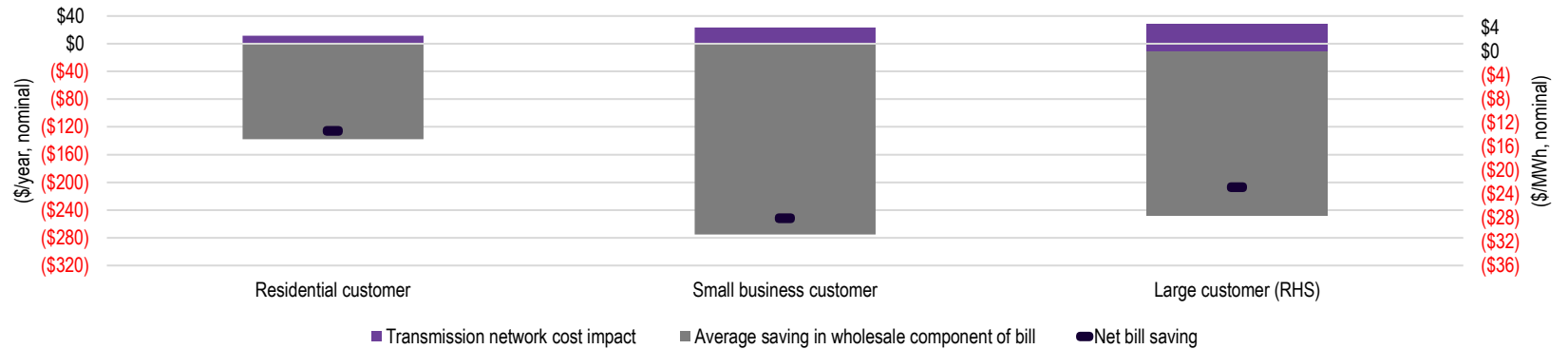


Source: ACIL Allen

Impact on retail electricity bills

The projected impact of PEC on customers' electricity bills is summarised in Figure ES 2 and Table ES 1.

Figure ES 2 Projected annual retail electricity bill impact (\$/year or \$/MWh, nominal) – by South Australian customer type (2026-2030)



Source: ACIL Allen

Table ES 1 Projected annual retail electricity bill impact (\$/year or \$/MWh, nominal) – by representative South Australian customer type (2026-2030)¹

	Residential customer	Small business customer	Large customer
Transmission network cost impact	\$10	\$20	\$4
Average saving in wholesale component of bill	-\$137.65	-\$275.29	-\$27.53
Net bill saving	-\$127.65	-\$255.29	-\$23.53
Annual consumption (kWh/annum)	5,000	10,000	N/A

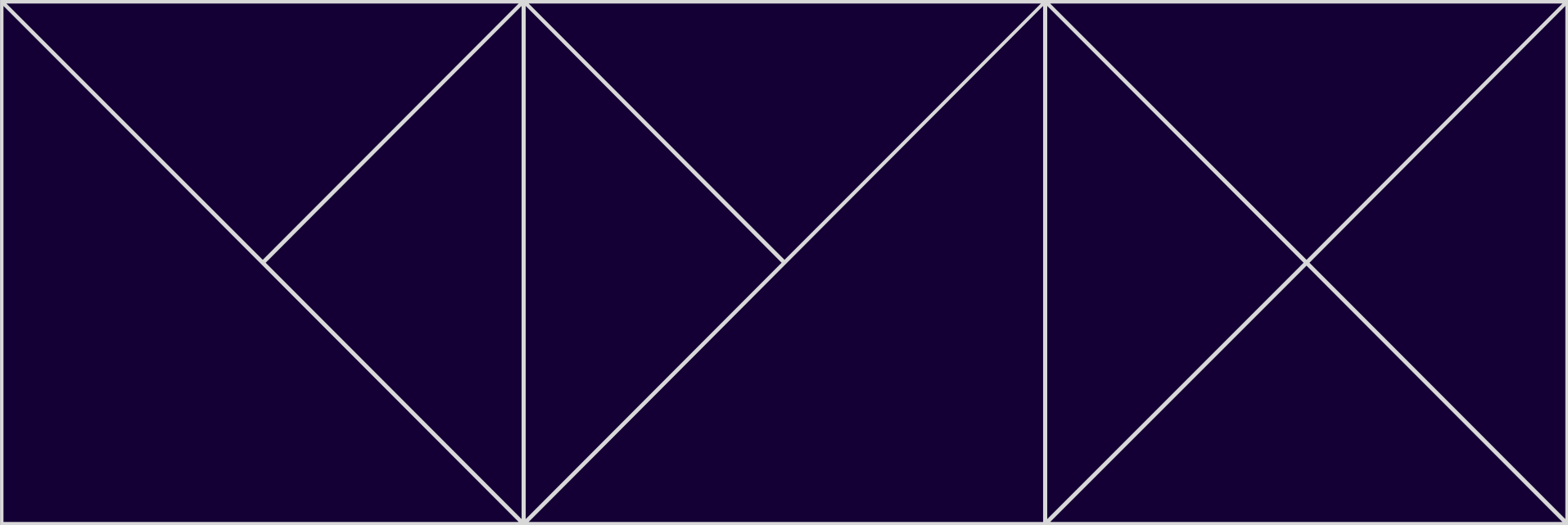
As the above figure and table show, on average in nominal terms from 2026 to 2030, the retail bill of a representative South Australian:

¹ We assume a fixed annual cost for residential and small business customers, and a cost per MWh for large customers to cover transmission network expenses.

- residential customer would reduce by \$128 per annum
- small business customer would reduce by \$255 per annum This bill reduction is larger than that of residential customers due to small businesses consuming more electricity than residential consumers.
- large business would reduce by approximately \$24 for each MWh of electricity used with the total impact varying substantially depending on the particular business in question.

The projected impact on electricity bills includes the amortised cost of PEC.

Introduction



ElectraNet is the electricity Transmission Network Service Provider (TNSP) in South Australia.

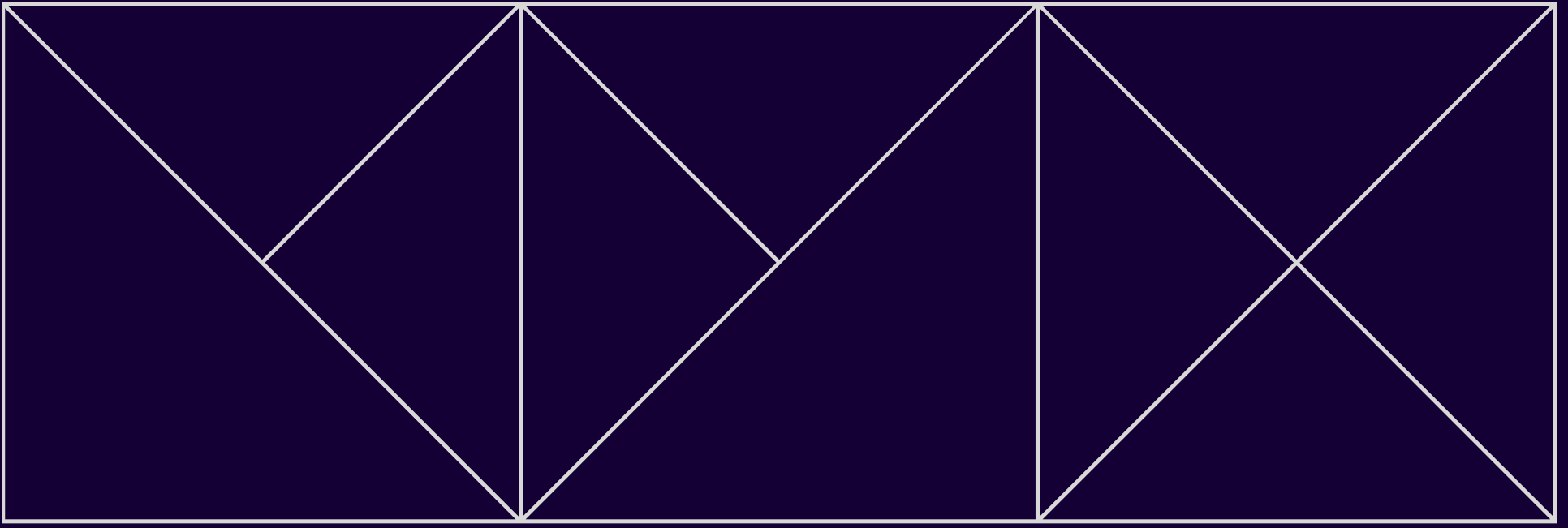
ACIL Allen was engaged by ElectraNet to provide an update to earlier modelling of the potential impact of Project EnergyConnect would have on wholesale electricity spot prices and, therefore, on customers' electricity bills in South Australia.

This report provides summary results of our analysis. Dollar values are presented in nominal terms unless noted otherwise. The projections were developed for calendar years 2024 to 2035.

The remainder of this report is structured as follows:

- Chapter 2 describes the methodology we used to model the potential impact of PEC on electricity prices, both wholesale and retail, which centred around PowerMark, our proprietary model of the National Electricity Market (NEM) wholesale electricity market.
- Chapter 3 provides the results from our electricity market modelling.

Methodology



We have modelled the impact of PEC on customers' electricity bills by considering the net impact it will have on:

- wholesale electricity spot prices in South Australia
- the transmission network costs associated with PEC recovered each year from customers.

The methodology for modelling the wholesale electricity market is discussed in section 2.1. The transmission network cost recovery estimates were provided by ElectraNet.

The way these were brought together to produce estimates of bill impacts is discussed in section 2.2.

2.1 Modelling the wholesale electricity market

The impact of PEC on wholesale electricity spot prices was assessed using *PowerMark*, ACIL Allen's proprietary model of the NEM's wholesale electricity market.

At its core, *PowerMark* is a simulator that emulates the settlements mechanism of the NEM. *PowerMark* uses a linear program to settle the market, as does AEMO's NEM Dispatch Engine in its real time settlement process.

A distinctive feature of *PowerMark* is its iteration of generator bidding. *PowerMark* constructs an authentic set of initial offer curves for each unit of generating plant prior to matching demand and determining dispatch through the market clearing rules. *PowerMark* encompasses re-bids to allow each major generation portfolio to seek to improve its position — normally to maximise uncontracted revenue, given the specified demand and supply balance for the hourly period in question.

PowerMark has been developed over the past 24 years in parallel with the development of the NEM, NEMS (Singapore) and WESM (Philippines). We use the model extensively in simulations and sensitivity analyses conducted on behalf of industry, regulatory, and government clients.

PowerMark routinely operates at *hourly* resolution, unlike the NEM spot market which is settled on a five-minute basis. Five-minute modelling is possible, but our experience is that hourly modelling has very little impact on the outcomes, but simplifies the model run time and analytical task substantially.

PowerMark relies on a range of assumptions, which are set out in section 2.1.1.

The scenarios modelled are discussed in section 2.1.2.

2.1.1 Assumptions

PowerMark is based on a large number of detailed input assumptions. For the most part these are drawn from our understanding of the physical and other properties of generators in the NEM and other relevant sources. ACIL Allen’s December 2022 Reference case² assumption set was used at the starting point for this analysis.

Wholesale spot price impacts of PEC were modelled up to 2035.

Table 2.1 Key Assumptions

Assumptions	Details			
Macro-economic variables	— Long term exchange rate of AUD to USD converging to 0.75 AUD/USD.			
	— The brent crude oil price is assumed to converge from current levels to USD65/barrel by the mid-2020s and remain at this level in the long-term.			
	— International thermal coal prices are assumed to converge from current elevated levels of about USD\$250/t to USD\$80/t by 2025.			
Market design/operational developments	— AEMO implemented five-minute settlement (5MS) in October 2021. Wholesale prices in this Reference case are still modelled on an hourly basis, since most of the movement in prices within each hour is insignificant when aggregated to the hourly level. Hence, the impact of moving to 5MS on modelled prices is negligible.			
	— No further changes to current market design or operation.			
Electricity demand	Underlying demand	Rooftop PV	Behind-the-meter BESS	Electric vehicles
	— AEMO Draft 2022 ISP Steady Progress scenario (energy and POE50 peak demand)	ACIL Allen’s in-house model of Rooftop PV uptake:	ACIL Allen’s in-house model of behind-the-meter BESS uptake (linked to rooftop PV model):	— AEMO’s Draft 2022 ISP Strong Electrification scenario
	— Aluminium smelters are assumed to remain operational throughout the projection period on the basis of lower projected electricity prices due to the various state-based schemes	NEM-wide Rooftop PV uptake is about 20 per cent higher than AEMO’s Central forecast by 2030, rising to levels of about 65 per cent higher than AEMO’s forecast by 2050.	— Higher NEM-wide uptake relative to AEMO Central forecast, about 38 per cent higher by 2050.	— ACIL Allen’s charging profiles: a blend of three charging behaviours which changes over time as charging infrastructure is developed. Includes an overnight charging profile, a daytime charging profile and a late evening/convenience charging profile.
	— To reflect a higher rate of NEM-wide electrification the Reference case includes annual electrification demand			

² ACIL Allen produces an independent Reference case projection of the NEM which is updated on a quarterly basis.

Assumptions	Details			
	from AEMO's Draft 2022 ISP Strong Electrification scenario.			
Federal greenhouse gas emission policies	—	Economy-wide 43 per cent reduction in GHG emission below 2005 levels by 2030 and net zero emissions target by 2050.		
	—	Retention of the LRET in its current form to 2030, with no extension beyond 2030.		
State based schemes	NSW	QLD	TAS	VIC
	NSW Roadmap capacity of: — 12 GW renewables by 2032 within designated REZ — 2 GW pumped hydro by 2030	Powering Queensland Plan: — CleanCo has been mandated to contract for a total capacity of 1 GW Queensland Energy and Jobs Plan (QEJP): — QRET target of 50% renewable energy generation by 2028 — 70% renewable energy generation by 2032 — 80% renewable energy generation by 2035 — 7 GW of long duration storage by 2035 — Our analysis shows that a further 15,000 MW of new wind and solar capacity will be required by 2035 to meet the QEJP targets	TRET, namely targets of 15,750 GWh (150 per cent) renewable energy by 2030 and 21,000 GWh (200 per cent) by 2040 Our analysis indicates that based on Tasmania's wind resource this amounts to about 1,100 MW by 2030 and 2,400 MW by 2040.	VRET targets of 40 per cent by 2025, 50 per cent by 2030 and 95 per cent by 2035. No new build is required in Victoria beyond what is already committed (noting that the target is calculated based on a percentage of total local energy dispatch). However, the second round VRET auction (VRET2) with a further six projects totalling 623 MW of grid based solar PV projects, as well as an additional 365MW/600MWh of battery storage has been included. Victoria energy storage targets: — At least 2.6 GW storage capacity by 2030 — At least 6.3 GW storage capacity by 2035 Offshore wind capacity target: 2 GW of offshore wind capacity by 2032
	SA	The government has indicated an ambition of 100 per cent net renewable energy by 2030.		

Assumptions	Details				
Electricity supply (beyond new supply driven by state based schemes)	Committed projects		Assumed new entry and closures		Projected new entry and closures
	<ul style="list-style-type: none"> — Named new entrant projects are included in the modelling where there is a high degree of certainty that these will go ahead (i.e., project has reached financial close) — Includes the Federal Government's Snowy 2.0 by 2028. 		<ul style="list-style-type: none"> — 400 MW of corporate PPAs across New South Wales and Victoria entering from mid-2024 to reflect the continued appetite by larger corporates to demonstrate their green credentials as well as reduce electricity costs ahead of the rollout of the various state-based schemes — Committed or likely committed generator closures included where the closure has been announced by the participant (Liddell in 2023, Torrens Island B by 2027, Eraring by 2027, Yallourn by 2028, Bayswater in 2033, Loy Yang A by 2035). 		<ul style="list-style-type: none"> — Beyond committed and assumed projects, only generic new entrants which are commercial are introduced within the modelling. — Closure of existing generators where the generator is projected to be unprofitable over an extended period of time or the generator's expected closure year as indicated to AEMO – whichever is earlier.
New entrant capital costs (renewables and storage)^a	Wind		Solar (single axis tracking)		Battery storage (eight hours)
	<ul style="list-style-type: none"> — \$2,145/kW in 2022 — \$1,837/kW in 2030 — \$1,601/kW in 2040 — \$1,496/kW in 2050 		<ul style="list-style-type: none"> — \$1,488/kW in 2022 — \$1,216/kW in 2030 — \$1007kW in 2040 — \$923/kW in 2050 		<ul style="list-style-type: none"> — \$2,856/kW in 2022 — \$1,505/kW in 2030 — \$1,115/kW in 2040 — \$1,043/kW in 2050
					Pumped hydro storage (eight hours)
					<ul style="list-style-type: none"> — \$2,350/kW in 2022 — \$2,317/kW in 2030 — \$2,278/kW in 2040 — \$2,240/kW in 2050
Gas prices into gas-fired power stations	<ul style="list-style-type: none"> — The Eastern Australian gas market is modelled in ACIL Allen's GasMark model. — Gas prices for power generation are assumed to: <ul style="list-style-type: none"> — commence the projection at \$20/GJ in 2022 — gradually decline to about \$12/GJ by the mid-2030s — converge to \$13/GJ by 2040. — However, between 2023 and the mid-2030s, gas prices are capped at \$12/GJ as part of the Government's response to high electricity prices 				

Assumptions	Details		
Coal prices into coal-fired power stations	ACIL Allen’s in-house understanding of the cost of thermal coal to the NEM’s coal-fired power stations, based on existing contracts with domestic mines and the plant’s exposure to the international export market. However, between 2023 and 2025, export coal prices are capped at AUD\$125/tonne as part of the Government’s response to high electricity prices.		
Hydrogen prices into hydrogen-fuelled Gas turbines	The Reference case introduces green hydrogen as a fuel type from 2040 onwards. Peaking plant and combined cycle gas turbines built after 2030 are assumed to be hydrogen-ready and will transition from natural gas to hydrogen from 2040 going forward. The cost of hydrogen as a fuel is projected to be \$2.48/kg (\$20.50/GJ) by 2040.		
Interconnectors	Existing interconnection Assumed transfer capabilities updated to reflect recent history and known constraints (e.g., related to planned outages as part of upgrade works).	ISP committed and actionable projects included: <ul style="list-style-type: none"> — QNI minor (July 2023) — EnergyConnect (Jul 2026) — Heywood upgrade (Jul 2026) — VNI Minor (Sep 2022) — VNI West (Jul 2028) — Marinus Link (two links: Jul 2028 and Jul 2031) — QNI connect (Jul 2029) 	Victoria’s System Integrity Protection Scheme The Big Battery is included as a 300 MW/450 MWh battery since 1 October 2021 (increases the VNI import limit by 250 MW in summer at peak times).
Marginal loss factors	ACIL Allen’s projections of average annual marginal loss factors (MLF) by generator DUID, developed using commercial power flow software. Our latest calibration with AEMO’s forecast has shown over 95 per cent of connection point values deviating by no more than 0.02 from the latest AEMO values for 2022-23.		
Constraints	<ul style="list-style-type: none"> — Thermal constraints which impact renewable energy zones in Western Victoria, South West New South Wales and Central New South Wales and result in generator curtailment greater than five per cent are included in the Reference case modelling. Stability limit constraints which have a material impact on QLD-NSW and VIC-NSW flows and regional prices during peak periods are also included. — Certain constraints are disabled once upgrades are installed. For example, EnergyConnect in 2026 is assumed to relieve some thermal constraints in South West New South Wales, and the VNI West upgrade in 2030 is assumed to relieve some constraints in Western Victoria. All constraints are disabled post 2030 due to the inherent uncertainty in the network upgrades beyond then. 		
<small>* ACIL Allen’s modelling considers battery storage technologies of varying duration – the four-hour batteries are the most prevalent duration option in our modelling results. Note: All dollar values in this table are presented in real 2022 AUD unless stated otherwise. Source: ACIL Allen</small>			

2.1.2 Scenarios analysed

The analysis presented in this report comprises two scenarios:

The Base case based on the December 2022 Reference case assumptions described above, with the following adjustments made:

- Inclusion of the South Australian Hydrogen Jobs Plan (250 MW of electrolysers and 200 MW of a hydrogen fuelled peaker) coming in by October 2025
- Project EnergyConnect is delivered in two stages: 150 MW by July 2024 and 800 MW by July 2026
- The X5 transmission line voltage stability constraint which limits NWWIC and SWNSW generators is assumed to be disabled from July 2026 upon commencement of PEC: “N^N_NIL_3 Out= Nil, limit power flow on line X5 from Balranald to Darlington Point (X5) to avoid voltage collapse at Balranald for contingency trip of any major 220kV line in NW Victoria”.
- Thermal constraints which impact renewable energy zones in Western Victoria, South West New South Wales and Central New South Wales are included and formulated for three different time slices: pre PEC, post PEC and post VNI West

The Counterfactual case, which differs from the Base case in the following way:

- Project EnergyConnect is assumed not to be developed, including the impact on the Heywood interconnector capacity
- Exclusion of Goyder wind farm, since given its location, is assumed not to be developed in the absence of PEC.
- The X5 voltage stability constraint which limits NWWIC and SWNSW generators is assumed to continue till 2035 in the absence of PEC.
- Thermal constraints which impact renewable energy zones in Western Victoria, South West New South Wales and Central New South Wales are included and formulated for two different time slices: pre VNI West and post VNI West.

For the purposes of this analysis, PEC was assumed to have the following properties:

- A full transfer capacity of 800 MW in either direction.
- Heywood interconnector limited to thermal capacity of 600 MW when PEC is in place.
- aggregate transfer limit of 1,400 MW across PEC and the existing Heywood interconnector.

An overview of the implementation schedule of PEC can be found in Table 2.2.

Table 2.2 Project EnergyConnect implementation schedule

Date	Heywood import	Heywood export	PEC import	PEC export	Combined import	Combined export
	MW	MW	MW	MW	MW	MW
Pre-Jan 2024	-500	460	NA	NA	-500	460

Date	Heywood import	Heywood export	PEC import	PEC export	Combined import	Combined export
1-Jul-24 – 30 Jun 26	-500	460	-150	150	-650	610
From 1-Jul-26	-600	560	-800	800	-1400	1360

Source: ACIL Allen

The modelling is based on the assumption that electrical losses on PEC will be the same as those on the Heywood interconnector, relative to the different capacity of the interconnectors.

2.2 Modelling the impact on customers' electricity bills

We have modelled the impact of PEC on residential, small business and large customers in South Australia.

We have assumed a representative residential customer consumes 5,000 kWh per annum, consistent with assumptions made by the Australian Energy Market Commission in its 2021 electricity residential price trends report³.

We have assumed a representative small business customer consumes 10,000 kWh per annum, which is consistent with the approach the Essential Services Commission of South Australia takes in its 2021-22 annual Energy Retail Offers Comparison Report.⁴

We also show the impact on large customers, although these customers are especially diverse in the amount of electricity they use. Therefore, rather than make a single assumption to convert the modelled impacts to annual bill impacts, those results are presented in terms of the impact per MWh used. They can be scaled to suit a given large business.

The impact of PEC on customers' electricity bills was assessed by considering the "building blocks" of retail electricity bills, namely:

- energy costs
- network costs
- retail operating costs and margin
- costs associated with environmental schemes

We have assumed that PEC will impact on the:

- energy costs building block through the impact on the wholesale electricity market

³ https://www.aemc.gov.au/sites/default/files/2021-11/2021_residential_electricity_price_trends_report.pdf

⁴ <https://www.escosa.sa.gov.au/ArticleDocuments/540/20220831-Energy-RetailPriceOffersComparisonReport2021-22.pdf.aspx?Embed=Y>

— the network cost building block through ElectraNet’s recovery of the costs for building and operating PEC.

PEC is assumed to have no impact on the other building blocks, that is, the movement in the other costs will be the same under the reference case and with PEC.

We note that changes in retail tariff structures and/ or the way customers use energy are quite possible over the timeframe. The former can be expected to flow from ongoing changes to the way distribution network services charge for the service they provide. Further changes in energy use at the residential level which may flow from improvements in energy efficiency, ongoing uptake of solar technology and the use of batteries could be expected. While we acknowledge that these changes might occur, we have not sought to incorporate them into the analysis, in part to allow comparison between our analysis and other presentations of retail bills, such as those in ESCOSA’s Energy Retail Offers Comparison Report.

The methodology for assessing the impact of PEC on the wholesale electricity market was discussed in section 2.1

ElectraNet provided estimates to us of the transmission network costs of building and operating PEC.⁵ The assumptions are shown in Table 3.1

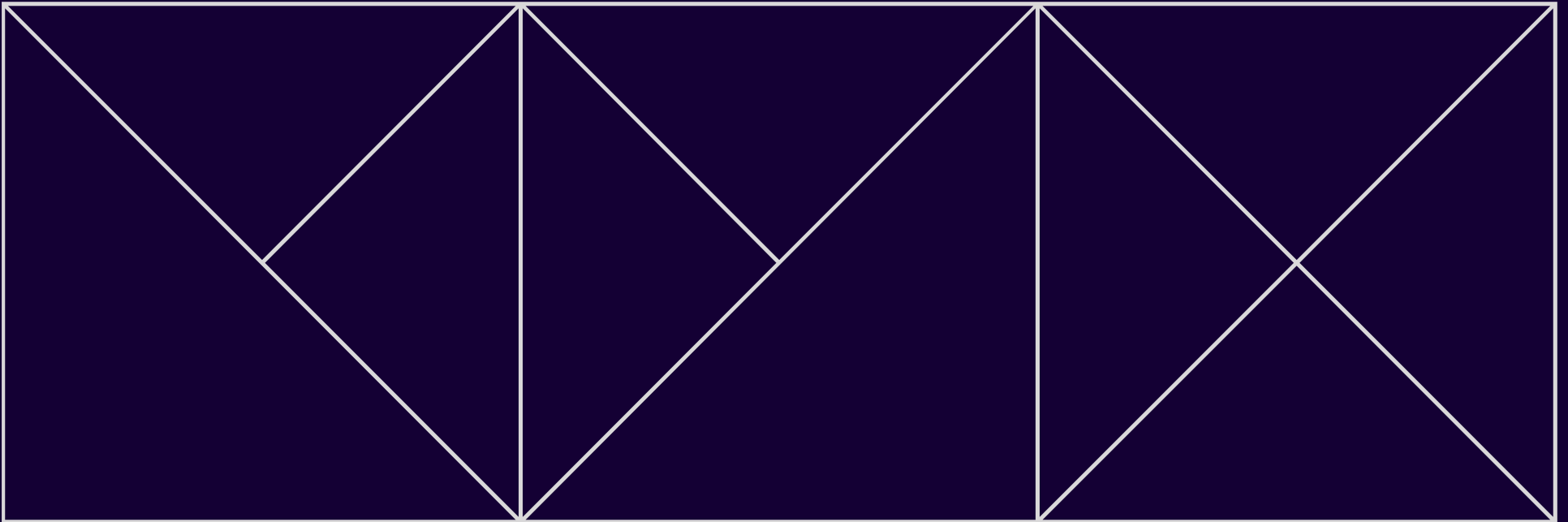
This report presents the change in the customers’ electricity bills rather than the level of the customers’ electricity bills.

The impact on customer bills, other than for large customers, is presented as the average of the annual projected savings from 2026 to 2030.

⁵ At this stage we have assumed that there will be no change in distribution network costs.

Results

3



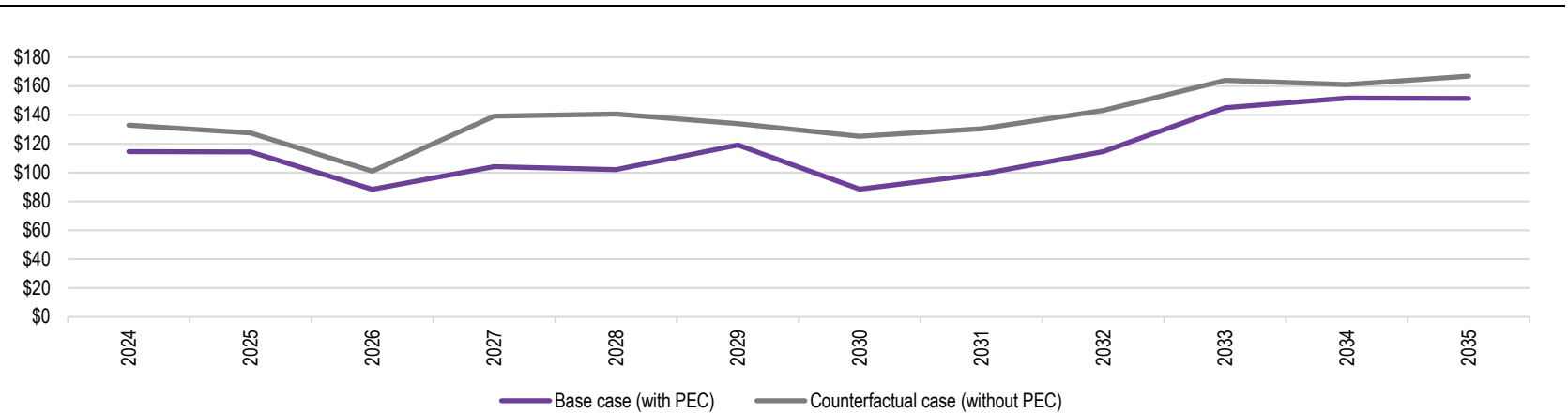
The results from the modelling are presented in this chapter. The results from the modelling of the wholesale electricity market are presented in section 3.1 and the projected changes in customers' electricity bills are presented in section 3.2.

All financial results in this section are in nominal terms (i.e., not adjusted for inflation).

3.1 Wholesale spot price analysis

The projected annual average load weighted price (LWP) of wholesale electricity in South Australia, for the Base case and the Counterfactual case is summarised in Figure 3.1.

Figure 3.1 Projected load weighted wholesale spot price (\$/MWh, nominal) with and without Project EnergyConnect

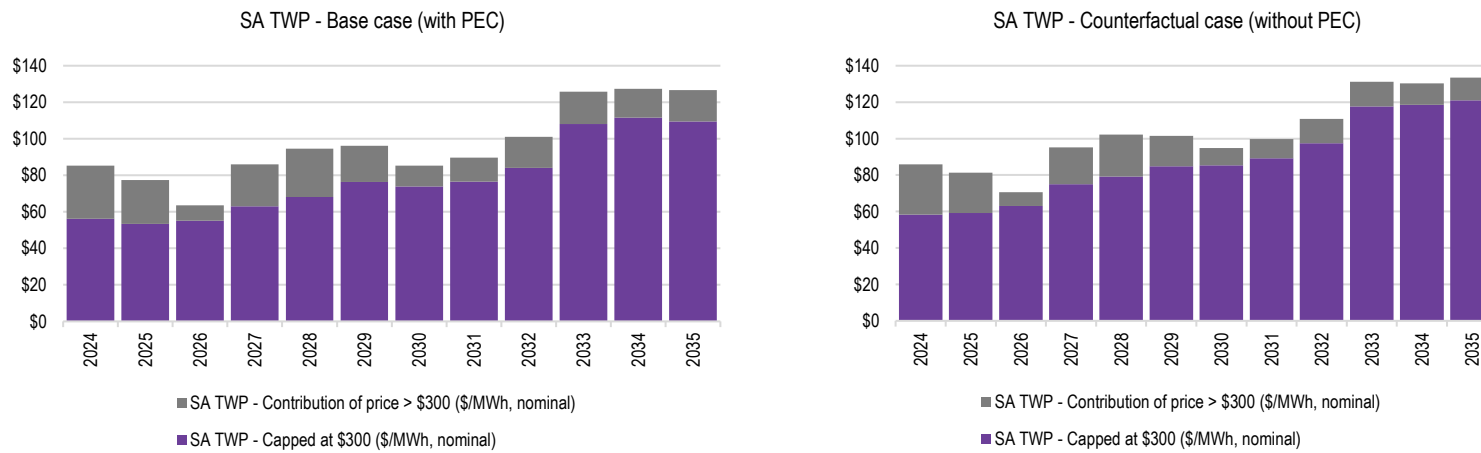


Source: ACIL Allen

Both scenarios indicate that the wholesale electricity spot price in South Australia will initially fall due to the continued development of renewable energy projects in the state and across the wider NEM, as well as the development of large-scale storage projects, driven by various state government renewable energy and storage targets. Additionally, the introduction of price caps on gas and coal puts further downward pressure on prices in the initial years of the projection period. However, the wholesale spot price of electricity is projected to increase between 2030 and 2035, primarily due to the closure of the majority of the coal plant fleet in the NEM.

The analysis shows that PEC will place downward pressure on wholesale spot prices of electricity in South Australia. The reduction in spot price is evident from PEC's first year of full operation in 2027. In the initial years, the projected reduction is substantial, with an average annual decrease of \$31/MWh between 2027 and 2032. Post 2032, the reduction tapers to around \$15/MWh.

Figure 3.2 Projected annual time-weighted prices (\$/MWh, nominal) - South Australia

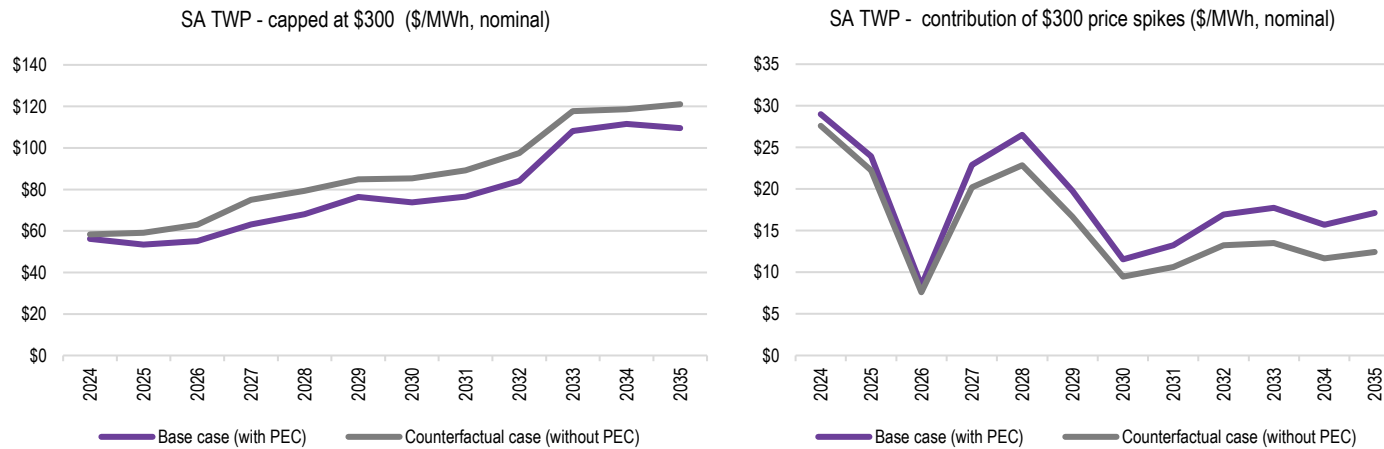


Source: ACIL Allen

Spot prices in the NEM are capable of ‘spiking’ to very high levels, which creates price risk for retailers and other customers buying electricity from the wholesale market. To manage this risk, several strategies can be employed, including exchange traded cap contracts, which limit exposure to prices above \$300/MWh – a commonly accepted threshold between ‘underlying’ and price spikes.

As shown in Figure 3.3, the presence of PEC is projected to reduce price spikes (above \$300/MWh) in the period of 2027-2032, with the impact diminishing over time. Conversely, underlying prices (below \$300/MWh) are projected to be, on average, \$12/MWh lower (in nominal terms) in the period of 2027-2032 with PEC in place.

Figure 3.3 Impact of PEC on underlying prices and price spikes – South Australia

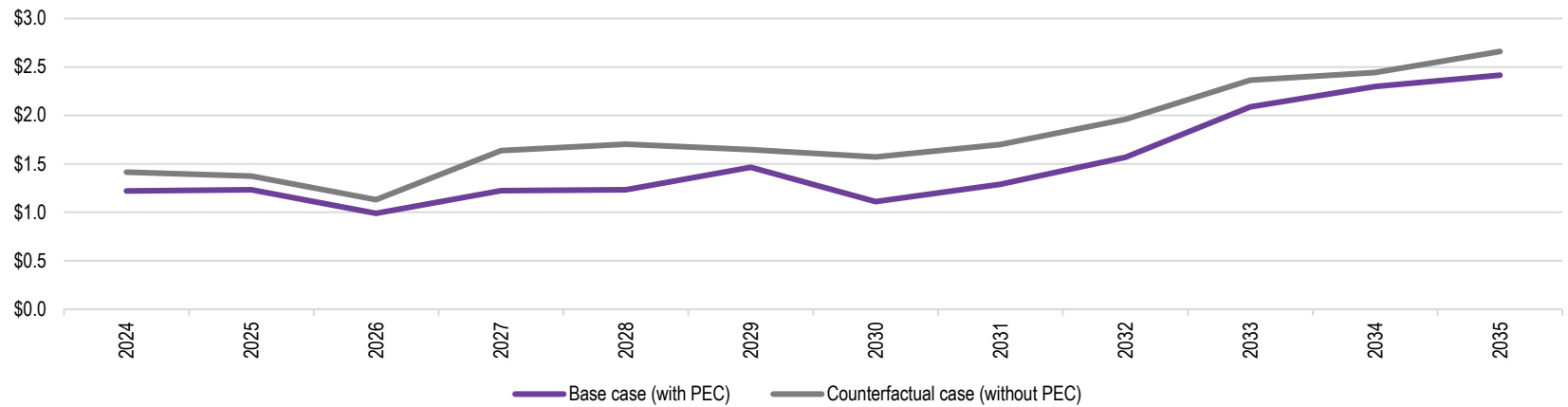


Source: ACIL Allen

PEC is projected to have a downward effect on both underlying prices and price spikes out to 2035. In the Counterfactual case, storage investment in addition to that of the Base case is projected to enter the market to fill the gap of PEC, and hence the differential in the value of price spikes between the two cases diminishes towards 2035. However, the additional storage capacity in the Counterfactual case also results in underlying prices to increase over the longer term due to an increase in amount of recharging occurring during daylight hours.

Further, Figure 3.4 represents the wholesale energy costs for both scenarios.

Figure 3.4 Projected annual Wholesale Energy Costs (\$'b, nominal) – South Australia



Source: ACIL Allen

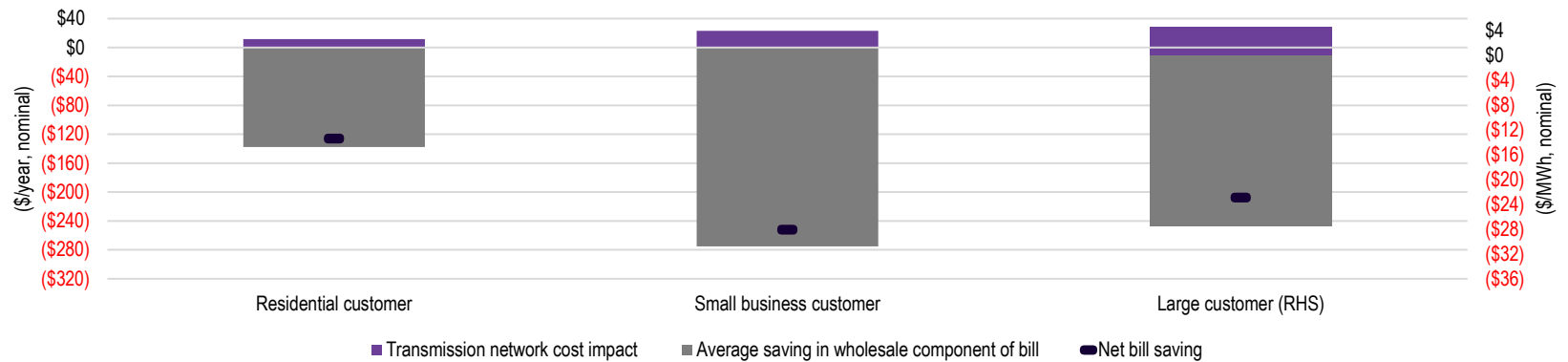
Throughout the entire modelling period, the Base case scenario shows lower energy costs compared to the Counterfactual scenario. The most significant difference occurs in 2028, where the energy costs are \$0.47 billion lower in the Base case scenario.

Overall, the total wholesale energy costs for the modelling period between 2024 and 2035 are \$3.46 billion lower in the Base case scenario.

3.2 Projected customer bill impacts

The projected impact of PEC on customer’s electricity bills is consistent with the projected change in wholesale spot prices. It is summarised in Figure 3.5 and Table 3.1.

Figure 3.5 Projected annual retail electricity bill impact (\$/year or \$/MWh, nominal) – by South Australian customer type (2026-2030)



Source: ACIL Allen

Table 3.1 Projected annual retail electricity bill impact (\$/year or \$/MWh, nominal) – by representative South Australian customer type (2026-2030)⁶

	Residential customer	Small business customer	Large customer
Transmission network cost impact	\$10	\$20	\$4
Average saving in wholesale component of bill	-\$137.65	-\$275.29	-\$27.53
Net bill saving	-\$127.65	-\$255.29	-\$23.53
Annual consumption (kWh/annum)	5,000	10,000	N/A

The accompanying figure displays two distinct impacts on retail bills. The first, depicted in purple, represents the annual cost of the interconnector, provided by ElectraNet, for each customer. The second, shown in grey, is the expected effect on the wholesale energy component of each yearly bill, averaged over the 2026-2030 period, in nominal terms.

⁶ We assume a fixed annual cost for residential and small business customers, and a cost per MWh for large customers to cover transmission network expenses.

According to the modelling results, the average annual representative residential customer bill is anticipated to decrease by \$128 in South Australia in nominal terms over the period of 2026 to 2030, with small business customers also projected to benefit from a reduction of \$255. Larger customers are predicted to save approximately \$24/MWh over the period in net terms, with the total impacts on their bills varying according to their usage.

As demonstrated in the figure, the projected savings resulting from wholesale spot electricity price reductions are expected to exceed the assumed effect of PEC on network use of system charges. The modelling indicates that energy cost savings for residential and small business customers in South Australia are expected to be around twelve times the additional transmission network cost on an annual basis between 2026 and 2030. For larger customers, savings are projected to be around five times the additional transmission network cost.

The following table displays the projected impact of the proposed PEC on the annual electricity bills of several illustrative medium-sized customers in South Australia, including a suburban hotel, supermarket, winery, fast-food restaurant, irrigating farmer, and service station. The annual consumption values were obtained from a publication by the South Australian government which was provided by ElectraNet. In addition, as advised by ElectraNet, a \$4/MWh transmission network cost was assumed to calculate the net saving.

Table 3.2 Projected annual retail electricity bill impact (\$ nominal) – by selected medium-sized South Australian customers (2026-2030)

Business	Annual Consumption (KWh)	Saving (Wholesale)	Saving (Net)
A suburban hotel in Adelaide	798,000	\$21,968	\$18,264
A suburban supermarket	674,000	\$18,555	\$15,426
A Barossa winery	656,000	\$18,059	\$15,014
A fast-food restaurant	743,000	\$20,454	\$17,006
An Adelaide plains farmer who irrigates	270,000	\$7,433	\$6,180
A suburban service station	509,000	\$14,012	\$11,650

The net savings in customer bills range from \$11,650 to \$18,264 (\$ nominal) per year during the 2026-2030 period, depending on the level of annual consumption.

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