Economic Regulation Authority

Electricity Generation and Retail Corporation regulatory scheme: 2023 effectiveness review

Report to the Minister for Energy

6 December 2023

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Economic Regulation Authority

Level 4, Albert Facey House

469 Wellington Street, Perth WA 6000

Telephone 08 6557 7900

Email info@erawa.com.au

Website www.erawa.com.au

This document can also be made available in alternative formats on request.

National Relay Service TTY: 13 36 77

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Executive summary

The Economic Regulation Authority has completed its sixth review of the effectiveness of the Electricity Generation and Retail Corporation (EGRC) scheme. The review considers the relevance and focus of the EGRC scheme in the new Wholesale Electricity Market (WEM) as the market continues to evolve and the State Government progresses its decarbonisation goals.

The ERA is recommending three amendments to improve the effectiveness of the EGRC scheme. Removing elements that do not provide benefits will reduce regulatory complexity and lower administration and compliance costs. Enhancing other elements will increase the value the EGRC scheme delivers and better meet its purpose to support competition as the market evolves.

The EGRC scheme has two main elements to deter anti-competitive behaviour. Firstly, Synergy is obliged to advertise standardised wholesale electricity contracts – called standard products – for sale and purchase. The second element, the disclosure mechanism, is intended to allow for detection of anti-competitive conduct. The EGRC scheme also requires Synergy to ringfence the flow of competitors' commercially sensitive information between its business units.

The ERA's first recommendation is that Synergy is no longer required to offer 'sell-side' standard products to entities that have access to sufficient generation assets.

The standard products regime remains necessary for market power mitigation in the wholesale electricity contracts market.[1] In assessing the standard products regime's effectiveness, the ERA considered the extent to which market participants can access standard products.[2]

Market participants, particularly those without access to sufficient generation assets, purchase energy forward through sell-side standard products to manage their exposure to variable real-time market prices. Retailers indicated that they use standard products to remain viable in the market but there were instances when they were unable to purchase them as all available quantities had been purchased.

Entities with access to sufficient generation assets already have a natural hedge to variable real-time markets and do not need the hedging provided through standard products. These entities that have access to their own generation may trade sell-side standard products speculatively – contrary to the purpose of the EGRC scheme – ultimately limiting access to sell-side standard products for other entities.

Restricting entities with sufficient generation assets from transacting sell-side standard products improves their availability for entities reliant on them for participating in the WEM.

The ERA has developed a framework that can periodically review and determine a threshold to identify which entities are eligible to access sell-side standard products. Instituting a threshold, based on an entity's access to generation relative to its retail load obligations, is an objective way to determine eligibility to access sell-side standard products. The framework will

1 Standard products are wholesale contracts for the sale and purchase of electricity for a future period at a set price. The EGRC scheme requires Synergy to provide standard products.

2 A 'sell-side' contract is when Synergy is selling electricity forward at a set price. In contrast, a 'buy-side' contract is when Synergy is purchasing energy forward at a set price. The ERA's analysis did not identify issues with market participants' access to buy-side contracts.

provide clarity and certainty to the market on which entities would be restricted from accessing sell-side standard products if the ERA's recommendation is implemented.

Second, the ERA recommends removing the disclosure mechanism.

The disclosure mechanism is ineffective in achieving its objective of identifying anti-competitive behaviour. The relevance of the disclosure mechanism has also diminished as the market has matured since 2014; current market conditions make it improbable that Synergy could engage in behaviour to effectively crowd out its competitors in the contestable retail market. Prohibitions on anti-competitive conduct, including predatory pricing, in the *Competition and Consumer Act 2010* (Cth) and the provision of standard products further reduce the need for an EGRC scheme disclosure mechanism.

Implementing this recommendation will reduce the EGRC scheme's complexity through removing the disclosure mechanism's components, which include the transfer price arrangements.[3]

Third, the ERA recommends removing the requirement to ringfence generator restricted information.

The ERA has not identified any benefit to the market in requiring Synergy to ringfence generator restricted information. This is information on Synergy's competitors that Synergy's wholesale unit obtains that cannot be shared with its generation unit. Synergy's generation unit does not directly engage in WEM trades, and the wholesale information that is currently generation restricted is unlikely to provide Synergy an unfair market advantage over its competitors in either wholesale or retail markets if it were provided to the generation business unit. Synergy incurs regulatory costs in administering and complying with this requirement with no identifiable benefits to market participants or market outcomes.

The ERA is not recommending any changes to the existing ringfencing of retail restricted information, which restricts the flow of sensitive information between wholesale and retail business units. This arrangement provides confidence to the market that Synergy is not using sensitive information available to its wholesale unit to the detriment of its competitor retailers.

[3] The main element of the disclosure mechanism – the requirement to publish quarterly segmented financial statements – was effectively removed by recent legislative reforms that affect government trading enterprises like Synergy. This is further explained in section 5.2 of this report.

1. Introduction

This report presents the ERA's recommendations from its 2023 review of the effectiveness of the Electricity Generation and Retail Corporation (EGRC) scheme. This is the ERA's sixth review of the EGRC scheme since it started in 2014.

The ERA reviews the effectiveness of the EGRC scheme every two years and provides a report to the Minister for Energy.[4] This report is prepared for the Minister and outlines the ERA's analysis and reasons for its recommendations.

This chapter provides an overview of the EGRC scheme and the ERA's approach to reviewing its effectiveness. Chapter 2 summarises the ERA's recommendations to improve the EGRC scheme.

The ERA first considered the relevance of the EGRC scheme in the new WEM and its effectiveness in promoting competition and mitigating Synergy's potential exercise of its market power (Chapter 3). Chapters 4 to 6 detail the ERA's findings and recommendations for each of the three main elements of the EGRC scheme.

1.1 Overview of the EGRC scheme

The EGRC, trading as Synergy, was created by a merger of the State Government-owned electricity generator Verve Energy and electricity retailer Synergy in 2014.

The State Government implemented the EGRC scheme, recognising that the newly merged entity was the dominant retailer and wholesale electricity supplier in the Wholesale Electricity Market (WEM) through its own generation and contractual arrangements with third-party generators. In 2023, Synergy continues to own around 50 per cent of wholesale electricity generation capacity and acquires energy from other generators through contractual arrangements.

The EGRC scheme comprises of the:

- *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* (EGRC Regulations).[5]
- *Electricity (Standard Products) Wholesale Arrangements 2014* (referred to as the standard products regime).[6]
- *Segregation and Transfer Pricing Guidelines 2020*.[7]

The EGRC scheme requires Synergy to internally separate itself into different business units. Synergy's wholesale business unit (WBU) is a major provider of wholesale electricity contracts and supplies market participants, including retailers who compete with Synergy's retail business unit (RBU). If Synergy were to exercise market power in the wholesale contracts

4 *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* (WA), 1 July 2023, Regulation 48, (online).

5 *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* (WA), 1 July 2023, (online).

6 *Electricity (Standard Products) Wholesale Arrangements 2014* (WA), Western Australian Government Gazette, No 73, 19 May 2014, p. 1577, (online).

7 *Segregation and Transfer Pricing Guidelines 202*0 (WA), Western Australian Government Gazette No. 111, 30 June 2020, p. 2264, (online).

market, this could decrease the profit margin of independent retailers to unsustainable levels. The EGRC scheme is needed to mitigate such a situation from occurring.

One of the main elements of the EGRC scheme that is designed to deter anti-competitive behaviour is to require Synergy to provide 'standard products', which are standardised wholesale electricity contracts. These standard products are small parcels of energy for quarterly, calendar and financial year terms that can be bought or sold as 'flat' or 'peak' products. Chapter 4 outlines the effectiveness of the standard products regime and its importance to mitigating Synergy's potential exercise of market power in the wholesale contracts market.

The EGRC scheme also establishes a disclosure mechanism that is intended to disclose and deter anti-competitive conduct. Prior to the commencement of the *Government Trading Enterprises Act 2023* (WA), the EGRC scheme required Synergy to publicly disclose segregated statements on the financial performance of each business unit. The disclosure mechanism requires Synergy to establish transfer pricing arrangements for trading wholesale electricity supplies between its wholesale and retail business units.[8] The other element of the disclosure mechanism provides for arm's length recording of wholesale trades between Synergy's WBU and RBU.[9] The effectiveness of the disclosure mechanism is discussed in Chapter 5.

The EGRC scheme also imposes obligations on Synergy to ringfence confidential information that its wholesale business unit (WBU) obtains from its competitors. The ringfencing obligation is separate to the standard products regime and the disclosure mechanism and complements the EGRC scheme's objective. This element of the EGRC scheme is discussed in Chapter 6.

The relationship between each EGRC scheme element and how it intends to achieve the scheme's objective is highlighted in Table 1.

Table 1. Overview of the EGRC scheme

EGRC scheme element	How it intends to achieve the scheme's objective
Standard products regime	Requires Synergy to make standardised wholesale contracts available and provides pricing discipline through a regulated maximum buy-sell price spread of these products.
Disclosure mechanism • Segmented financial statements • Non-discrimination • Transfer pricing arrangements	Public disclosure of Synergy's segmented financial statements may indicate instances of anti-competitive conduct and deter such conduct. The non-discrimination requirement and transfer pricing arrangements may inform the development of these segmented financial statements.
Ringfencing • Generation restricted information • Retailer restricted information	Restricts the flow of confidential information from Synergy's wholesale business unit to other business units. This is to address the information advantage that Synergy could have over its competitors.

8 *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* (WA), 1 July 2023, Regulations 9 and 11, (online).

9 Synergy must *not* discriminate between its RBU and competitor retailers and generators when supplying wholesale electricity to the RBU. *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* (WA), 1 July 2023, Regulation 22, (online).

1.2 The ERA's role

The ERA must 'carry out a review of the operation of the EGRC regulatory scheme for the purpose of assessing its effectiveness' every two years and prepare a report for the Minister for Energy on its findings and may make recommendations to improve the EGRC scheme.[10] When conducting its review, the ERA can also consider any prevailing circumstances in the South West Interconnected System (SWIS) and any other matters the ERA considers are relevant.[11]

The ERA does not have an audit role over Synergy's compliance with the EGRC scheme. The Office of the Auditor General assesses Synergy's compliance with the EGRC scheme.[12,13]

1.3 Review approach

The WEM is undergoing a transition in how electricity is being supplied and used. The State Government's electricity market reforms aim at addressing this change.[14] One aspect of the State Government's reform was the commencement of a new WEM design that commenced on 1 October 2023 to assist with this transition.[15]

In this review, the ERA has evaluated how the EGRC scheme will operate in the new WEM and reviewed evidence for the ongoing reliance by entities on wholesale electricity contracts from Synergy. The ERA considered what behaviour the elements of the EGRC scheme allow and incentivise, and whether this is consistent with the intent of the EGRC scheme and the purpose of its individual elements.

Consistent with past reviews, the ERA is reviewing the EGRC scheme against the following objective:

> To mitigate the potential for Synergy to exploit its market position as a dominant, vertically integrated electricity business, for the purposes of engaging in anticompetitive conduct, to the detriment of competing electricity generation and retail businesses and electricity customers.[16]

The ERA commenced this review by first establishing the ongoing need for the EGRC scheme to mitigate Synergy's potential exercise of market power in the new WEM. After establishing the need for the EGRC scheme, the ERA reviewed the effectiveness of the three main elements of the scheme – standard products regime, disclosure mechanism, and ringfencing arrangements – in meeting their purpose. The ERA considered the costs and benefits of each element for market participants and consumers.

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10 *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* (WA), 1 July 2023, Regulation 48, (online).

11 Ibid.

12 Ibid, Regulations 29-31, (online).

13 The Auditor General's latest audit report for the 2023/24 financial year: Office of the Auditor General, 2023, *Report 8: 2023-24, Financial Audit, Electricity Generation and Retail Corporation (Synergy)*, (online).

14 The ERA's WEM review provides an overview of the energy market transition. See: Economic Regulation Authority, 2022, *Triennial review of the effectiveness of the Wholesale Electricity Market 2022, Report to the Minister for Energy*, p.5, (online).

15 Wholesale Electricity Market Rules (WA), 3 November 2023, (online). The new market includes new market power mitigation measures. However, these do not apply to the wholesale contracts market.

16 Public Utilities Office, 2019, *Electricity Generation and Retail Corporation regulatory scheme – Response to 2016 report to the Minister for Energy on the effectiveness of the Scheme*, p. vi, (online).

The ERA has considered the likelihood of Synergy potentially exercising market power through marking up wholesale contract prices in the wholesale contracts market and predatory pricing in the contestable retail market.[17] To inform the assessment of the disclosure mechanism, this review explored how disclosure mechanisms in contexts other than wholesale electricity markets can prevent anti-competitive behaviour or indicate when such behaviour may be occurring.

In forming its recommendations, the ERA has considered feedback from stakeholders received in response to the discussion paper published on 15 September 2023.[18] Six submissions were received from Alinta Energy, Amanda Energy, Change Energy, Perth Energy, Shell Energy and Synergy.[19]

The ERA also met with interested stakeholders to receive feedback on the findings presented in the discussion paper and provided an online workshop to inform stakeholders. Stakeholder feedback, and the ERA's response, are detailed in Appendix 4.

17 The ERA considered running an imputation test to identify if the disclosure mechanism could identify anti-competitive behaviour. This informed the ERA's assessment of the effectiveness of the EGRC scheme's disclosure mechanism. Imputation tests assess if market power exercise results in a profit margin squeeze that would deter participation of retailers as efficient as the RBU from operating in the contestable retail market. Details on how a price squeeze would detect anticompetitive behaviour is in Frontier Economics' report (see Appendix 9).

18 Economic Regulation Authority, 2023, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

19 These submissions are published on the ERA's website, (online).

2. The ERA's findings and recommendations

The EGRC scheme remains necessary but can be improved

The ERA considers the EGRC scheme remains necessary as there are no mechanisms in the WEM Rules for mitigating Synergy's potential exercise of market power in the wholesale contracts market.[20] Introducing new market power mitigation tools for this market would be difficult, partly because many bilateral contracts between market participants are confidential. The ERA's analysis underpinning this finding is provided in chapter 3.

As it has found in each previous review of the EGRC scheme, the ERA concludes that the EGRC scheme can be improved to better meet its purpose. The ERA recommends three changes to improve the effectiveness of the EGRC scheme, which are highlighted below and detailed in chapters 4 to 6 of this report. Suggested actions to implement the ERA's recommendations are detailed in Appendix 3.

Summary of Recommendations

1. Synergy is no longer required to offer 'sell-side' standard products to entities that have access to sufficient generation assets.
2. Remove the disclosure mechanism.
3. Remove the generation restricted information ringfencing requirement.

Restrict access to standard products

The standard products regime mitigates Synergy's potential exercise of market power in the wholesale contracts market by requiring Synergy to provide competitors with access to risk management tools, through standard products. Standard products also provide an additional benefit of providing discovery of forecast future electricity prices.

Market participants without sufficient access to generation use 'sell-side' standard products to manage their risk exposure to variable real-time market prices. However, entities that have in-house generation capacities, and thus a natural hedge, may transact in sell-side standard products speculatively – contrary to the purpose of the standard products regime.[21] Speculative trades limit access to sell-side standard products for entities needing these products to manage their risk, which is one of the objectives of the standard products regime.

The ERA recommends that Synergy no longer be required to offer 'sell-side' standard products to entities with access to sufficient generation assets (see section 4.3).

Allowing ongoing access to standard products for market participants that require standard products to hedge their positions against the uncertainty and volatility of real-time market prices will support a level playing field in the WEM.

[20] The new WEM, which commenced on 1 October 2023, also does not have any market power mitigation measures that apply to the wholesale contracts market. Wholesale Electricity Market Rules (WA), 3 November 2023, (online).

[21] A 'sell-side standard product' is those standard product transactions relating to Synergy selling energy forward at a fixed price. In contrast, a 'buy-side' contract is when Synergy is purchasing energy forward at a set price. The ERA's analysis did not identify issues with market participants' access to buy-side contracts.

The ERA has developed a framework which can be implemented to identify and determine which entities have sufficient generation assets that are recommended to be restricted from transacting sell-side standard products (section 4.3.1).

Remove the disclosure mechanism

A disclosure mechanism provides value where it can be used to detect and discourage anti-competitive conduct that may occur. The ERA has found that the EGRC scheme's disclosure mechanism is not an effective market power mitigation tool in disclosing anti-competitive conduct in the WEM's wholesale contracts and contestable retail markets. In addition, the disclosure mechanism is not fit for purpose given the market has evolved since the EGRC scheme's inception in 2014.

Removing the disclosure mechanism will not reduce the effectiveness of the EGRC scheme as it does not provide benefits to the market and has the benefit of reducing administrative and compliance costs.

The ERA evaluated options to improve the disclosure mechanism, including considering strengthening the existing reporting requirements to require Synergy to provide more detailed segregated financial data.[22] The ERA found that the incentives that exist outside the EGRC scheme for Synergy to behave competitively in the retail electricity market remove the need for the disclosure mechanism.

The analysis underpinning this recommendation is provided in chapter 5.

Remove the generation restricted information ringfencing requirement

The ERA has considered the benefits of maintaining Synergy's information ringfencing obligations for:

- Retail restricted information, which restricts the flow of information being disclosed to Synergy's retail business unit (RBU).
- Generation restricted information, which restricts the flow of information being disclosed to Synergy's generation business unit (GBU).

For retailers that transact wholesale electricity contracts with the WBU, ringfencing on retail restricted information provides confidence that Synergy will not share confidential retail competitor information with the RBU. This information sharing could allow Synergy to undercut its retail competitors or increase margins whilst maintaining its market share.

The ERA's analysis indicates the requirement to ringfence retail restricted information benefits the market. Therefore, the ERA is not recommending any changes to this aspect of ringfencing.

However, the ERA has not identified any benefits of preventing generation restricted information being exchanged between Synergy's wholesale and generation business units. Given that GBU is concerned with operating Synergy's generators, it is unlikely that GBU having access to generation restricted information would provide Synergy an unfair market advantage over its competitors in the wholesale or retail markets. The ERA did not receive any feedback from stakeholders identifying the effect of GBU having access to generation restricted information on market outcomes or competition in the market.

[22] This options analysis was presented in the ERA's discussion paper for stakeholder feedback previously and is summarised in Appendix 8 of this report.

Given the lack of any benefits of maintaining generation restricted information ringfencing, the ERA is recommending that this requirement be removed. Removing this element of ringfencing is unlikely to be detrimental to competition in the market and lowers Synergy's costs of administering and complying with the EGRC scheme. This may ultimately flow through to consumers if competition in the contestable market is effective. This is further explained in chapter 6.

3. Necessity of the EGRC scheme

To assess the necessity of the EGRC scheme, the ERA has considered the following questions:

- Do market participants need wholesale contracts? Without demand for wholesale contracts, the EGRC scheme would not be required to constrain Synergy's potential exercise of market power in the wholesale contracts market.
- Can Synergy influence wholesale contract prices? If Synergy is unable to influence wholesale contract prices through mark-ups or restricting access, the EGRC scheme may not require market power mitigation mechanisms like standard products.
- Are there any risks to the ongoing provision of wholesale contracts for Synergy? Synergy's expected change in its net energy position may increase the cost to Synergy of providing wholesale contracts.
- Do other regulatory measures provide oversight of market power in the wholesale contracts market and predatory pricing in the contestable retail market? Overlapping regulatory provisions contribute to unnecessary compliance and administration costs.

The ERA's findings are informed by stakeholder feedback, the volume of wholesale contracts declared to the Australian Energy Market Operator (AEMO), information the ERA has received from Synergy, feedback from stakeholders, public information around WEM participation, market surveillance data available to the ERA, reviews of similar regulatory mechanisms in other jurisdictions, and technical advice from Frontier Economics.[23]

3.1 Overview of the WEM

As context for the necessity of the EGRC scheme, this section provides an overview of the wholesale markets and of the market power mitigation and administered schemes that exist to protect consumers within the WEM.

The WEM contains a real-time market for generators to trade electricity with retailers.[24] All wholesale generated electricity must be offered into the real-time market. The short-term energy market (STEM) and wholesale contracts market allow generators and retailers to manage their exposure to the risk of price variation in the real-time market. These arrangements are illustrated in Figure 1. Market participants may notify AEMO of quantities that they have agreed to trade bilaterally at pre-agreed prices.[25]

Bilateral wholesale contract trades allow market participants to lock-in a price for the electricity they supply or purchase from days to years in advance of the real-time market trading intervals. Electricity retail businesses enter contracts to supply electricity to end consumers at a fixed price, however the cost of acquiring this electricity on the real-time market is uncertain for retailers. Retail businesses can enter wholesale contracts to lock-in the price of electricity regardless of the real-time market price. This allows retailers to mitigate the risk of electricity costs being higher than they expect when they sell retail products. Similarly, generators can

[23] Frontier Economics' report is provided in Appendix 9.

[24] The WEM also contains other markets and administrative procurement mechanisms to provide other services. System restart service and reserve capacity, for example, are procured through administrative mechanisms that assist AEMO to procure services efficiently on behalf of consumers.

[25] When settling trades in the real-time market, AEMO deducts the quantity of electricity that is traded bilaterally (or through the STEM) from the amount to be settled at the cleared real-time market price, because parties to such contracts settle those contracted volumes bilaterally at the pre-agreed prices (or at STEM cleared prices, as applicable).

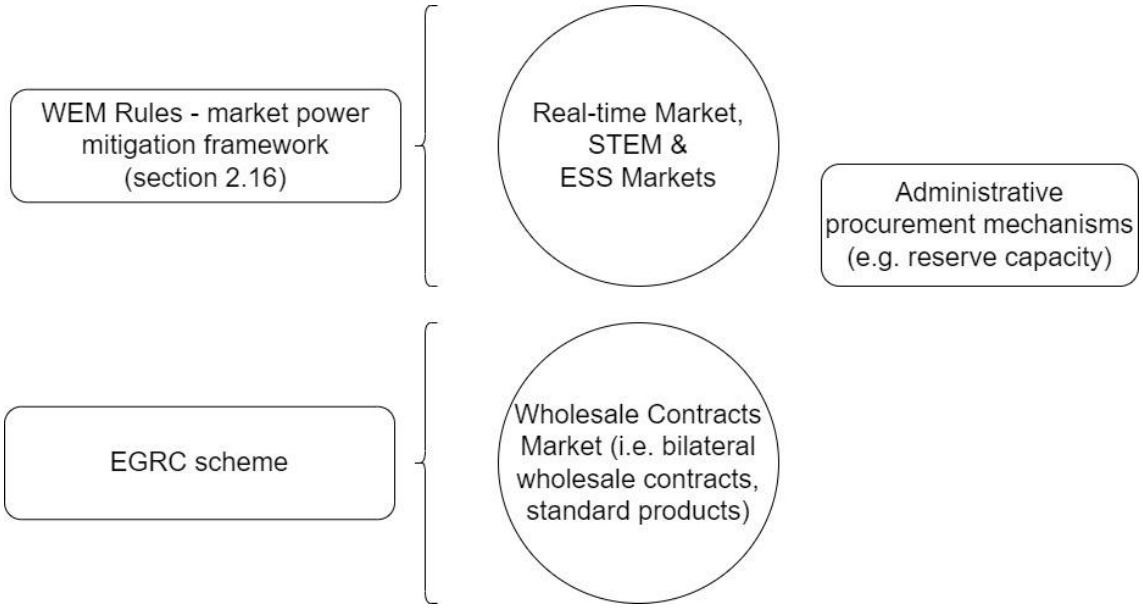
use wholesale contracts to hedge against real-time market price volatility to acquire revenue certainty.

Figure 1. Markets in the WEM

Source: ERA analysis of market information

Market power mitigation measures cover the real-time market, STEM and frequency control essential system services markets (outlined in Figure 2).[26] These measures aim to promote efficient procurement of services by reducing the risk of market participants including markups – beyond costs incurred – in their offers.

Figure 2. Market power mitigation measures in the WEM



Source: ERA analysis of WEM information.

Effective market power mitigation in the wholesale contracts market benefits retailers that use wholesale electricity contracts to manage their financial risk. The exercise of market power in

[26] Wholesale Electricity Market Rules (WA), 3 November 2023, Rule 2.16, (online).

the wholesale contracts market can raise input costs for retailers, which ultimately leads to consumers overpaying for electricity.

The WEM Rules are silent on market power mitigation in the wholesale contracts and retail markets. The EGRC scheme constrains Synergy's potential exercise of market power in the wholesale contracts and retail markets but does not extend to the behaviour of other market participants.[27]

3.2 The market needs wholesale contracts

Retailers and generators without access to generation assets rely on wholesale contracts to manage their exposure to the risk of variable real-time market prices. This reliance on wholesale contracts is continuing in the new WEM and may increase as market participants adjust to the new co-optimised energy and essential system services (ESS) markets.

A substantial share of energy in the WEM is bilaterally traded (Figure 3).[28] Since the EGRC scheme commenced, the quantity of energy underpinning all wholesale contracts traded bilaterally with third parties (declared to AEMO) has varied between approximately 39 and 57 per cent of total annual electricity consumption in the SWIS.[29] Figure 3 demonstrates the degree to which market participants have access to their own generation assets to manage their exposure to the risk of variable real-time market prices (shown in Figure 3 as self-nominations). Since the inception of the EGRC scheme, approximately 36 to 52 per cent of generation was nominated for self-use, that is an entity being covered by its own generation to serve its own retail customers.

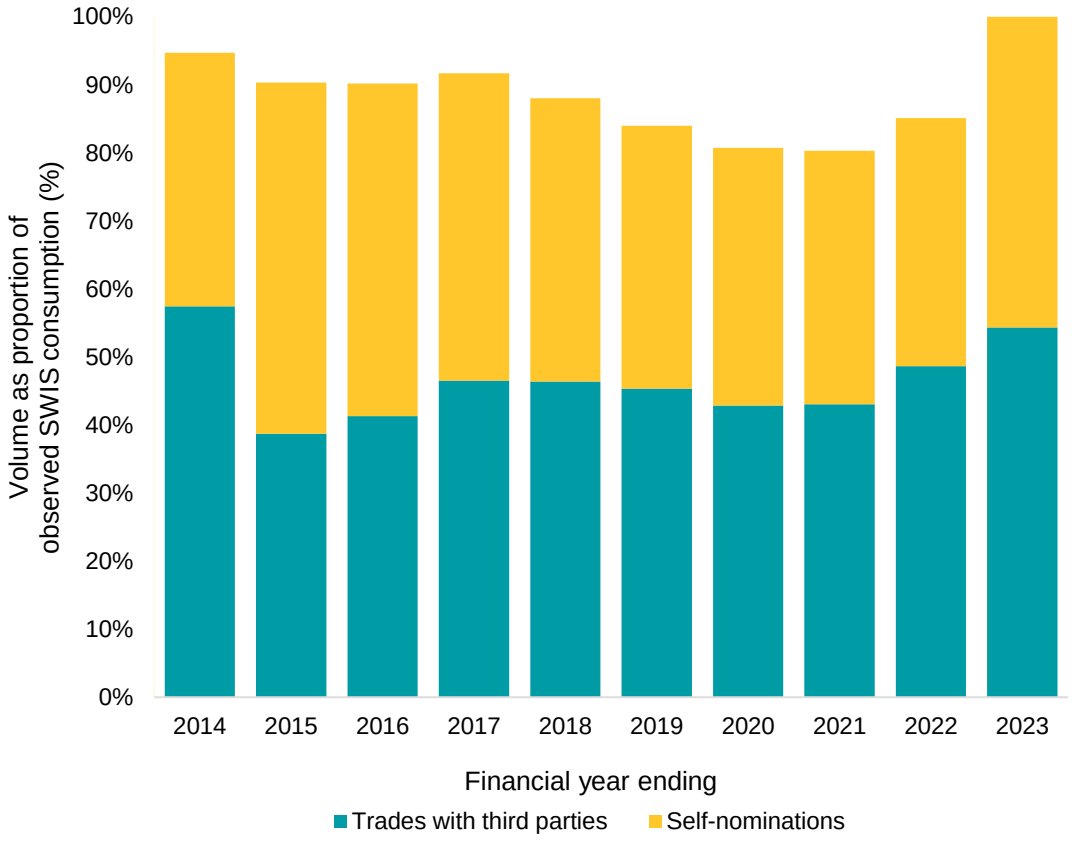
The ERA's review of Synergy's wholesale contract transactions shows that it trades with both small and large market participants. Some small retailers hedge a significant proportion of their consumption through wholesale contracts with Synergy, highlighting the vulnerability of these small retailers if Synergy were to exercise market power in the wholesale contracts market.

27 The retail market in the WEM comprises of the contestable and non-contestable segments. Customers in the non-contestable segment are serviced solely by Synergy and comprise of households and small businesses. Synergy competes in the contestable market for market-based contract customers and those based on regulated retail tariffs.

28 This analysis is based on data available for contract quantities declared to AEMO (Figure 3) and data provided confidentially by Synergy to the ERA.

29 Based on operational demand in the SWIS.

Figure 3. Annual wholesale contract quantities and quantities self-nominated as percentage of total energy consumption in the the SWIS



Source: The ERA's analysis of bilaterally contracted quantities declared to AEMO and the total electricity generation in SWIS sourced from SCADA.

Note: The volume of energy traded under wholesale contracts may be larger than that displayed in Figure 3 as not all wholesale contracts are declared to AEMO.

In response to the EGRC scheme review discussion paper, the ERA received stakeholder feedback that highlighted the importance of wholesale contracts for small and medium-sized retailers' business operations:

> Given the very limited contracts available from other generators, Synergy's standard products are of great value. They are the only contracts that smaller retailers can be assured of securing which makes them essential for the ongoing survival of smaller retailers.[30]
>
> There are limited alternatives to Synergy's wholesale contracts for retailers, as other vertically integrated participants tend to withhold any available energy for the benefit of their retail operations rather than sell it to a third-party competitor.[31]
>
> Currently there are no alternatives [to Synergy's wholesale electricity contracts] available from other large generators.[32]

30 Perth Energy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

31 Change Energy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

32 Amanda Energy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

Synergy is the main supplier of risk management products in the WEM as it provides wholesale contracts through customised and standard products.[33,34]

Given the size of the wholesale contracts market and its importance for retail focused market participants, the ERA considers cost-reflective wholesale contracts remain necessary for the effective functioning of the WEM and that the effective regulation against the potential exercise of market power in the wholesale contracts market is critical.

3.3 Synergy can influence wholesale contract prices

The ERA's analysis considered whether Synergy can influence wholesale contract prices. If Synergy can influence wholesale contract prices through mark-ups or access restrictions, and there are no other market power mitigation measures in the wholesale contract markets, then the EGRC scheme should require market power mitigation mechanisms like standard products. This analysis supports the ERA's conclusion that the EGRC scheme remains necessary.

A firm can influence market prices where there are limited alternatives to obtain that good or service. In these situations, firms supplying these limited products can take advantage of the situation by:

- Increasing prices when demand is relatively insensitive to price changes, allowing them to retain customers despite higher prices.
- Imposing favourable terms for product sales, benefiting the supplying firm at the expense of purchasing firms.

The opportunities for Synergy to influence wholesale contract prices arise from a lack of rivals and offers into the wholesale contracts market, which leaves Synergy as the dominant supplier. The ERA considered several measures and sources of information when assessing Synergy's ability to influence wholesale contract prices, such as:

1. **Synergy's share of wholesale contract quantities:** Since the merger, Synergy's share of contracted volumes with third parties are substantially more than those traded between third parties.[35]

2. **Synergy's share of generation capacity:** The WEM is a highly concentrated market.[36] Synergy retains a substantial share of generation capacity and energy generation, accounting for over half of the market, indicating that retailers have limited options when looking for electricity providers to contract. Synergy's power purchase agreements with third parties are expected to further increase its share of generation capacity, which means that retailers have even more limited choices outside of contracting with Synergy.

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33 Customised products are bilateral contracts that are tailored to meet the needs of the counterparty trading with Synergy. Typically, bilateral contracts between market participants are confidential, with terms in the contracts, such as price, contract period and other conditions, known only to the contracting parties.

34 This is also consistent with the CCA which requires a corporation or related body corporate that generates electricity to offer electricity financial contracts. An electricity financial contract is a contract that payments under which are derived from the price of electricity on an electricity spot market. *Competition and Consumer Act 2010* (Cth), Section 153F, (online).

35 The difference in volumes could be due to the scarcity of alternatives to Synergy and the attractiveness of Synergy's products in terms of price and conditions. See Appendix 7 for the ERA's analysis.

36 Appendix 7 includes the ERA's analysis of the Herfindahl-Hirschman Index, which is used to measure market concentration.

However, the ERA notes Synergy's uncertain future capacity outlook given the planned retirement of its coal generation fleet by 2030.[37]

3. **Synergy's conduct in pricing wholesale contracts:** Synergy remains the dominant supplier of wholesale electricity contracts in the WEM, granting it the ability to influence prices and wholesale contract conditions within the market.[38] The ERA is not aware of any other market participant that advertises wholesale contracts for sale or any financial institution that actively trades in financial contracts relating to electricity in the WEM.

4. **Feedback from stakeholders:** Market participants indicated that Synergy is the primary supplier of wholesale contracts due to limited alternative suppliers for the required electricity amounts or, where there were offers from other sources, they were at unattractive prices. Pursuing contracts with other suppliers was not commercially sensible for some stakeholders.[39]

Based on evidence available, the ERA considers Synergy can influence wholesale contract prices and therefore the EGRC scheme remains necessary to mitigate the potential exercise of market power in the wholesale contracts market. Further details on this analysis are contained in Appendix 7.

3.4 Risks to the future provision of wholesale contracts

This section considers the changes in Synergy's net energy position – and implications for Synergy's capacity to act as a market maker for wholesale products – which informs the assessment of the effectiveness of the standard product regime presented in chapter 4.

Entities with a net energy surplus – with respect to the sale, acquisition and generation of electricity – have commercial incentives to sell energy forward with wholesale contracts. The forward sale of energy reduces an entity's revenue exposure to the risk of variable real-time market prices. Entities with a net energy deficit may be incentivised to buy energy forward. This means that the incentives for (and benefits from) the forward sale of electricity decreases as an electricity market participant's net energy surplus decreases.

At the time of the EGRC scheme's inception in 2014, Synergy had a significant surplus of energy through direct ownership of several generation plants and control over the generation of other plants. However, the State Government has recently announced the retirement of Synergy's coal plants by 2030.[40] This will reduce Synergy's future generation capacity, which may reduce Synergy's net energy position over time. As a result, Synergy's incentives and resulting benefits to sell its electricity forward (that is, sell-side standard products) may decrease. Synergy has provided feedback to the ERA that its future energy position is uncertain.[41]

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37 Government of Western Australia media statement, 20 June 2022, 'State-owned coal power stations to be retired by 2030 with move towards renewable energy', (online) [accessed 17 November 2023].

38 Dominant firms can strategically limit the supply of a product to manipulate prices. By reducing the availability of a product, they can increase its price and thereby enhance their profits. A vertically integrated dominant firm can also use this strategy in the supply of a product in the upstream market – which is essential for market players in the downstream market - to deter competitors from participating in the downstream market.

39 Stakeholder feedback is summarised in Appendix 4.

40 Government of Western Australia media statement, 20 June 2022, 'State-owned coal power stations to be retired by 2030 with move towards renewable energy', (online) [accessed 17 July 2023].

41 Synergy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

If Synergy faces a net energy deficit, Synergy's provision of sell-side standard products is unlikely to serve the purpose of the EGRC scheme as selling energy forward will increase Synergy's exposure to the risk of real-time market prices. Synergy will require a substantial risk premium in the price of wholesale contracts to ensure cost recovery on the contracts to compensate for taking on additional real-time market price risk. In this scenario, retailers may consider it is no longer economical to maintain wholesale contracts with Synergy and instead seek alternative suppliers.

While such a scenario has not materialised yet, the ERA has considered changes in Synergy's net energy position since the inception of the EGRC scheme and Synergy's feedback that Synergy's future net energy position is uncertain. This has informed the ERA's analysis of possible solutions to improve access to sell-side standard products.

3.5 Other existing regulatory measures

The ERA has considered other regulatory measures that provide equivalent protections or overlap with the EGRC scheme.

Competition and Consumer Act 2010 (Cth)

The *Competition and Consumer Act 2010* (Cth) (CCA) provides general prohibitions on anti-competitive behaviour but is not an effective substitute for the EGRC scheme in the wholesale contracts market. This is despite the CCA having specific provisions to promote competition by prohibiting certain conduct in electricity markets across Australia.[42]

The CCA prohibits anti-competitive behaviour such as predatory pricing and provides an avenue for entities to be investigated and prosecuted.[43] The CCA's jurisdiction includes the WEM's wholesale and retail electricity markets.

In 2020, the CCA was amended to specifically prohibit certain conduct in wholesale electricity markets.[44] For example, under the amendment, entities are required to offer electricity financial contracts.[45] However, these specific electricity market CCA amendments are set to expire on 1 January 2026.

Given the lack of alternatives to Synergy's wholesale contracts, consumers could face higher costs if significantly fewer contracts were available and if Synergy could exercise market power to raise contract prices above cost. It would also decrease competition as many retail firms would have to exit the market if they did not have access to cost-reflective wholesale contracts to hedge their real-time market risks.

Government Trading Enterprises Act 2023 (WA)

As a government trading enterprise (GTE), Synergy is also governed by the *Government Trading Enterprises Act 2023* (WA) (GTE Act).[46] The GTE Act governs the strategic planning, accountability and financial reporting of GTEs like Synergy.

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42 *Competition and Consumer Act 2010* (Cth), Part XICA, (online). The Act prohibits conduct in markets across the electricity supply chain – retail, financial contracts and wholesale markets – that can be detrimental to competition or to consumer welfare. See: Australian Competition and Consumer Commission, 2020, *Guidelines on Part XICA – Prohibited conduct in the energy market*, (online).

43 Ibid, Section 46(1).

44 Ibid, Part XICA.

45 Ibid, Section 153F.

46 *Government Trading Enterprises Act 2023* (WA), (online).

The GTE Act governs Synergy's financial reporting obligations. When the GTE Act commenced on 1 July 2023, it removed the obligation for Synergy to provide segmented financial information under the EGRC regulations. The removal of this obligation aligns with the ERA's recommendation to remove the disclosure mechanism, which is discussed in chapter 5.

4. Standard products

The primary market power mitigation tool in the EGRC scheme is the standard products regime. An effective standard products regime fulfils the following criteria:

- Product specifications – such as term and temporal coverage (for example, coverage for peak and entire-day periods) – suit market participants' risk management requirements.
- Products are accessible to those entities that need to hedge their risk exposure against variable real-time market prices.[47]
- Product prices are cost reflective. High wholesale contract prices, when compared to average real-time market prices, increase market participants' risk management costs. This can discourage participation in the market. However, standard product prices must also allow Synergy to recover its costs.[48]

The ERA has previously evaluated other aspects of the standard products regime, including the suitability of the buy-sell spread and the specification of standard products.[49] In this review, the ERA has not focused on the appropriateness of the buy-sell spread due to the recency of the spread change in 2022 by the Minister for Energy.[50] This review has instead focused on the effectiveness the standard products regime by considering the extent to which standard products are accessible to entities seeking wholesale contracts to hedge their risk.

Standard products support the EGRC scheme's objective by providing market participants with access to a hedge product. For example, standard products through which Synergy sells energy forward at a set price (referred to as 'sell-side'), are particularly useful for market participants without access to sufficient generation to hedge their load obligations. This chapter presents evidence that the current standard products can more effectively meet its objective of enabling market participants to rebalance their portfolios. This outcome can be achieved by providing entities that need sell-side standard products to manage their risk with better access.

This evidence supports the ERA's recommendation to no longer require Synergy to offer sell-side standard products to entities with access to sufficient generation assets. This better aligns the standard products regime with its purpose as firms with access to sufficient generation assets do not require sell-side standard products as a hedge instrument. Section 4.3.1 presents a framework that the State Government can adopt to identify and determine which

47 For example, entities with access to sufficient generation capacity greater than their load obligations do not need standard products. These entities can manage the risk resulting from their generator outages through customised wholesale contracts to suit their outage duration.

48 By selling a quantity of energy forward at advertised prices, Synergy forgoes the opportunity to sell that quantity of energy at spot prices. In principle, Synergy's expectation of average real-time market prices during the term of a standard product contract underpins the cost of the product. The cost of serving the product also includes a risk premium or discount, depending on Synergy's perception of its forecasting uncertainty, propensity for risk and the benefit Synergy would expect from managing its own risk by selling energy forward.

49 The spread specifies the maximum percentage amount Synergy can set the buy price for a standard product below the sell price it advertises for the standard product covering the same period. The spread is the main lever for imposing pricing discipline on Synergy. The standard product's buy-sell spread needs to be narrow enough to encourage efficient standard products pricing to ensure the EGRC scheme operates as intended, while being wide enough to allow Synergy to cover its costs related to the risks of offering standard products.

50 In 2022, the Minister for Energy reduced the maximum buy-sell spread from 20 per cent to 15 per cent following the ERA's recommendation. Economic Regulation Authority, December 2021, *Report to the Minister on the Effectiveness of the Electricity Generation and Retail Corporation Regulatory Scheme*, (online).

entities have access to sufficient generation assets (when compared to their load) that are recommended to be restricted from transacting in sell-side standard products.

4.1 Purpose of standard products

The EGRC scheme requires Synergy to advertise standardised wholesale contracts (standard products) for sale and purchase. Standard products are subject to a buy-sell price spread, which imposes pricing discipline on Synergy's offer prices for standard products. This helps mitigate the risk of Synergy's possible exercise of market power in the wholesale contracts market.

Standard product contracts commit Synergy to buy or sell an agreed quantity of energy in the future at an agreed price. Having a guaranteed future electricity price allows retailers and generators to hedge against variable prices in the real-time market.[51] Synergy must publish standard product prices and anonymised transactions.[52] This provides market participants an additional benefit of price discovery of Synergy's expectation of future electricity prices.[53]

The State Government identified the following objectives for the standard products regime:

- Function as a price-discovery mechanism to provide greater transparency and predictability for short to medium-term energy contracts.
- Provide a simple alternative to customised products by:
  - facilitating new market entrants with simple products and lower barriers to entry; and
  - enabling market participants to rebalance their portfolios (at the margins) with simple products.[54]

These objectives were designed to support the regime's intent by providing market participants with certainty of access to hedge products.

4.2 Improve access to standard products

One objective of the standard products regime is ensuring that those entities that need them to rebalance their positions can access them at cost-reflective prices. Certain aspects of the EGRC scheme are designed to ensure that access to standard products is not limited by burdensome trade requirements.[55] However, two elements of the standard products regime

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51 Participants can manage their risk of exposure to variable real-time electricity prices through hedging markets such as the day-ahead Short-Term Energy Market (STEM) or through bilateral contracting. By design, the STEM cannot provide parties with a hedge against uncertain market outcomes over the coming months and years. Other wholesale bilateral contracts are needed to meet this requirement.

52 Synergy, 2023, Standard Products homepage, (online), [accessed 17 November 2023].

53 This price transparency mechanism indicates what market participants will need to pay to enter into a contract with Synergy, and what others are willing to pay to contract with Synergy. Synergy's standard products prices are based on its forecasts of future electricity prices. Synergy's published prices provide an indication of Synergy's view of future electricity real-time market prices to which market participants can compare their own price expectations. Market participants and customers can also use Synergy's published prices as a benchmark to inform their negotiations with Synergy and others for contracting.

54 Public Utilities Office, 2019, *Electricity Generation and Retail Corporation Regulatory Scheme – Response to 2016 Report to the Minister for Energy on the effectiveness of the Scheme*, p. 8. (online).

55 For example, Synergy is required to prepare and maintain a written policy setting out standard processes to be followed in offering a wholesale supply of electricity to RBU, a retail competitor, or a generation competitor, including processes for determining the terms and conditions on which the wholesale supply of

could potentially hinder access to standard products for those entities that need them to operate:

- limited weekly standard product quantities
- open access for all market participants.[56]

In response to the ERA's discussion paper, retailers advised that they have been unable to access standard products as they are frequently unavailable:

> We rely on the Standard Products for hedging exposure to the spot price and frequently are unable to fill our requirement despite following the letter of the process within a time precision of seconds.[57]

The current standard products regime allows one participant to buy the entire weekly volume, leaving no access to standard products for others for the rest of the week. In this case, other participants may be able to access a customised product with the same terms and conditions, including the price, as the standard product. However, the pricing discipline provided by the maximum buy-sell spread for standard products does not apply to customised products.

The ERA analysed two possible options to make sell-side standard products more accessible to parties in need of the products to manage their risk.

1. Increase the quantity of standard products offered

Requiring Synergy to increase the quantity of standard products in the market may be appropriate if Synergy is significantly long in energy as it would align with Synergy's incentive to sell energy forward to reduce its exposure to the risk of variable real-time market prices. However, Synergy's future generation profile is uncertain, particularly due to the expected retirement of its coal generation fleet by 2030, which will substantially reduce Synergy's generation capacity.[58,59]

Since the commencement of the EGRC scheme in 2014, Synergy's generation capacity relative to its load requirements has been decreasing. If Synergy becomes a net purchaser of energy, selling energy forward through wholesale contracts will heighten Synergy's exposure to variable real-time market prices. This will increase its risk profile, resulting in increased cost to offer wholesale contracts to the market, which may flow through as higher prices to consumers.

For these reasons, the ERA considered this method to improve access to standard products would be unsuitable.

2. Restrict access to sell-side standard products

Unimpeded access to standard products by all market participants is not in line with the purpose of the EGRC scheme if participants are trading in standard products for speculative

electricity is to be offered. *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* (WA), 1 July 2023, Regulation 23(1), (online).

56 Across all product types and durations, Synergy is required to offer a minimum 150 MW for sale and 100 MW for purchase. Standard products must be offered in units of 1 MW (0.5 MWh per trading interval) and Synergy must offer to buy and sell 5 MW per week.

57 Amanda Energy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

58 Synergy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

59 Government of Western Australia media statement, 20 June 2022, *State-owned coal power stations to be retired by 2030 with move towards renewable energy*, (online) [accessed 17 November 2023].

purposes rather than risk management. This can restrict the provision of hedge products to entities, particularly retailers, that need to use these products to manage their risk, whilst raising risks for Synergy where others engage in speculative trades via standard products.

Speculative traders seek to profit from trading in standardised products, in exchange for taking risk. In other electricity markets, speculative traders can increase the number and diversity of participants to benefit the market by increasing liquidity for trading financial risk management instruments. Speculative traders both acquire and sell financial contracts and engage in trades with several counterparties. However, in the WEM, Synergy is the sole supplier of standard products and assumes the entire risk from speculative trades of standard products.

The ERA also considered feedback from Perth Energy that suggested two alternatives to improve access to standard products: limit the quantity of standard products that can be purchased by a market participant relative to the total quantity available; or allow Synergy to offer standard products to smaller entities first.[60,61] The ERA has responded to Perth Energy's and other stakeholders' feedback in Appendix 4.

The ERA considers restricting access to standard products is a suitable method to improve the effectiveness of the standard products regime and has considered this method in developing its recommendation.

4.3 The ERA's recommendation

The ERA recommends limiting access to sell-side standard products to entities without sufficient generation assets (when compared to the load they serve). These market participants do not have generation capacity to manage their exposure to variable real-time market prices, and do not have incentives to engage in speculative trades to the same extent as large vertically integrated entities with sufficient generation assets.

While entities with sufficient generation assets would be restricted from trading standard products, they can still enter in wholesale electricity contracts directly with other competitors and Synergy through customised wholesale contracts.[62] Synergy, Amanda Energy and Perth Energy supported the ERA's proposal in its discussion paper to restrict access to sell-side standard products.[63,64,65]

60 Perth Energy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

61 Implementing Perth Energy's suggested alternatives would likely impose significant administrative costs.

62 As noted earlier, customised products are likely to be more suitable than standard products for the purpose of covering a vertically entity's generator outages.

63 Synergy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

64 Amanda Energy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

65 Perth Energy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

Recommendation 1

Synergy is no longer required to offer 'sell-side' standard products to entities that have access to sufficient generation assets.

The ERA considers this recommendation will improve access to standard products as a risk management instrument and the effectiveness of the EGRC scheme in meeting its purpose. Implementing the ERA's recommendation:

- Ensures that entities without access to sufficient generation assets (relative to the load they serve) continue to have access to standard products during the transition in the WEM, while Synergy's position in terms of sale and acquisition of energy is changing.[66]
- May facilitate future reductions in the buy-sell spread, providing further benefits to the market by improving price discovery for market participants.

The ERA has developed a framework to evaluate which entities would be considered 'entities with access to sufficient generation assets' that would be restricted from transacting standard products (section 4.3.1). This will provide clarity and certainty to market participants on which entities are restricted from trading standard products.

4.3.1 Framework for determining which entities are restricted from transacting standard products

The ERA established guiding criteria in developing a framework to determine which entities are restricted from transacting sell-side standard products. There is currently no evidence that access to buy-side standard products is impeded.[67]

In developing this framework, the ERA considered the need to provide certainty and clarity to market participants. Stakeholders were concerned on how a threshold to restrict access would be implemented and determined.[68]

If implemented, a responsible body would periodically determine which market participants would be restricted from transacting sell-side standard products by considering the following guiding criteria:

1. The entity has a high ratio of self-generation capacity to load it serves. This analysis identifies which entities have sufficient generation assets compared to the load they serve, and therefore are unlikely to require sell-side standard products as a risk management tool. Section 4.3.1.1 includes guidance on determining an appropriate ratio; and

2. The entity has a large generation size. This analysis complements the previous principle to ensure that smaller entities that may have large variances in their generation to load ratio (due to their small generation or load size), are not restricted from transacting sell-side standard products. This mitigates the risk that smaller entities –

66 As noted earlier, the ERA considered improving access to standard products by increasing the total and weekly limits for the provision of the products; however, this may increase Synergy's risk exposure.

67 There have been no trades of buy-side standard products since 2019. Since the commencement of the EGRC scheme, there have been eight buy-side standard product transactions. Economic Regulation Authority, 2021, *Electricity Generation and Retail Corporation regulatory scheme: 2020 effectiveness review*, pp. 12-14, (online).

68 Shell Energy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

that have frequent variation in their risk exposure – are restricted from accessing sell-side standard products due to short-term variations in their generation or load. This is further explained in section 4.3.1.2.

Appendix 5 and Appendix 6 demonstrate the application of this framework through a worked example using actual data from the WEM.

4.3.1.1 Appropriate generation to load ratio

In determining an appropriate generation to load ratio, the ERA considered:

- Analysis on electricity retailers' hedging profiles in the National Electricity Market (NEM) conducted by the Australian Competition and Consumer Commission (ACCC).
- How regulators in other jurisdictions restricted the provision of risk management instruments for smaller market entities.
- Dispatch profiles of market participants and their associated entities in the WEM. Some of this information, such as consumption data, is confidential and presented in Appendix 6 instead.

The ERA considered the ACCC's analysis on the level of hedging targeted by electricity retailers in the NEM.[69] The hedging position of retailers – which measures a ratio of the retailer's load that is hedged against spot prices through risk management financial instruments – guides the setting of an appropriate self-generation to load ratio.[70] The ACCC reported the average hedge position of small retailers for Quarter 3 2022 to Quarter 2 2024 to vary between approximately 0.4 to 0.9.[71] The range of hedge position targets varied between zero to 1.3.

The ERA also conducted an interjurisdictional analysis which identified how other jurisdictions restricted the provision of risk management instruments for smaller market entities. For instance, in the United Kingdom's electricity markets, the Office of Gas and Electricity Markets (Ofgem) introduced market making requirements on the six largest generation companies, referred to as the Secure and Promote (S&P) license condition.[72] Ofgem designed a framework through which small independent suppliers (such as retailers) could access agreements to trade in the UK's wholesale electricity market with obligated generators.[73]

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69 Australian Competition and Consumer Commission, 2022, *Inquiry into the National Electricity Market*, (online).

70 A hedge ratio of one implies a retailer is fully hedged for the period and has no residual exposure to real-time market prices. A ratio of 0.5 indicates half the projected retail load is hedged and the other half is not yet hedged.

71 Australian Competition and Consumer Commission, 2022, *Inquiry into the National Electricity Market*, p. 46, (online).

72 Office of Gas and Electricity Markets, 2013, *Wholesale power market liquidity: statutory consultation on the 'Secure and Promote' license condition*, p. 19 (online). This included the enactment of Supplier Market Access rules into the generation licenses held by regulated entities.

73 To become an eligible counterparty to trade with these generators, the participant had to hold a valid Great Britain electricity supply licence and they and their affiliates had to supply less than 5 TWh and generated less than 1 TWh in the 12 months ending the month before the last full calendar month. These criteria effectively limited the traders to hedgers and resulted in a registered list of participants that could trade in products advertised under a market making obligation. Licensees were only required to comply with the Supplier Market Access rules when dealing with participants on the eligible supplier list, which was maintained by Ofgem on its website. Office of Gas and Electricity Markets, 2013, *Wholesale power market liquidity: final proposals for a 'Secure and Promote' license condition*, pp. 16-18, 32, (online).

Ofgem established an access threshold by considering a hedge ratio of 0.2 (generation to load).[74]

Given the observed variation in the hedge position of electricity retailers, setting the generation to load ratio to as low as 0.4 may risk restricting access to standard products for many of WEM market participants that need standard products to manage their risk. The analysis presented in Appendix 5 demonstrates that setting the ratio as high as 1.0 can cover the changing needs of market participants as their risk exposure varies over time, for example, due to variation in their generation capacity and load profiles.

Determining the generation to load ratio requires the responsible body to review market participants' annual generation and consumption data.[75] Appendix 5 provides further details on the analysis underlying an appropriate generation to load ratio.

4.3.1.2 Appropriate generation size

Generation and consumption quantities fluctuate over time. For entities with small generation and consumption quantities, this can result in their generation to load ratio varying significantly due to short-term variations in their generation or retail book. These smaller entities need risk management instruments to manage these frequent changes in their risk exposure.

Including an additional criterion for the size of the entity's generation – for example, by considering annual generation – complements the generation to load ratio criterion and mitigates against unintended outcomes of excluding small generators or gentailers. The analysis in Appendix 5 shows how an annual generation size of 0.5 terawatt hour (TWh) may suitably be adopted for restricting access to 'sell-side' standard products.

74 Ibid, p. 24.

75 The generation data is publicly available through the Australian Energy Market Operator (AEMO), however the consumption data is based on confidential meter data collected by Western Power.

5. Disclosure mechanism

The EGRC scheme includes a disclosure mechanism to serve as a second market power mitigation tool. The operation of the standard products regime in preventing the potential exercise of market power in the wholesale contracts market is not dependent on any element of the disclosure mechanism.

This chapter presents evidence that the disclosure mechanism is not useful as it does not provide financial information that could be used to detect anti-competitive conduct. This evidence supports the ERA's recommendation to remove the disclosure mechanism.

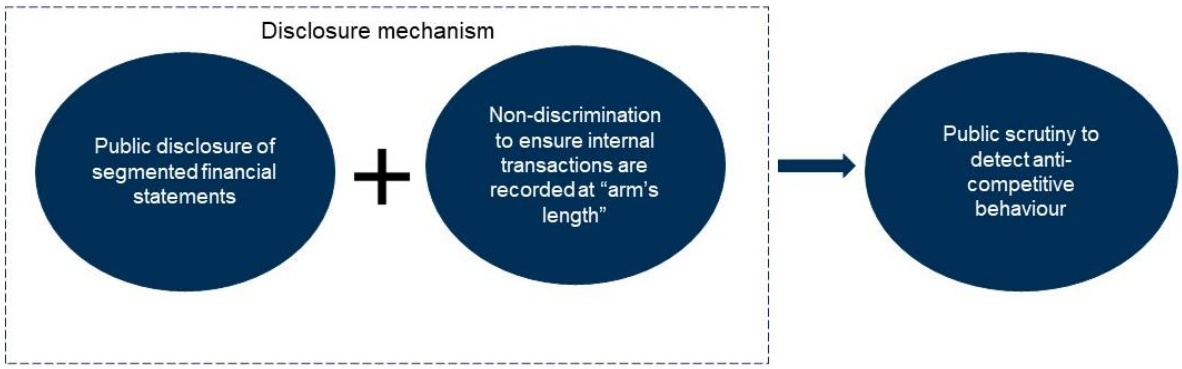
5.1 Elements

The disclosure mechanism has three main elements which require Synergy to:

- Publicly disclose financial statements for each business segment (section 5.1.1). This requirement was removed when the GTE Act came into force.[76]
- Publish the method Synergy uses to determine the transfer price for internal supplies of electricity between its WBU and RBU (section 5.1.2).
- Carry out wholesale trades at arm's length between Synergy's WBU and RBU (section 5.1.3). [77]

The disclosure mechanism relies on other parties reviewing Synergy's financial information as depicted in Figure 4.

Figure 4. Operation of the disclosure mechanism



Source: ERA

The segmented financial statements were intended to deter Synergy from marking up prices in the wholesale contracts market and from offering retail products at unrealistically low prices to discourage rival retailers from competing in the market by publicly disclosing Synergy's financial information. Contract price mark-ups raise Synergy's revenue and profit while unrealistically low retail product prices reduce Synergy's revenue and profit in the short run.

76 The effect of the GTE Act on the EGRC scheme is discussed in section 5.2.

77 Synergy must *not* discriminate between its RBU and competitor retailers and generators when supplying wholesale electricity to the RBU. The second part of the non-discrimination obligation – to *not* consider the RBU's financial interests when determining the terms and conditions for the wholesale supply of electricity to competitors – is not part of the disclosure mechanism. As a result, removing the disclosure mechanism will not remove Synergy's obligation to not discriminate transacting with competitors. *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* (WA), 1 July 2023, Regulation 22, (online).

The disclosure of margins, revenues and costs in financial performance information were intended to provide transparency and confidence to the market that Synergy does not engage in anti-competitive conduct.

To assess the effectiveness of the disclosure mechanism, the ERA considered the relevance of the financial information being disclosed, which could allow the detection of anti-competitive conduct. The disclosed financial information must be detailed enough to determine if anti-competitive conduct is driving changes in Synergy's individual business segments' financial performance. A comprehensive outline of the ERA's assessment of each element of the disclosure mechanism is in Appendix 8 with further discussion in the rest of this chapter.

5.1.1 Segmented financial statements

Synergy was required to quarterly publish its revenues, costs and profits of each operating segment: GBU, RBU, WBU and corporate shared services.[78,79,80]

Reporting segmented financial information can provide insight into possible anti-competitive conduct. For example, analysis of WBU's revenue (both from external customers and inter-segment), WBU's margin (revenue minus cost of sales and operating costs) and RBU's margin may reveal if Synergy was exercising market power to mark-up wholesale contract prices. Higher profits and margins for the WBU accompanied by lower RBU profits could provide a possible indicator of the exercise of market power. However, highly detailed financial information would be required to demonstrate that the change in margins and profits was due to anti-competitive behaviour and not a legitimate business reason, such as higher input costs or changes in WEM conditions.

Synergy's financial reporting does not separate its gas and electricity segments or contestable and non-contestable financial results, and is at a highly aggregated level.[81] The ERA has previously found that this segmented financial reporting obligation lacks enough detail to conduct analysis for anti-competitive conduct.[82,83] An example of Synergy's segmented financial statements is presented in Appendix 8.

The ERA considers the disclosure of segmented financial statements does not provide relevant information to conduct a meaningful assessment of whether Synergy has engaged in anti-competitive conduct. The disclosure lacks detail to determine the drivers of the changes

78 *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* (WA), 1 July 2023, Regulation 6(1), (online). This information relates to costs, revenues and profitability of all operational units, as well as inter-segmental revenues, and is published on Synergy's website since 2015-16.

79 Prior to the commencement of the *Government Trading Enterprises Act 2023* (WA) (GTE Act), the EGRC scheme required Synergy to comply with Australian accounting standards when preparing its segmented financial statements.

80 The Minister for Energy has the power to further segment Synergy's operations – *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* (WA), 1 July 2023, Regulation 5(2), (online). Synergy has not been separated into any additional segments since the merger in 2014. The corporate shared services (CSS) or shared services segment manages corporate strategy, finance, human resources, information technology and operations undertaken in connection with two or more businesses.

81 The State Government did not act on the ERA's recommendation for increasing the level of segmentation of Synergy's financial statements. Refer to Public Utilities Office, 2019, *Electricity Generation and Retail Corporation regulatory scheme – Response to 2016 report to the Minister for Energy on the effectiveness of the Scheme*, Directions Report, pp. 21–22, (online).

82 Economic Regulation Authority, 2021, *Electricity Generation and Retail Corporation regulatory scheme: 2020 effectiveness review*, p. 88-89, (online).

83 Economic Regulation Authority, 2019, *Report to the Minister on the Effectiveness of the Electricity Generation and Retail Corporation Regulatory Scheme 2017*, pp. 17-19, (online).

in Synergy's revenue and margins, preventing an observer from concluding if changes relate to the exercise of market power. This point was reinforced by stakeholders.[84]

The possibility for cost-shifting between Synergy's business units and within its retail business confounds the assessment of information disclosed for detecting anti-competitive behaviour. Without a detailed investigation or greater information disclosure, identifying incidences of cost-shifting will be a significant challenge. This challenge will hinder any comparison of Synergy's financial information against industry benchmarks.

5.1.2 Transfer pricing arrangements

The EGRC scheme requires Synergy to publish the method it uses to determine transfer prices for supplying electricity to foundation customers and new contestable retail customers. The determination of internal Synergy transfer prices does not provide any benefits for market participants because Synergy is not required to publish or use these transfer prices when determining its retail prices or prepare segmented financial statements (detailed in Appendix 8). This was reinforced by stakeholder feedback:

> We do not believe Synergy uses the [transfer pricing] mechanism when pricing contestable customers, it would therefore have a minimal impact on outcomes if it was to be removed.[85]

Without a mandated use of a transfer price, publishing a transfer price method does not provide meaningful information that can be used to detect anti-competitive conduct. In other jurisdictions, the disclosure of transfer prices (as well as the method for their determination) is implemented to potentially deter or expose anti-competitive conduct.

The requirement for Synergy to publish its transfer pricing method arose from the ERA's recommendation in a previous EGRC scheme review recommendation to enhance transparency of Synergy's internal pricing arrangements by publishing the foundation transfer price.[86] The State Government stated that publishing the transfer price would be detrimental to Synergy's business interests as it would require "Synergy to reveal commercial-in-confidence information".[87]

The market could benefit from determination of transfer prices if those prices provided additional relevant information or were required to be used in the preparation of segmented financial statements assuming transactions between WBU and RBU were on an arm's length basis. The ERA considers the existing transfer pricing arrangement is ineffective because:

- There is no requirement in the EGRC scheme for Synergy to publish transfer prices.
- There is no requirement for Synergy to use transfer prices for preparing segmented financial statements.
- There is no requirement for Synergy to use transfer prices for determining retail product prices.

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84 For example, see Change Energy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

85 Change Energy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online)..

86 Economic Regulation Authority, 2017, *2016 Report to the Minister on the Effectiveness of the Electricity Generation and Retail Corporation regulatory scheme*, p. 16, (online).

87 Public Utilities Office, 2019, *Electricity Generation and Retail Corporation regulatory scheme – Response to 2016 report to the Minister for Energy on the effectiveness of the Scheme*, Directions Report, p. 16, (online).

5.1.3 Non-discrimination obligations

The EGRC scheme imposes obligations on Synergy regarding the wholesale acquisition and supply of energy. The non-discrimination requirements prohibit Synergy from:

1. Offering wholesale supplies of electricity to RBU on terms more favourable than it would offer competitors.[88]
2. Considering the financial interests of the RBU in determining the terms and conditions on which a wholesale supply of electricity is offered to retail or generation competitors.

The requirement for Synergy to *not* consider its retail arm's interests when trading with third parties provides benefits in addressing additional incentives for Synergy to exercise market power in the wholesale contracts. Exercise of market power in the wholesale contracts market could provide benefits to Synergy by squeezing the profit margin for third party retailers and deterring their participation in the retail market. This aspect of the non-discrimination requirement is not related to the operation the disclosure mechanism.

5.2 The ERA's recommendation

The WEM has changed significantly since the merger in 2014 and the ERA has not found any evidence that the EGRC scheme's disclosure mechanism is useful to market participants or effective in meeting the EGRC scheme's objective. The main deterrence to Synergy potentially exercising its market power is through an appropriate buy-sell spread in standard products, which is critical for the wholesale contracts market to continue operating effectively.

The ERA considers the existing disclosure is not useful in identifying whether Synergy has engaged in anti-competitive conduct because it does not provide relevant financial information that is comparable and transparent which can be used to detect anti-competitive conduct.

The ERA considers that removing the disclosure mechanism would not reduce the EGRC scheme's effectiveness in providing a level playing field for new and existing market participants. It will also simplify the regulatory scheme and reduce complexity. Change Energy, Perth Energy and Synergy supported the ERA's preferred option of removing the disclosure mechanism.[89,90,91]

Recommendation 2

Remove the disclosure mechanism.

In developing its recommendation, the ERA also considered the option of improving the existing disclosure mechanism. This option would require Synergy to provide information that could be compared against a relevant benchmark to determine if anti-competitive conduct had occurred. A responsible entity would monitor specified financial data from Synergy. An

88 This obligation requires Synergy to develop policies for terms and conditions for the wholesale supply of electricity, dealing with requests for wholesale supply of energy, and related record keeping. This obligation facilitates Synergy's financial reporting between the RBU and WBU to be recorded at arm's length.

89 Change Energy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

90 Perth Energy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

91 Synergy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

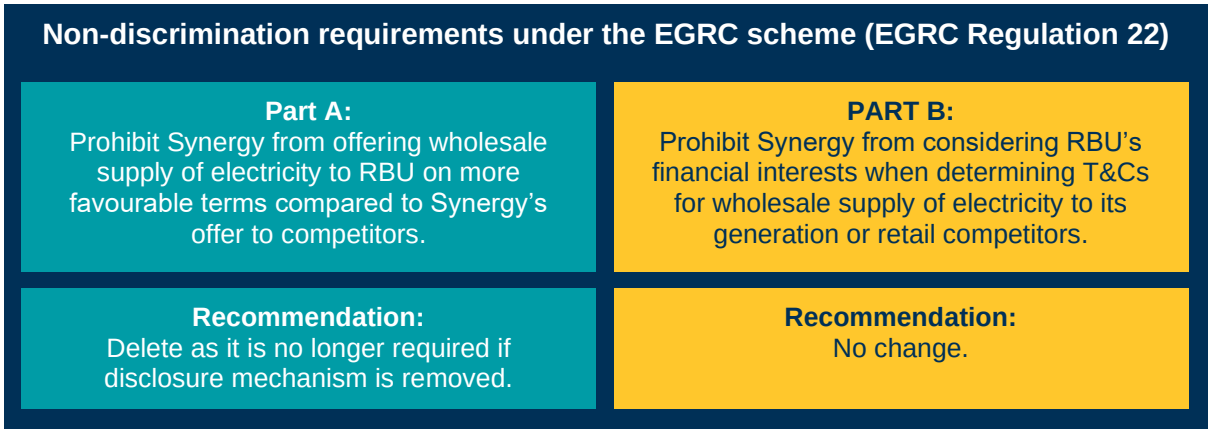
indication of anti-competitive behaviour would trigger a detailed investigation. The ERA found that there were barriers impeding the effectiveness of this option, as well as associated regulatory and financial costs. Details on this options analysis is presented in Appendix 8.

In each past EGRC scheme review, the ERA noted that elements of the disclosure mechanism were not useful and that they were not supporting the EGRC scheme's objective to promote a level playing field. The market has also matured since the commencement of the EGRC scheme, with WEM conditions now reducing the risk of Synergy engaging in anti-competitive conduct in the contestable retail market than what was contemplated when the EGRC scheme was implemented.

Synergy is highly unlikely to benefit from engaging in predatory pricing in the retail market. Predatory pricing is generally considered non-viable or less effective in markets where large, established competitor firms have the financial resources and market presence to withstand temporary losses from predatory pricing.[92] Large incumbents can match or undercut the predator firm's prices and continue to compete effectively.

In implementing the ERA's recommendation to remove the disclosure mechanism, Synergy would no longer be required to publish the transfer pricing mechanism.[93] Since the requirement to prepare segmented financial statements are already not required, the associated part of the non-discrimination requirement is now redundant and no longer required. The ERA is not recommending any changes to the existing non-discrimination element of the EGRC scheme which is unrelated to the operation of disclosure mechanism and requires Synergy to *not* consider the financial interests of RBU when offering contracts to external participants (Figure 5).[94]

Figure 5. Recommendation to amend non-discrimination element of the EGRC scheme



In assessing each option, the ERA considered interactions with existing market power mitigation tools, including the standard products regime, the *Consumer and Competition Act 2010* (Cth) and the WEM Rules.[95]

Removing the disclosure mechanism reduces administrative and compliance costs, while not reducing the effectiveness of the EGRC scheme as the current disclosure mechanism does

92 The CCA regulates predatory pricing which is another deterrent for Synergy to engage in predatory pricing. *Competition and Consumer Act 2010* (Cth), Section 46, (online).

93 The requirement in the EGRC scheme to prepare segmented financial statements was repealed following the enactment of the GTE Act.

94 *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* (WA), 1 July 2023, Regulation 22(b), (online).

95 Wholesale Electricity Market Rules (WA), 3 November 2023, (online).

not provide benefits to the market. The requirements for Office of the Auditor General to audit the EGRC scheme will be reduced to reflect the removal of the disclosure mechanism.[96] Notwithstanding the removal of the disclosure mechanism, the ERA will continue to periodically review the effectiveness of the EGRC scheme. Overlap with recent reforms

Synergy's segmented financial disclosure obligations were removed with the commencement of the GTE Act on 1 July 2023.[97] The amendments to the EGRC scheme align with the ERA's recommendation to remove the disclosure mechanism. Synergy's financial reporting obligations must comply with the GTE Act.

[96] When developing this recommendation, the ERA considered the practicality of requiring Synergy to price its wholesale contracts at cost to mitigate Synergy's market power. Including such a requirement is not viable. Auditing compliance would require a detailed analysis of forecasts and subjective factors, such as propensity for risk, which underpin the cost of wholesale contracts.

[97] The GTE Act deleted a division in the *Electricity Corporations Act 2005* ('EC Act'), which establishes the EGRC Regulations and requires Synergy to conduct financial and annual reporting. The EGRC Regulations also prescribed the contents of Synergy's annual report and permitted the redaction of commercially sensitive matters from such reports. The deletion of the EC Act division was due to the overlap with other provisions within the GTE Act, which also provided for financial and annual reporting, and the redaction of commercially sensitive matters from such reports. Regulation 6 in the EGRC Regulations is therefore no longer operative, and was impliedly repealed by the passing of the GTE Act section 204. See:

Government Trading Enterprises Act 2023, (WA), 1 July 2023, Section 204, (online);

Electricity Corporations Act 2005 (WA), 1 July 2023, Part 5 Division 3, (online);

Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013 (WA), 1 July 2023, Regulation 6, (online).

6. Ringfencing

The EGRC scheme includes ringfencing obligations that restricts confidential information on Synergy's competitors obtained by WBU from being disclosed to:

- The retail business unit – this is retail restricted information.
- The generation business unit – this is generation restricted information.

As the primary supplier of wholesale contracts, WBU has access to substantial competitor information. The restrictions imposed on Synergy through the EGRC scheme's ringfencing obligations aim to encourage a level playing field and promote competition in the WEM by restricting the flow of confidential competitor information within Synergy. The ringfencing obligation is separate to the standard products regime and the disclosure mechanism but is complementary to achieving the EGRC scheme's objective.

In this review, the ERA has evaluated the advantages and disadvantages associated with maintaining both types of ringfencing arrangements and whether they continue to provide benefit to the market and achieve the EGRC scheme's objective.

6.1 Retail restricted information

WBU is prohibited from sharing competitor retailers' wholesale contract terms and prices with RBU. This restriction denies RBU the advantage of knowing its competitors' input costs, which could enable RBU to undercut its competitors' prices in the contestable retail market. RBU's conduct in offering prices below its competitors could benefit consumers in the short term but would lead to higher costs in the long term due to reduced competition in the retail market.[98]

Without ringfencing, the flow of wholesale information to RBU would be like that of other vertically integrated firms that operate in the WEM. The ERA considers there is benefit to the market in maintaining ringfencing of retail restricted information.

In response to the ERA's discussion paper, stakeholders were supportive of maintaining the existing ringfencing arrangements between RBU and WBU. The ERA is not recommending any amendments to the existing retail restricted information ringfencing arrangement.

6.2 Generation restricted information

WBU is prohibited from sharing generation restricted information – such as third-party power purchase agreements, terms and conditions for trade with generators, and market intelligence on Synergy's wholesale competitors – with GBU. The GBU is responsible for generation operations and does not trade directly in the WEM. The WBU dispatches Synergy's generation in the WEM.

In response to the ERA's discussion paper, stakeholders did not provide feedback to strongly demonstrate the benefits of maintaining the generation restricted information ringfencing.

[98] Ringfencing arrangements also provide benefits in mitigating the potential for RBU to raise its retail product prices above the cost to serve these contracts; in a market with sufficient competitive tension, product prices will reflect the cost of supply. With access to retail competitor wholesale information, RBU can potentially raise its prices above its cost of supply and just below its competitors' costs whilst maintaining its market share. Such pricing outcomes raises costs for consumers whilst maintaining market share. This behaviour would be unlikely to occur if the RBU does not know of its competitors' wholesale cost information.

However, Shell Energy considered the ringfencing obligations between WBU and GBU should continue to apply as it promotes best practice in the restriction of information flow:

> …even though Synergy's GBU does not directly engage in WEM trades, Shell Energy believes that ringfencing obligations should continue to apply between the WBU and GBU and promote best practice in the restriction of information flow. Ringfencing, with effective compliance and enforcement oversight, aims to protect and promote competitive markets, allowing companies to act on a level playing field.[99]

While a ringfencing mechanism does promote best practice in restricting the flow of confidential information across an entity generally, the ERA considers the benefits of ringfencing generation restricted information are not evident as GBU's access to this information is unlikely to affect market outcomes.[100]

Perth Energy and Change Energy presented some concerns about the usefulness of the ringfencing arrangements in altering Synergy's behaviour. Perth Energy queried if there was likely to be any information leak from WBU to GBU which could flow through to RBU if there was no requirement to ringfence GBU. The ERA notes GBU would still be obliged to *not* disclose retail restricted information to RBU even if the ringfencing requirements between WBU and GBU were removed.[101]

Synergy's compliance with this obligation remains subject to the annual audit undertaken by the Office of the Auditor General. Synergy noted it has successfully managed the risk of inadvertent disclosure of retail restricted information by GBU to RBU since the EGRC scheme's inception in 2014. All annual audits conducted by the Office of the Auditor General have found that Synergy has complied with the EGRC scheme's ringfencing obligations.[102]

6.2.1 The ERA's recommendation

In forming its recommendation, the ERA has considered the regulatory burden on Synergy to comply with this ringfencing arrangement and the lack of evidence of any benefits to the market in requiring generation restricted information ringfencing.

Synergy considered it faces substantial regulatory burden in complying with this ringfencing requirement and it would benefit from increased operational efficiencies and lower costs if the generation restricted information ringfencing were removed:[103]

- Co-location of WBU and GBU staff in the same office, which could improve knowledge sharing in Synergy's facilities' operations and energy trading, as well as improved inter-business segment collaboration, particularly with the new WEM. GBU staff would have an improved understanding of Synergy's supply portfolio which could improve timing of

99 Shell Energy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

100 GBU having access to generation restricted information from WBU will not change the way that Synergy operates its generators as Synergy is incentivised to operate its plants in the most optimal configuration. The potential information that could affect operations is outage information; however, that is publicly available and disclosed by AEMO to the market.

101 Once information is classified as requiring to be ringfenced, it cannot be disclosed to the relevant business unit regardless of where that information resides within Synergy.

102 The Auditor General's latest audit report, for the 2023/24 financial year is available: Office of the Auditor General, 2023, *Report 8: 2023-24, Financial Audit, Electricity Generation and Retail Corporation (Synergy)*, (online). Historical audit reports conducted by the Office of the Auditor General are available on its website (online).

103 Synergy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

operational maintenance to generation plant, resulting in improved financial outcomes for Synergy and reduce overall market costs.

- Reduced IT overhead costs, which Synergy considered significant, to separate and restrict access to documents and systems between WBU and GBU staff.
- Reduced costs associated with internal and external audits.
- Potential future cost savings for developing market reporting and analytics systems that will not require detailed segregation of generator and retailer restricted information.

Additionally, the EGRC scheme requires the Office of the Auditor General to annually assess Synergy's compliance with the ringfencing obligation, which further contributes to its cost.

Synergy does not consider there would be any detriment to competition in the market or its competitors if the requirement to ringfence generation restricted information was removed.[104]

As WBU is responsible for trading in the WEM, it is unlikely that the GBU could use generation restricted information to obtain an unfair market advantage over Synergy's competitors in either wholesale or retail markets. This was reinforced by feedback from Synergy.

Given the lack of identifiable benefits of maintaining this restriction and the costs incurred by Synergy in complying with the requirement to ringfence generation restricted information, the ERA considers the EGRC scheme could be improved by removing the obligation on Synergy to ringfence generation restricted information. There is no evidence of detriment to market participants or to the state of competition in the market by restricting wholesale information from the GBU.

Recommendation 3

Remove the generation restricted information ringfencing requirement.

[104] Synergy, 2023, Submission to the ERA, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online). Synergy provided further clarity on how it implements its ringfencing obligations in a confidential response to the ERA.

Appendix 1 List of Tables

Appendix 2 List of Figures

Appendix 3 Recommended amendments to the EGRC scheme

This appendix lists the suggested changes to the legislative instruments underlying the EGRC scheme that will be required to implement the ERA's recommendations.

Table 2. Recommended amendments to the EGRC scheme

EGRC scheme element	Recommended change	Rationale
Standard products. *[Electricity (Standard Products) Wholesale Arrangements 2014]*	Amend to restrict market participants with sufficient generation assets transacting in sell-side standard products.	Improves the effectiveness of the standard products regime in achieving its purpose of promoting competition. The recommended change will ensure that those entities without access to sufficient generation assets can access standard products to hedge whilst limiting access for entities that would use them for speculation. This is discussed in section 4.3. The change will *not* restrict entities with access to sufficient generation assets from negotiating wholesale electricity contracts with Synergy.
Quarterly statements of financial performance. [EGRC Regulation 6]	Remove.	The commencement of the *Government Trading Enterprises Act 2023* (WA) removed the requirement for Synergy to prepare quarterly segmented statements of financial performance. These segmented financial statements did not provide enough detail to detect if Synergy was engaging in anti-competitive conduct (see section 5.2).
Foundation transfer pricing mechanism. [EGRC Regulations 11, 12 and 12A]	Remove.	The publication of the Foundation Transfer Price methodology does not provide any insight for market participants or discourage Synergy engaging in anti-competitive behaviour (see section 5.1.2).
Non-discrimination between Synergy's Retail Business Unit (RBU) and competitors when offering wholesale supply to RBU. [EGRC Regulation 22(a)]	Remove this part of the non-discrimination requirement that relates to supporting the disclosure mechanism.	This element of the non-discrimination requirement is no longer required given that Synergy is not required to publish segmented financial information. This part of the non-discrimination requirement does not assist with the detection of anti-competitive behaviour or the mitigation of market power (see section 5.1.3).
Ringfencing of generation restricted information. [EGRC Regulations 13 to 20]	Remove requirement to ringfence generation restricted information.	There is no evidence of benefit to the market in retaining the requirement to ringfence generator restricted information (see section 6.2.1).

EGRC scheme element	Recommended change	Rationale
Audit requirements [EGRC Regulation 29 to 31]	Update audit requirements to reflect the adopted amendments to the EGRC scheme.	Audit requirements will change if elements of the EGRC scheme are removed or changed.

Appendix 4 Summary of stakeholder feedback

The ERA published a discussion paper on 15 September 2023 for feedback and received six submissions from:

1. Alinta Energy
2. Amanda Energy
3. Change Energy
4. Perth Energy
5. Shell Energy
6. Synergy.

These submissions are published on the ERA's website.[105] A summary of the feedback, and the ERA's response to each is summarised in Table 3 below.

Table 3. Summary of stakeholder feedback

Stakeholder feedback	ERA response
Alinta Energy	
Standard products Alinta Energy disagrees with the ERA's proposed threshold for standard products to participants with generation assets greater than 0.5TWh per annum. Alinta presented the following arguments in support of its position: • **Restriction will increase costs and reduce liquidity:** Prohibited participants will incur higher costs to serve. Standard products help participants reduce exposure during outages, when their load exceeds their generation, or when the standard product price is less than the cost of their generation. It will undermine pricing discipline for standard products and possibly increase the sell price for retailers, creating inefficiencies and reducing the use of standard products, possibly reducing liquidity. • **Removing speculative trades may not be beneficial:** Speculative trades provide a net benefit to the market by supporting pricing discipline. Prohibiting participants from making speculative trades is unlikely to improve access for retailers and would restrict participants from rebalancing their portfolio – a stated objective of the scheme. • **Restrictions may not improve the effectiveness of the scheme:** It is unreasonable to prioritise access for pure	• **Increasing costs and reducing liquidity:** All participants will continue to be able to negotiate customised contracts with Synergy, which can be tailored to their specific needs. For example, a wholesale contract can be customised to seek coverage that can appropriately suit the outage duration and size. • Synergy's non-discrimination obligation (EGRC regulation 22(b)) requires Synergy to offer contracts to external participants without considering the financial interests of its own retail business unit. This preserves pricing discipline on wholesale contracts (both customised contracts and standard products). Historically, the WEM's wholesale contracts market has been illiquid. • **Speculative trades and pricing discipline:** The proposal is to enhance the purpose of standard products, which is to facilitate the rebalancing of portfolios for participants who need wholesale products to hedge their positions. The suggested proposal to restrict access to standard products will make standard products more accessible to those parties that need them

[105] Economic Regulation Authority, 2023, *Review of Synergy's regulatory scheme*, (online), [accessed 21 November 2023].

Stakeholder feedback	ERA response
retailers over participants with annual generation greater than 0.5TWh as this creates an uneven playing field. The purpose of the scheme is not to exclusively support smaller retailers. Other gentailers can currently leverage standard products that would otherwise go unutilised to sell to retailers. • **Restrictions may not facilitate future reductions in the buy-sell spread and thereby provide further benefits to the market by improving price discovery:** It is assumed that current arrangements are preventing a narrower spread and that the Minister will agree to a narrower spread in contrast with previous experience. A narrower spread may not benefit retailers as the sell-price could come down further. Lastly, by restricting large generators, the proposal could remove all participants that use buy products, leaving Synergy unconcerned about where to set the buy price.	to operate and aid them in rebalancing their position to hedge their price risk. • **Effectiveness of scheme:** The purpose of the standard products regime is to complement the EGRC scheme's purpose, which is to promote a level playing field, by supporting a participant's ability to hedge against real-time market price variability. Entities with access to sufficient generation assets are naturally hedged against real-time market price variations through their internal generation. The proposal to limit standard product access supports the intention to provide a level playing field and encourage greater competition by ensuring many competitors have access to standard products for hedging. • **Future restrictions on buy-sell spread:** The Minister for Energy reduced the spread in 2022 which aligns with the ERA's previous EGRC review recommendation. A narrower spread provides greater market power mitigation and can make standard products a more attractive hedging instrument.
Disclosure mechanism Alinta Energy disagrees with the proposal to remove the disclosure obligations. Even though Synergy's financial results are insufficient to detect potential anticompetitive conduct, Alinta Energy has stated that these results could provide a useful indicator, which is better than no transparency at all. They could provide grounds for seeking further information. Improving or at least retaining the current level of transparency would also provide broader benefits to Synergy's shareholders and general public.	The ERA considers Alinta has not identified what conduct could be indicated through Synergy's published segmented quarterly financial statements. The ERA considers that there is no benefit in retaining the existing disclosure mechanism since it does not effectively deter anti-competitive conduct and retaining it imposes additional costs to the market and final consumers. Additionally, Synergy's segmented financial disclosures were removed by the GTE Act making it ineffectual to retain the other elements of the disclosure mechanism. The ERA's assessment of the option to enhance the disclosure mechanism by implementing a two-stage process may not effectively detect the misuse of market power.
Ringfencing Alinta Energy did not provide any feedback on ringfencing.	No response required.
Amanda Energy	
Standard products Amanda Energy considers that there are currently no alternatives comparable to Synergy's wholesale electricity contracts and it supports the existence	The ERA notes Amanda Energy's support for the ERA's proposal to restrict the participants that can access standard products.

Stakeholder feedback	ERA response
of standard products in managing risk and mitigating exposure to spot prices. Amanda Energy advises it is frequently unable to purchase standard products due to unavailability and supports the ERA's proposal to limit the scope of standard products as outlined in the discussion paper. Amanda Energy considers there is benefit to the market in having transparency on how standard products are determined as this would allow competitor retailers without significant generation assets to inform their own pricing.	The ERA notes Amanda Energy's concern regarding the transparency of how Synergy sets its standard product prices. These comments reinforce the ERA's previous EGRC review recommendations of reducing the standard product buy-sell spread as a narrower spread reduces the range where Synergy can price its standard product contracts, which provides greater market power mitigation. Reducing the spread lessens the need for transparency and will help address Amanda Energy's concerns as competitors will have better price discovery that will allow them to price their products appropriately.
Disclosure mechanism Amanda Energy accepts the ERA's findings that the existing disclosure mechanism is ineffective and considers that the ERA should make recommendations to improve its effectiveness rather than remove it. Amanda Energy considers both options by the ERA to amend the disclosure mechanism "are acquiescence by the ERA to Synergy's accounting manoeuvring to avoid any useful disclosure". Amanda Energy considered ERA should improve the effectiveness of the existing mechanism. Amanda Energy does not use the segmented financial disclosures to detect anti-competitive behaviour and relies on the ERA.	The ERA acknowledges Amanda Energy's position but notes it does not provide alternative suggestions for improving the EGRC scheme nor reasons explaining their position. The disclosure mechanism is also made ineffective due to the removal of the segmented financial reporting requirements by the GTE Act.
Ringfencing Amanda Energy considers the ringfencing arrangements are beneficial for Synergy's organisational culture as it signals to Synergy personnel the need to preserve the confidentiality of information.	The ERA acknowledges Amanda Energy's view on the benefits of ringfencing. The ERA is not proposing any changes to the existing ringfencing arrangements regarding retail restricted information. Synergy will be required to preserve the confidentiality of information, which cannot be disclosed to RBU. The ERA notes that Amanda Energy does not state any benefits from the maintaining generation restricted information. The ERA considers that removing redundant ringfencing restrictions on Synergy will reduce compliance costs that ultimately benefit consumers.
Change Energy	
Standard products Change Energy strongly supports the existence of standard products. Change Energy notes it is one of the last small retailers in the WEM and considers standard products are crucial for it to	The ERA acknowledges Change Energy's suggestion to impose market making conditions on generators. The ERA's role is limited to assessing the effectiveness of the

Stakeholder feedback	ERA response
remain viable in the market. Change Energy considers there are limited alternatives to Synergy's wholesale contracts for retailers. Change Energy does not consider there will be any benefit from the ERA's proposed restrictions to the trade of standard products. Change Energy notes standard products are not traded frequently and provide a back-stop price from which it negotiates and transacts non-standard products with Synergy and other participants. Change Energy notes other vertically integrated participants tend to withhold any available energy for the benefit of their retail operations rather than sell it to third-party competitors. Change Energy suggests that the ERA consider alternatives such as the 'Secure and Promote' licence conditions in Great Britain which would force other generators to 'make markets' and promote competition in the wholesale and retail markets.	existing EGRC scheme which applies to Synergy only, and the issue of developing conditions requiring Synergy and other firms to be market makers is outside this review's scope. However, these are issues that can be raised as part of EPWA's EGRC scheme review.
Disclosure mechanism Change Energy supports the ERA's recommended option to remove the disclosure mechanism as suggested in the discussion paper. Change Energy does not consider it valuable to require Synergy to provide segmented financial information. Change Energy considers the removal of the transfer pricing mechanism would have a minimal impact on the market as it does not consider that Synergy uses the transfer pricing mechanism when pricing products for customers in the contestable retail market. Change Energy suggests the ERA use customer and market participant surveys to gather anecdotal evidence on Synergy's behaviour to better understand the issues private sector participants face in the market dominated by Synergy. **Ringfencing** Change Energy does not consider the existing ring-fencing arrangements materially alter Synergy's behaviour in the contestable retail market. Change Energy considers the removal of the ring-fencing arrangements would improve Synergy's understanding of its own financial position as the RBU's commerciality may be improved if it has access to generation costs and wholesale electricity contracts. Change Energy considers the improved financial management of Synergy as a commercial business will be beneficial for West Australians – the indirect owners of Synergy. Change Energy considers Synergy must be held accountable to manage its retail unit commercially as it is competing with the private sector for customers.	The ERA notes Change Energy's support for removing the disclosure mechanism, transfer pricing and ringfencing within Synergy. The ERA is considering Change Energy's suggestion of using surveys to gather evidence on participants' experiences with the market and Synergy. As part of this EGRC review, the ERA conducted a stakeholder survey of market participants to assess the need for standard products and the wholesale contracts market's liquidity.

Stakeholder feedback	ERA response
Perth Energy	
Standard products Perth Energy strongly supports the existence of standard products as it considers that there are limited wholesale contracts available from other generators and these products are essential for small retailers to remain viable in the market. Perth Energy supports the threshold suggested in the discussion paper as it makes standard products accessible to those who need them the most. Perth Energy also suggests two other mechanisms through which this can be achieved: • Limiting the contract quantity that can be acquired by any entity to a nominated proportion of the total available; or • Initially offering contracts to smaller participants with the remainder being offered later to all remaining market participants. For example, after two weeks.	The ERA notes Perth Energy's support of a standard product threshold and have considered the suggested mechanisms in developing the framework for determining access to standard products. The ERA recommends restricting access to sell-side standard products. Access to buy-side standard products will not be limited.
Disclosure mechanism Perth Energy does not use currently available financial information provided in Synergy's segmented reports and is not clear about the effect of removing the transfer pricing mechanism. Perth Energy prefers the option to remove the disclosure mechanism. Perth Energy states that costs associated with retaining and strengthening the disclosure mechanism will only add to the overhead costs unless real price reductions can be implemented.	The ERA notes Perth Energy's preference for removing the disclosure mechanism.
Ringfencing Perth Energy agrees with the benefits that ringfencing provides in restricting the flow of information between RBU and WBU. For ringfencing between WBU and GBU, Perth Energy argues that while a case could be made for removing it, this would open the possibility of leakage of information to RBU.	The ERA notes that the existing ringfencing arrangements restricts the retail business unit from accessing any retail restricted information. The ERA has confirmed that retail restricted information held anywhere within Synergy's other business units cannot be shared with the retail business unit. That is, if Synergy's generation business unit obtains retail restricted information, this cannot be shared with the retail business unit.
Shell Energy	
Standard products Shell Energy perceives the standard product threshold to be problematic. Whilst Shell Energy is not captured by the threshold of a "significant generation asset" in the discussion paper, when the planned retirements of Synergy's generation fleet materialise, other generators can be captured by this threshold. Shell Energy suggests that	The ERA has developed a framework for determining which entities will be restricted from accessing sell-side standard products. Entities that have access to sufficient generation do not need to access sell-side standard products as they have their own generation which provides an internal hedge

Stakeholder feedback	ERA response
further alternatives be presented to stakeholders following feedback from the discussion paper.	against variable price risk. Even with the restriction, all firms will maintain access to Synergy's customised wholesale contracts. Additionally, the restriction's framework is designed with the intention that a participant's short-term variation in generation and consumption will not affect whether they can access standard products, reducing uncertainty and administrative and compliance costs.
Disclosure mechanism Shell Energy prefers the option to improve the current disclosure mechanism. Shell Energy considers market participants require increased transparency and assurance that a dominant business is being held to a high level of accountability. Shell Energy disagrees with the discussion paper that the option which removes the disclosure mechanism would "eliminate administration and compliance costs" and that the option to improve the disclosure mechanism only provides "limited benefit". Shell Energy strongly suggests that a responsible entity monitor Synergy's financial data and trigger a detailed investigation if anti-competitive conduct is suspected.	The ERA notes Shell Energy's preference to the option to improve the disclosure mechanism in relation to increased transparency and assurance. However, the multitude of factors that influence financial outcomes along with the possibility of cost shifting make it difficult to detect anti-competitive conduct even with detailed financial information and this provides little benefit to the market.
Ringfencing Shell Energy supports the argument that without ringfencing, the flow of information between wholesale and retail business units would be similar to other vertically integrated businesses supplying wholesale products in the WEM. For the ringfencing between generation and wholesale business units, even though the generation unit does not trade in the WEM, Shell Energy believes that ringfencing obligations should continue to apply between these units to promote best practise in restriction the flow of information. Shell Energy considers increased scrutiny of a dominant market participant and retaining strict ringfencing requirements should be maintained and undergo continual improvement and enforcement oversight as a matter of preventing potential anti-competitive conduct.	The ERA notes Shell Energy's feedback on supporting ringfencing between WBU and GBU of generation restricted information. It is also noted that Shell Energy does not list any explicit benefits which could result from maintaining the generation restricted information ringfencing obligation.
Synergy	
Standard products Synergy supports the standard products threshold to provide smaller participants greater access to standard products. Synergy also supports ERA's approach of reviewing the appropriateness of the buy-sell spread in the next review. Synergy noted it is the sole provider of standard products in the WEM and currently assumes the	**Standard products, ringfencing and disclosure mechanism** The ERA notes Synergy's support: • To impose restrictions on entities with access to sufficient own-generation from being able to access standard products as it forces Synergy to increase its risks.

Stakeholder feedback	ERA response
entire risk from speculative trades. Synergy considers restricting entities with significant assets from accessing standard products will reduce Synergy's financial risk in the provision of these products. AEMO's Electricity Statement Of Opportunities (ESOO) supply-demand outlook projects an urgent need for capacity providers to supply in the SWIS and standard product thresholds will enable Synergy to transition smoothly from a net seller to a net buyer, if required. Synergy considers it will be able to effectively administer the provision of standard products based on ERA's proposed approach. **Disclosure mechanism** Synergy supports the ERA's preferred option of removing the obligation to prepare segmented financial reporting and part 22(a) of the non-discrimination provisions. Synergy agrees with ERA's comments regarding the ineffectiveness of the transfer pricing mechanism. Synergy does not support the retention and expansion of the existing disclosure mechanism. Synergy agrees with the ERA's assessment that market conditions make it unlikely for Synergy to be able to engage in predatory pricing to eliminate its competitors in the contestable retail market. **Ringfencing** Synergy does not see a market need for retaining the provision requiring ringfencing between WBU and GBU. Synergy also states that the ESOO highlights a potentially significant role for new private sector generation (potentially 945MW as early as 2025-26) that warrants ringfencing between WBU and RBU to be reconsidered.	• To remove ringfencing of generation restricted information as it is not needed. • For the ERA's preferred option to remove the disclosure mechanism as it is ineffective.
Audit requirements Synergy considers that the current level of audit and review is onerous. Synergy estimates its cost of complying with the EGRC scheme in 2023 is more than $1 million. Synergy states that an EGRC scheme that permits audit frequency to change based on Synergy's compliance performance would reduce both Synergy's and the Auditor General's costs and recognise Synergy's consistent and compliant behaviour.	The ERA has considered Synergy's feedback related to changing audit requirements. The annual audit requirement can be effective in discouraging Synergy from engaging in anti-competitive behaviour. For example, if the audit requirements were broadened to two years, and if there were an information breach of the ringfencing requirements, it would take two years to find out that there is a problem and rectify it. This could be too long depending on the type, severity and impact of such a breach on market outcomes. Although past compliance performance is useful, it is not necessarily an indicator of future performance.

Appendix 5 Application of the framework to restrict access to sell-side standard products

As set out in chapter 4, the ERA recommends that entities with access to sufficient generation assets be restricted from trading sell-side standard products. Implementing this recommendation requires an assessment of which entities have access to sufficient generation assets. Section 4.3.1 of this report outlined a framework to determine which entities would be restricted. This appendix provides further detail on the application of this framework using historical WEM data prior to new market start.

The analysis presented in this appendix uses data on entities' dispatch and consumption from calendar year 2022. The ERA has not included data from the new WEM, which commenced on 1 October 2023, given that some generators are being dispatched differently in the new WEM and there may be anomalies in the new data that may need to be excluded.

The framework must be robust enough to adapt to entities' changing generation and consumption profiles. Results of the analysis for calendar years 2019 to 2021 resemble outcomes from 2022 presented in this appendix.

For an entity to be restricted from transacting sell-side standard products, it must satisfy two conditions:

1. The entity has a ratio of generation access relative to the load it serves above a chosen threshold. Table 4 outlines various options for an appropriate generation to load ratio.

2. The entity must have access to sufficient generation assets (for example, at least 0.5 TWh a year). Table 5 outlines various options to assess an entity's size.

These conditions aim to strike a balance between the cost and practicality of implementing a framework to restrict access to sell-side standard products, while ensuring that only those entities that do *not* need access to 'sell-side' standard products for risk management are captured by this framework.

Assessment of an entity's generation to load

As highlighted in section 4.3.1.1, entities that have access to sufficient generation assets compared to the load they serve are unlikely to require sell-side standard products as a risk management tool. Restricting these entities from accessing these products will help increase the availability to those entities that need them for hedging their risk. The ERA has used an entity's generation to load ratio as a measure of an entity's need for access to standard products.

The ERA derived each entity's generation to load ratio from its:

- Annual generation (in megawatt hours (MWh)), based on historical WEM data.
- Annual load (in MWh), based on confidential data collected from Western Power.

For example, an entity that generated 100 MWh and served a load of 100 MWh over 2022 would have a generation to load ratio of one.

The ERA explored various options to identify ratios of generation capacity to load that would be appropriate to restrict access to sell-side standard products. The analysis considered how

many entities would be potentially captured by the ratio, based on the number of existing market participants and their associated entities in the WEM (Table 4).

Table 4. Generation to load ratios and the number of entities potentially restricted access to sell-side standard products

Option	Generation to load ratio	Number of entities potentially restricted (before considering the generation size [criteria 2])
1	1.2	6
2	1	7
3	0.8	7
4	0.6	7
5	0.2	9

Source: Based on 2022 generation and consumption data. Due to the confidentiality of consumption data, the names of entities and their associated ratios are not provided here; however this is included in the confidential appendix redacted for public release and provided to the Minister for Energy (Appendix 6).

Note: The data underlying the analysis in this table excludes entities that are solely a generator, solely a retailer, or Synergy.

For example, six entities would be restricted from accessing sell-side standard products if the EGRC scheme establishes a threshold by restricting entities that had a generation to load ratio greater than 1.2 (Table 4). This is based on the number of existing market participants and their associated entities in the WEM and does not consider the effect of the second criteria (size of generation access), which is discussed below.

The number of entities that could be potentially restricted from accessing standard products increases as the generation to load ratio decreases. As shown in Table 4, the number of entities restricted from trading standard products is unchanged for generation to load ratios between 0.6 and 1.0 (that is, seven entities).[106]

Some of these seven entities are small entities that may have frequent changes in their risk exposure due to short-term variations in their generation or retail book. Therefore, the analysis must also consider an entity's size.

Assessment of generation size

In developing the framework to restrict access to sell-side standard products, the ERA considered the need to provide certainty and clarity to market participants. Implementing a condition to consider the size of an entity in determining access to sell-side standard products will provide certainty and clarity to market participants. This mitigates the risk that smaller entities – that have frequent variation in their risk exposure – are restricted from accessing sell-side standard products due to short-term variations in their generation or load.

[106] This is based on the number of existing market participants and their associated entities in the WEM and does not consider the effect of the second criteria (size of generation access).

In its analysis, the ERA used an entity's annual generation (in MWh) as a measure of its size. This data is publicly available, which provides clarity and transparency to market participants in assessing whether they may be restricted in accessing sell-side standard products.

The ERA applied the following steps in assessing the generation size to restrict access to sell-side standard products:

1. Derive the generation to load ratios for each entity, which comprise of associated market participants.

2. Rank these entities based on their ratios in descending order of magnitude.

3. Evaluate the number of entities that have a ratio higher than the chosen ratio threshold.

4. Evaluate the size of the entities identified in item 3 above, based on their recent annual generation.

5. Identify entities that can be considered small, that is, they generate less than 0.5 TWh annually.[107] These small entities are not restricted from trading standard products as they frequently can have material variations in their generation to load ratios.

Table 5 shows the number of entities that could be potentially restricted from accessing sell-side standard products, by considering various generation to load ratios and a 0.5 TWh generation size limit.

Table 5. Different scenarios of generation to load ratios.

Option	Ratio of generation to load	Number of potential entities affected (based on generation to load ratio)	Number of potential entities restricted (based on generation to load ratio and generation size)
1	1.2	6	2
2	1	7	2
3	0.8	7	2
4	0.6	7	2
5	0.2	9	4

Source: Based on 2022 generation and consumption data. Due to the confidentiality of consumption data, names of entities and their associated ratios cannot be published.

Note: The data underlying the analysis in this table excludes entities that are solely a generator, solely a retailer, or Synergy.

Incorporating the criteria of considering an entity's size does not restrict smaller entities with highly variable generation to load ratios from trading sell-side standard products. This reduces the uncertainty for these participants from being captured by this restriction.

[107] Due to confidential data, the entity and figures used to determine the 0.5 TWh threshold cannot be published.

As demonstrated in Table 5, the application of both conditions will potentially restrict two entities from trading sell-side standard products if a generation to load ratio of 0.6 or higher is adopted. These two entities can still transact customised wholesale contracts with Synergy.

Appendix 6 Confidential appendix (redacted for public release)

This appendix contains confidential data that has been redacted for public release. The information in this appendix includes market participants' consumption data that was used to develop the framework for restricting access to sell-side standard products (section 4.3.1 and Appendix 5).

This information has been provided to the Minister for Energy.

Appendix 7 Synergy and the wholesale contracts market

This appendix details the ERA's analysis in considering the necessity of market power mitigation measures in the wholesale contracts market by considering the extent to which Synergy can influence wholesale contract prices, as summarised in section 3.3.

The opportunities for Synergy to influence wholesale contract prices arise from a lack of rivals in the wholesale contracts market to constrain Synergy's pricing.

A firm can influence market prices where there are limited alternatives to the firm supplying the good or service. In these situations, firms supplying the limited products can take advantage of the situation by:

- Increasing prices when demand is relatively insensitive to price changes, allowing them to retain customers despite higher prices.
- Imposing favourable terms for product sales, benefiting the supplying firm at the expense of counterparties.

The ERA considered several measures and sources of information to assess Synergy's ability to influence wholesale contract prices.

Stakeholder feedback

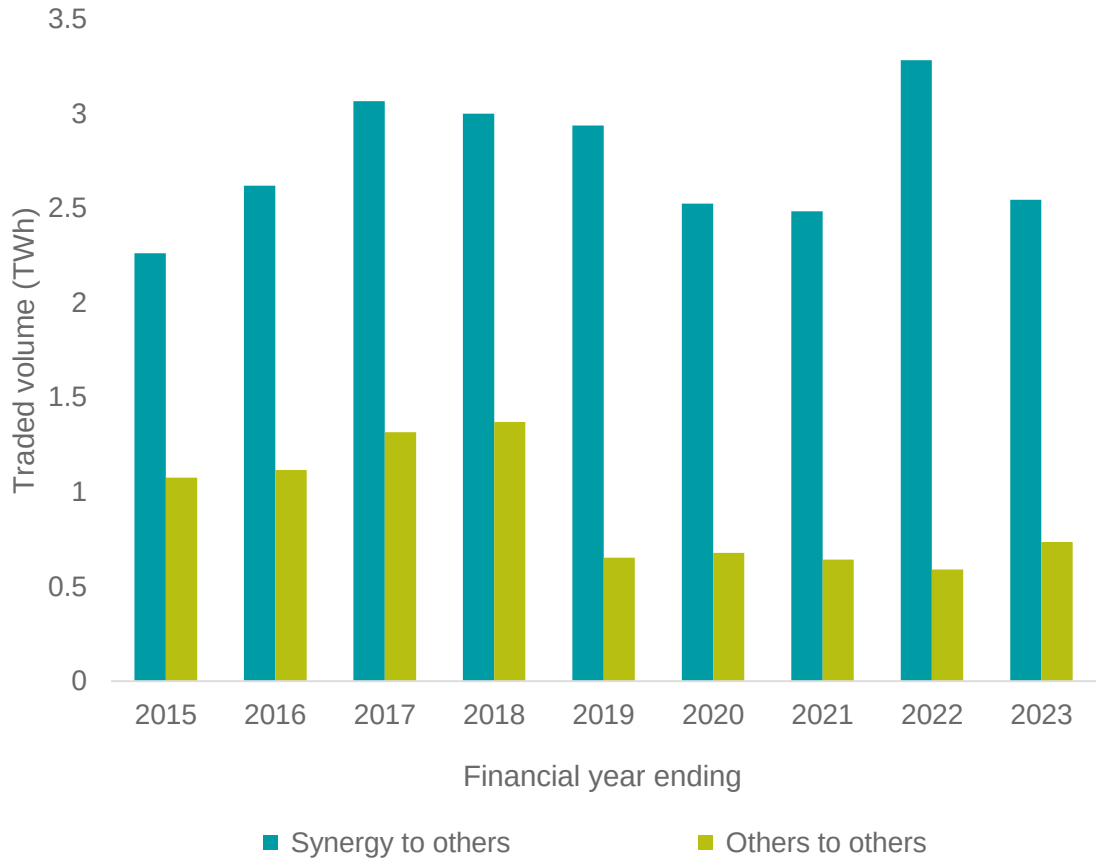
Stakeholders indicated that Synergy is the primary supplier of wholesale contracts due to limited alternative suppliers for the required electricity amounts or, where there were offers from other sources, they were at unattractive prices. Pursuing contracts with other suppliers was not commercially sensible for some stakeholders.

The ERA is not aware of any other market participant that advertises wholesale contracts for sale or any financial institution that actively trades in financial contracts relating to electricity in the WEM.

Synergy's share of wholesale contract quantities

Synergy has remained the dominant supplier of wholesale contracts to other market participants since the merger in 2014. Analysis of the wholesale contract volumes declared to AEMO, as depicted in Figure 6, shows that Synergy's contracted volumes with third parties are substantially more than those traded between third parties. The difference in volumes could be due to the scarcity of alternatives to Synergy and the attractiveness of Synergy's products in terms of price and conditions.

Figure 6. Amount of electricity traded by Synergy and others, excluding internal supply



Source: ERA analysis of WEM data.

Synergy's share of generation capacity

Assessments of Synergy's generation capacity and market concentration show that the WEM continues to be a highly concentrated market, with Synergy able to influence wholesale contract prices.[108]

Synergy retains a substantial share of generation capacity and energy generation, accounting for over half of the market (see Table 6), suggesting that retailers may have limited options when looking for electricity providers to contract. The generation capacity shares in Table 6 do not account for Synergy's acquisition of generation from third parties, often through long-term power purchase agreements. Due to Synergy's power purchase agreements with third parties, Synergy is anticipated to have a greater share of generation capacity compared to what is indicated in Table 6. This means that retailers have even more limited choices outside of contracting with Synergy.

[108] Entities with large generation capacity (relative to the load they serve) supply wholesale contracts to hedge their generation revenue risk. Data on the share of generation capacity is used as a proxy for the share of wholesale supply contract market.

Table 6. Share of capacity credits (per cent) by market participant[109]

Year	Synergy	Summit Southern Cross[110]	Alinta	Newgen Neerabup	All others
2014	52	13	11	5	19
2022	52	16	15	7	10

Source: ERA analysis of AEMO data.

Note: Figures may not add up to 100 per cent due to rounding.

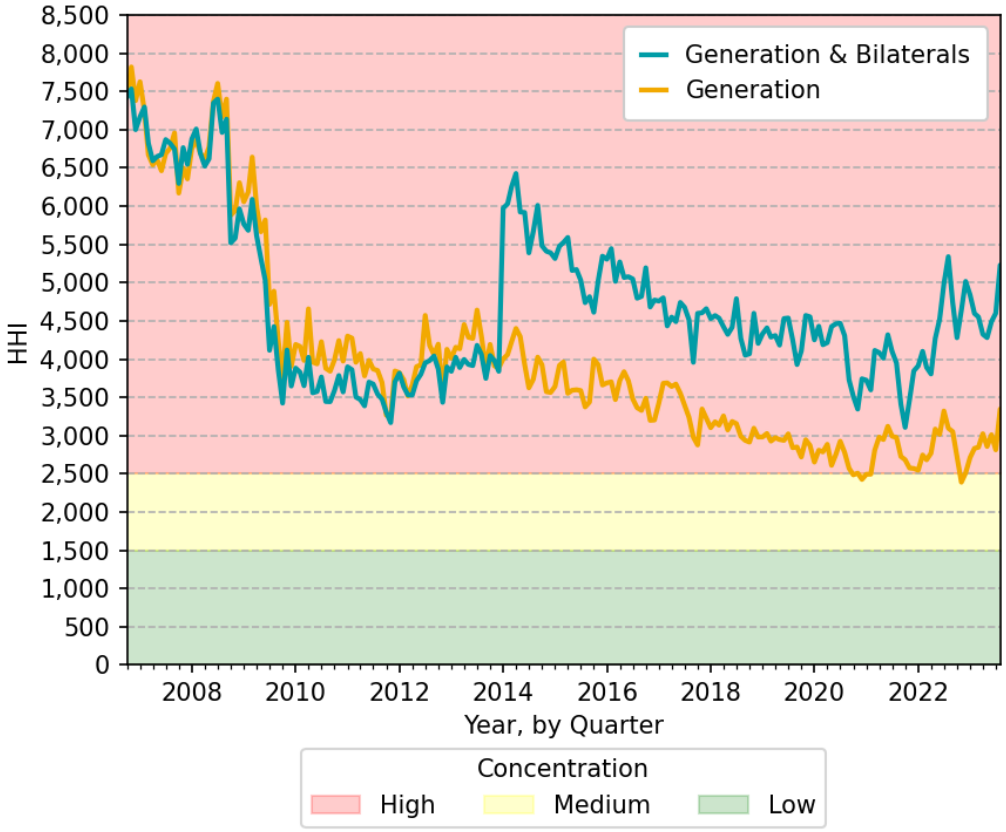
The ERA examined the level of competition in the WEM by using the Herfindahl Hirschman Index (HHI), which measures market concentration (see Figure 7).[111] The HHI of the WEM (based on generation only) is around 3,000, which sits in the highly concentrated range.

109 Capacity credits are awarded by AEMO to generators (and other capacity providers) to make their generating capacity available. In general, capacity credits reflect the reasonable expectation of the amount of capacity a generator can provide during times of high demand in the SWIS.

110 The Summit Southern Cross share is a consolidation of all market participants (this includes Bluewaters and Newgen Kwinana) that receive capacity credits that relate to Summit Southern Cross.

111 The Figure 7 HHI is calculated based on generation share that includes the effect of bilateral contracts. The HHI is the sum of squares of the individual market share of market participants from a scale of 0 to 10,000. Unconcentrated markets with market share spread across many participants yield very low values and highly concentrated markets yield high values. The HHI can only change when new suppliers enter the market, incumbent suppliers exit the market, or there are changes in ownership of generation capacity.

Figure 7. Herfindahl Hirschman Index (HHI) for the WEM's wholesale electricity market



Source: ERA analysis of WEM data.

Note: The increase in the 'Generation & Bilaterals' HHI figure in 2014 is due to Verve Energy's contracts being incorporated with Synergy's contracts.

Once bilateral power purchase agreements (PPA) are accounted for, the WEM sits well within the highly concentrated band. The reason for the difference in concentration is best discussed by example. Where Synergy has a PPA to acquire all the energy from another market participant, this effectively removes a competitor from the WEM which increases the market's concentration. The high level of market concentration when accounting for bilateral PPAs suggests that a few dominant firms hold a significant share of the market, leading to a less competitive market environment. This is indicative of few options for retailers to obtain wholesale contracts from given the highly concentrated WEM.

Synergy's conduct in the pricing of wholesale contracts

The ERA's review of Synergy's pricing of wholesale contracts also indicates a lack of competitive pressure on Synergy that could otherwise reduce Synergy's ability to include markups in its wholesale contract prices.

From information available to the ERA, Synergy remains the dominant supplier of wholesale electricity contracts in the WEM, granting it the ability to influence prices and contract conditions within the market.[112] For example, Synergy can impose unfavourable wholesale

[112] Dominant firms can strategically limit the supply of a product to manipulate prices. By reducing the availability of a product, they can increase its price and thereby enhance their profits. A vertically integrated dominant firm can also use this strategy in the supply of a product in the upstream market – which is essential for market players in the downstream market - to deter competitors from participating in the downstream market.

contract terms and conditions (such as, burdensome credit requirements or unfavourable wholesale product specifications) to restrict the provision of wholesale contracts to competitor retailers that need the products to participate in the WEM.

Appendix 8 The EGRC scheme's disclosure mechanism

This appendix provides further details about how the ERA evaluated the effectiveness of the disclosure mechanism and details on each of the disclosure mechanism's elements:

- segmented financial information disclosure
- transfer pricing arrangements
- non-discrimination obligations.

Assessing the disclosure mechanism

This review assessed the effectiveness of the disclosure mechanism against the following criteria to detect if Synergy has engaged in anti-competitive conduct.

1. The disclosure mechanism provides relevant financial information

Specific financial information is required for the detection of anti-competitive conduct. Synergy's annual financial statements do not provide this information as they are prepared at an aggregated level and are not detailed enough to detect if changes in Synergy's financial performance is due to anti-competitive conduct.

For example, variation in generation fuel costs, operating and non-operating costs, spot prices for electricity, retail product prices and wholesale contract prices all influence Synergy's profit. The detection of anti-competitive conduct such as price markups in the wholesale contracts market or predatory pricing in the retail market can be assisted by the provision of segmented financial performance information for Synergy's wholesale and contestable retail businesses, and for relevant products.

2. Information required to be provided through the disclosure mechanism can be benchmarked

Comparing Synergy's financial performance against a benchmark of other similar electricity businesses is a way of indicating whether there has been anti-competitive conduct. Requiring Synergy's business units' financial performance to be developed so that they can be compared with other electricity retailers allows Synergy's financial performance to be benchmarked. Where Synergy's financial performance deviates significantly from those benchmarks, it can be an indicator of anti-competitive conduct.

For example, low profit margins for the contestable electricity retail segment, when compared to 'as efficient' third-party retailers as Synergy's retail business, can indicate Synergy's inclusion of price markups in the wholesale contracts market or unrealistically low retail product pricing, both of which are anti-competitive conduct.

Assessment of costs against benefits

Benefits from the disclosure of information are being considered against administration and compliance costs. For example, anti-competitive behaviour can be scrutinised by having access to detailed information on Synergy's product prices, pricing approaches and costs. However, public disclosure of Synergy's commercially sensitive information creates a disadvantage for Synergy. Market participants that develop innovative pricing approaches or risk management methods obtain a competitive advantage by reducing their costs and maximising value to their shareholders. Consumers are expected to benefit from the resulting cost reductions, as these savings are anticipated to be passed on to them, leading to more

affordable products and services. An obligation to publish such sensitive information reduces incentives for market participants to improve their pricing and risk management approaches.

Public disclosure of financial information in a generalised manner can help protect sensitive commercial in confidence details. However, as the level of generality increases, the effectiveness of the disclosed information in uncovering instances of anti-competitive behaviour may decrease. Striking a balance between providing meaningful insights to the public while protecting sensitive information is crucial.

Segmented financial information

The EGRC Regulations require Synergy to operationally segregate into a generation business unit (GBU), wholesale business unit (WBU), retail business unit (RBU) and shared services, and had an obligation for Synergy to provide a breakdown of its financial statements based on these segments.[113,114,115] As an example, Figure 8 shows Synergy's segmented financial statements for the first quarter of 2023.

Figure 8. Synergy's segmented financial information for March 2023

31 March 2023	GBU	WBU	RBU	CSS	Eliminations	Group
	'000	'000	'000	'000	'000	'000
Revenue External customers	7,110	316,008	2,207,297	14,816	-	2,545,231
Inter-segment	299,375	848,726	-	-	(1,148,101)	-
Total Revenue	**306,485**	**1,164,734**	**2,207,297**	**14,816**	**(1,148,101)**	**2,545,231**
Cost of sales	(432,188)	(816,035)	(1,956,484)	-	1,148,101	(2,056,606)
Operating costs	(198,224)	(6,451)	(59,596)	(114,261)	-	(378,532)
Bad Debts	-	-	(28,934)	(1,596)	-	(30,530)
Impairment					-	-
Other income	289	142	771	18,035	(11,091)	8146
EBITDA[116]	**(323,638)**	**342,390**	**163,054**	**(83,006)**	**(11,091)**	**87,709**
Depreciation and amortisation	(20,862)	(376)	(748)	(3,274)	-	(25,260)
Finance income	-	-	-	6,328	-	6,328
Finance costs	(11,122)	(6,882)	(2)	(2,346)	-	(20,352)

113 *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* (WA), 1 July 2023, Regulation 5(1).

114 The Minister for Energy has the power to further segment Synergy's operations. *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* (WA), 1 July 2023, Regulation 5(2).

115 Synergy has not been separated into any additional segments since the merger in 2014. The corporate shared services (CSS) or shared services segment manages corporate strategy, finance, HR, IT and operations undertaken in connection with two or more businesses.

116 EBITDA is a measure of earnings before interest, taxation, depreciation and amortisation.

31 March 2023	GBU	WBU	RBU	CSS	Eliminations	Group
Net finance costs	(11,122)	(6,882)	(2)	3,982	-	(14,024)
Segment profit/ (loss)	**(355,622)**	**335,132**	**162,304**	**(82,298)**	**(11,091)**	**48,425**
Unallocated items Share of profit of joint ventures and associates						380
Tax equivalent expense						-
Profit for the year from continuing operations						**48,805**

Source: Synergy, Regulatory Reports (Quarter ending 31 March 2023), (online). Note: CSS is Corporate Shared Services.

The commencement of the *Government Trading Enterprises Act 2023* (WA) on 1 July 2023 removed the segmented financial reporting requirement under the EGRC Regulations. Synergy is no longer required to prepare quarterly financial reports segmented by business unit.

This change in Synergy's obligation occurred during the ERA's review of the effectiveness of the EGRC scheme. For completeness, the ERA's analysis on the effectiveness of the segmented financial statements is provided in this appendix.

The ERA's analysis indicated that the segmented financial statements, as required by the EGRC regulations, were ineffective in meeting their purpose of disclosing anti-competitive behaviour. The ERA recommends removing the obligation to prepare these statements, which align with the intent and outcome of the GTE Act.

Effectiveness in revealing anti-competitive behaviour

Instances of Synergy marking up wholesale contract prices will be revealed by inspecting WBU's revenue (both from external customers and inter-segment) and margin (revenue minus cost of sales and operating costs) and RBU's margin.

WBU is responsible for trading in the energy market. Third-party generators and retailers can obtain wholesale contracts from WBU – these are either customised products or standard products. The RBU pays for consumption of electricity based on balancing prices as well as its wholesale contract prices for the quantities it sources through customised wholesale contracts with WBU.

Marked up contract prices raise WBU's revenue and margin over time. Contract price markups reduce RBU's margin because wholesale contracts form a part of RBU's costs – input price markups related to wholesale contracts increase RBU's cost of sales. The non-discrimination requirements under the EGRC scheme – as discussed in section 5.1.3 – are intended to ensure WBU's trade of wholesale contracts with RBU are at arm's length. That is, any of

WBU's price markups included in the price of wholesale contracts with parties will also be included in the wholesale contracts that RBU obtains.

Synergy's quarterly and annual financial statements may be monitored to detect a possible abuse of market power in the wholesale contracts market. However, the previous information disclosure obligations resulted in financial information being published that was highly aggregated and does not provide effective disclosure of anti-competitive conduct.[117] For example, an increase in WBU's revenue may be due to increases in spot prices, sale quantities or an increase in WBU's risk margin included in the price of wholesale contracts. A decrease in RBU's margin may be related to a decrease in its revenue from revised pricing strategies, decrease in customer load or increase in its cost sources such as balancing prices, wholesale contract prices, network charges, reserve capacity charges and operating costs.

Synergy's segmented financial information was not separated between gas and electricity or contestable and non-contestable areas. RBU's sales and costs change with variations in RBU's financial outcomes from its operation in the gas retail market and given that these were aggregated with electricity sales and costs in the segmented financial statements, it did not provide useful information for readily detecting if Synergy engaged in anti-competitive conduct.

Instances of anti-competitive behaviour related to predatory pricing in the contestable retail market may be revealed by inspecting RBU's revenue and margin. Unrealistically low retail contract prices reduce RBU's revenue and margin. However, as stated above, several factors other than inappropriate pricing of contestable retail products influence RBU's revenue and margin. The financial information provided for RBU was highly aggregated and did not allow for a meaningful assessment to detect predatory pricing in the contestable retail market.

The issue of cost-shifting and financial reporting

Due to Synergy's vertical integration and its unique ability to operate in both the contestable and non-contestable retail segments, there is a possibility for costs to be shifted between segments where cost classification is uncertain.[118] This is particularly an issue where costs are shared between Synergy's business or operating segments.

To assess for anti-competitive conduct, such as predatory pricing, consistently and appropriately classified financial information is required. This raises the possibility that any assessment of predatory pricing based on Synergy's disclosed financial information could be confounded by Synergy's accounting approach to apportioning shared costs between business segments. For example, conduct such as predatory pricing may not result in a decrease in RBU's margin if Synergy shifts costs away from its contestable retail offerings to other business segments.

The possibility for cost-shifting reduces the effectiveness of any disclosure mechanism that relies on the provision of segmented financial statements, as opposed to a mechanism that provides for a full disclosure and audit of costing and pricing approaches. Accounting approaches for the allocation of shared costs between products and segments might vary over

[117] The ERA previously raised this matter as part of the previous review of the EGRC scheme. The Public Utilities Office responded to the ERA's recommendation for increasing the level of segmentation of Synergy's financial statements. Refer to Public Utilities Office, 2019, *Electricity Generation and Retail Corporation regulatory scheme – Response to 2016 report to the Minister for Energy on the effectiveness of the Scheme*, Directions Report, pp. 21–22, (online).

[118] Electricity customers under the contestability threshold, that is a customer that uses less than 50 MWh per year, and who is connected to the Western Power network must use Synergy as their retailer – Economic Regulation Authority, 'Can I choose my retailer?', (online) [accessed 28 August 2023].

time. This factor was considered as part of the assessment of options to improve the effectiveness of the disclosure mechanism.

Further disaggregation of Synergy's financial statements to contestable and non-contestable electricity retail segments can provide more relevant information and improve the effectiveness of the disclosure mechanism, provided that shared costs are appropriately attributed across business segments and between contestable and non-contestable retail segments. Examples of shared costs include the cost of large-scale generation certificates (LGCs), and operating and overhead costs – such as information technology costs, corporate overhead costs and cost of managing wholesale price risk.[119] Although further segmentation of information related to contestable and non-contestable segments provides additional relevant information such as RBU's contestable margin, the possible shifting of costs away from the contestable segment would raise RBU's margin and confound any benchmarking of RBU's margin.

In the ERA's previous reviews of the EGRC scheme, stakeholders raised concerns about Synergy's ability to shift costs from its contestable retail market to non-contestable retail segment and recovery of those costs through subsidies. The State Government's Budget Papers explain that Synergy currently receives operating subsidies to fund it for obligations that are non-commercial (mainly to better manage electricity costs for residential and small business customers) and for rebates and concessions to customers that Synergy administers on behalf of the Government.[120,121] The ERA is mindful of Synergy's ability to cost-shift and this has been considered this in its options analysis in the discussion paper.

Benchmarking financial information

Financial data in isolation does not provide for a meaningful assessment of possible anti-competitive conduct. Evaluating trends over time and comparing the financial data with benchmarks can lead to effective assessments for anti-competitive conduct. Comparing Synergy to similarly structured market participants can demonstrate if WBU's and RBU's margins are abnormally high or low, which could indicate anti-competitive conduct.

To allow a comparison between Synergy's financial information and other parties, Synergy's segmented financial information must be prepared on the basis that internal transactions between Synergy's business units were conducted at arm's length. This makes Synergy's financial information comparable to those of independent generators and retailers as it provides information as if Synergy's business units were independent businesses.

The EGRC scheme includes two main mechanisms to provide for preparation of segmented financial information on an arm's length basis:[122]

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119 Cost of managing wholesale price risk is common across Synergy's customer portfolio, as a retailer manages its wholesale price risk based on exposure to energy spot prices for its total load.

120 WA State Government, 2023, *2023-24 budget, budget statements, budget paper No. 2, Volume 2*, p. 777, (online).

121 Previously the State Government paid a Tariff Adjustment Payment (TAP) to Synergy to cover the cost of serving non-contestable retail customers when gazetted tariffs did not provide for Synergy's full cost recovery. In its submission to the 2015 review, ERM Power noted that that the TAP was not widely understood. ERM Power asserted that potentially, the TAP was used to subsidise all three market segments. It noted that there was little transparency in the classification of customers and decisions as to whether subsidisation through the TAP was warranted for particular classes, and that the TAP has not been reported on in any meaningful detail.[121]

122 *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* (WA), 1 July 2023, Regulations 9(2), 9(4) and 22(a).

1. The requirement for Synergy to determine transfer prices.
2. The non-discrimination clause requires Synergy to ensure that a 'wholesale supply' of electricity is not offered to the RBU on terms and conditions that are, having regard for all relevant circumstances, more favourable than the terms on which it is offered to retail or generation competitors.[123]

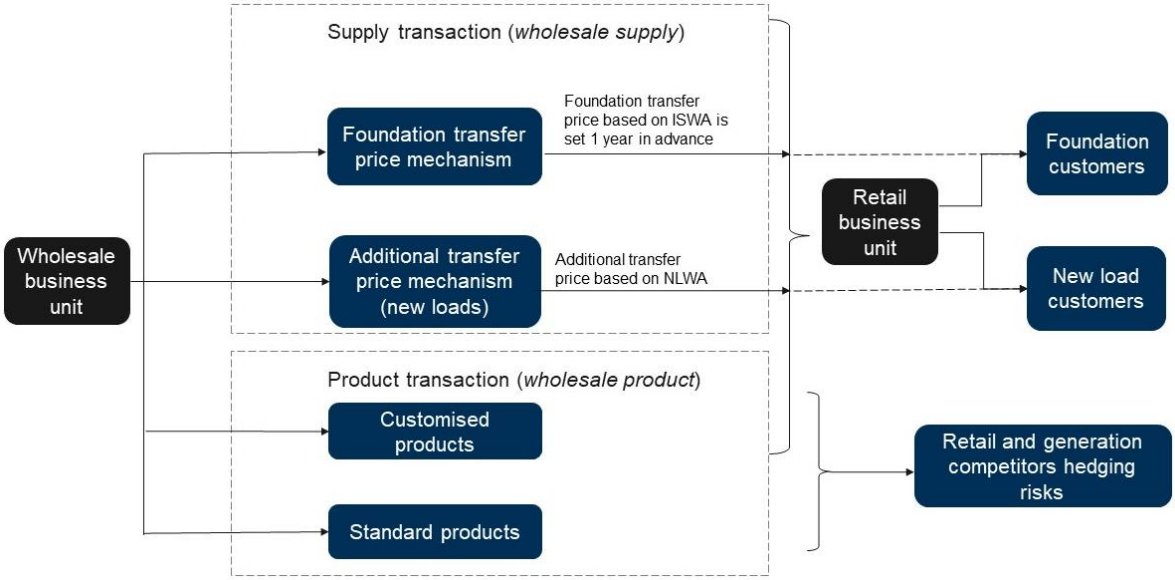
The regulations also require that Synergy prepare, maintain and comply with a written policy documenting standard processes for wholesale electricity supply requests from the RBU and its retail and generation competitors. This policy provides the basis to ensure non-price terms and conditions of trades with RBU are comparable to those with third parties, and hence the applied prices are determined on equal terms and conditions.

However, Synergy's requirement to produce segmented financial information has been removed (referred to earlier in this appendix).

Transfer pricing arrangements

A simplified map of Synergy's internal and third-party wholesale transactions and transfer prices is provided in Figure 9.

Figure 9. Role of transfer prices in transactions for WBU, RBU and third parties



Source: ERA

Note: For Synergy, the transfer pricing arrangements apply only to supply transactions and not to wholesale product transactions. Detail on the differences between supply transactions and wholesale product transaction is explained later in this appendix.

Determination of transfer prices does not provide any benefit

The determination of transfer prices may be beneficial for the market if those prices provided additional relevant information or contributed to the preparation of segmented financial statements on an arm's length basis. Neither of these are provided by transfer prices because:

[123] Ibid, Regulation 22(a).

- There is no requirement in the EGRC scheme for Synergy to publish transfer prices.
- There is no requirement for Synergy to use transfer prices for preparing segmented financial statements.
- There is no requirement for Synergy to use transfer prices for determining retail product prices.

Synergy used to prepare segmented financial statements based on Australian accounting standards.[124] Accounting standards provide for recording of costs on accrued basis – that is, they provide for recording of actual wholesale supply costs. Actual wholesale supply costs are driven by realised spot prices and wholesale contract prices that the RBU agrees to pay to the WBU. The use of actual costs – consistent with accounting standards – together with the EGRC scheme's non-discrimination requirements (see section 5.1.3) – is sufficient for recording RBU's input energy costs on an arm's length basis. This means that the determination of transfer prices is not needed for the preparation of segmented financial information.

Transfer prices are forecast prices applicable to supply transactions between WBU and RBU and do not reflect the actual cost of supply of energy to RBU. For example, currently Synergy determines the foundation transfer prices for peak and off-peak periods for each month as a load weighted average of its forecast energy market prices to apply to the next financial year.

Benefits could be realised if transfer prices were published and if they reflected the input cost for RBU of sourcing energy. For example, market participants could use this information and infer an estimate of RBU's margin, which can be used to detect anti-competitive behaviour. For example, to facilitate competition in the New Zealand electricity market, vertically integrated entities are required to provide their internal retail transfer pricing and retail gross margins to the Electricity Authority. In the New Zealand market, information on internal transfer prices is available publicly.[125,126]

The current requirement of publishing the mechanism for determining the foundation transfer price in the EGRC scheme could yield benefits only if transfer prices were also made public. By disclosing the method for determining transfer prices, stakeholders could gain an understanding of how these prices are determined, enabling them to use this information effectively in identifying potential anti-competitive behaviour.

However, transfer prices are neither published nor reflect the input cost for RBU of sourcing energy. Transfer prices are applicable to supply transactions only and do not cover wholesale product transactions. Therefore, transfer prices do not reflect RBU's cost of sourcing energy from WBU, which comprises two components:

- cost component related to supply transactions – charges paid based on volume energy sources at spot price, and
- cost component related to product transactions – charges paid based on wholesale contract prices.

The charges paid under these two components (both in terms of per unit of energy sources and total charges) are different. For example, the foundation transfer price is a volume

[124] As explained earlier, the GTE Act removed Synergy's requirement to publish segmented financial statements. Prior to the commencement of the GTE Act, the EGRC scheme required Synergy to comply with Australian accounting standards when preparing its segmented financial statements.

[125] Electricity Authority, *Electricity Industry Participation Code*, 2010, Part 13 p. 154. The average load weighted retail transfer price is calculated by dividing the total notional cost of electricity under the internal retail transfer price arrangements by total amount of electricity sold to mass market customers.

[126] Electricity Authority, *Compliance Monitoring Framework*, December 2022, p. 7,13.

weighted average forecast price. Wholesale contract prices are volume weighted average forecast prices that also include a risk premium. Total charges paid under these two components also vary depending on RBU's hedging strategy – which determines the proportion of its load to be covered by wholesale contracts.

Non-discrimination obligations

Synergy not to discriminate between RBU and competitors

The requirement for Synergy to avoid discriminating between its RBU and competitors when offering wholesale supplies to RBU facilitates Synergy's financial reporting between the RBU and WBU to be recorded at arm's length. This includes intersegment costs, revenues, and margins.

The non-discrimination requirements and application of transfer prices do not deter Synergy from marking up wholesale contract prices, as explained in section 5.1.3. If Synergy marked up contract prices – including those charged to RBU – this would reduce RBU's profit margin. However, Synergy's overall consolidated profit would increase due to markups in the wholesale contracts market.[127]

The ERA has assessed the necessity for the non-discrimination regulation (for the WBU to not preference the RBU relative to third parties) having regard for Synergy's commercial interests.

Considering that Synergy is required to act in its own commercial interests, it is motivated to maximise its profits.

To maximise its profits, WBU will price its wholesale supply of electricity at the opportunity cost of wholesale supply of electricity – the highest price it can obtain. For WBU transactions with the RBU, the price would be in line with the price it could obtain for transactions with third parties because Synergy would have the opportunity to trade with third parties at prevailing market prices for the wholesale supply of electricity. If WBU were to trade electricity contracts with RBU at below this opportunity cost, it would be forgoing revenue it could have made and thus not maximising its return. Similarly, if RBU were to carry that lower price through to their contestable retail products, this would effectively be giving away revenue Synergy would have made had its price equalled its opportunity cost. That is, Synergy has incentives to price wholesale supplies to its own RBU on the basis of arm's length transactions.

While Synergy is incentivised to conduct arm's length trades between its business segments, the non-discriminatory trade requirement helps to assure that Synergy's segmented financial statements contain information reflecting arm's length transactions. This provides market participants and new entrants confidence in the market that Synergy's segmented financial statements align with the purpose of the EGRC scheme.

An ambiguity exists concerning the scope of the non-discrimination requirements and whether they encompass wholesale products. This raises concern that the non-discrimination requirements do not extend to the trade of wholesale products with third parties and RBU and Synergy might be able to trade wholesale products with RBU on a discriminatory basis.

[127] Economic Regulation Authority, 2019, *Report to the Minister for Energy on the Effectiveness of the Electricity Generation and Retail Corporation Regulatory Scheme 2017*, pp. 7–9, (online).

Synergy not to consider RBU's financial interests when trading with competitors

The requirement for Synergy to *not* consider its retail arm's interests when trading with third parties provides benefits in addressing additional incentives for Synergy to exercise market power in the wholesale contracts market. Exercise of market power in the wholesale contracts market could provide benefits to Synergy by squeezing the profit margin for third party retailers and deterring their participation in the retail market. This aspect of the non-discrimination requirement is not related to the objective of the disclosure mechanism and is not being removed under the ERA's recommendation to remove the disclosure mechanism.

Wholesale supply of electricity, wholesale supply of wholesale products, and supply arrangements

The EGRC scheme sets out arrangements for the 'wholesale supply of electricity' and 'supply of wholesale products' by the WBU to the RBU. The *Electricity Corporations Act 2005* (WA) specifies the wholesale acquisition or supply of electricity and defines wholesale products as "the acquisition or supply by the corporation of goods and services *relating to* the wholesale acquisition or supply of electricity".[128]

The EGRC scheme and the *Electricity Corporations Act 2005* (WA) do not provide a clear explanation of wholesale supply of electricity or wholesale products. The ERA interpreted wholesale products as wholesale contracts for managing energy price risk, because these contracts relate to the wholesale supply or acquisition of electricity, they derive their value from real-time market energy prices and are not typically written to provide for physical delivery of energy. These, for example, include forward contracts such as customised products and standard products that Synergy sells to third parties.[129]

The EGRC scheme differentiates between *wholesale supplies* from the WBU to the RBU for meeting foundation customer load (that is, customers who do not have a new contestable customer arrangement), and *wholesale supplies* from the WBU to the RBU for additional customer load (that is, customers who do have a new contestable customer arrangement).

The arrangements between the WBU and the RBU for *wholesale supply* for foundation customers are set out in the foundation transfer price mechanism and the arrangements between the WBU and the RBU for *wholesale supply* for new load customers are set out in the additional transfer price mechanism.[130]

The EGRC scheme requires these arrangements to:

1. set out the terms and conditions that are to apply to *supply transactions (*for *wholesale supply).*

2. Be in place before the retail supply of electricity to a customer.

3. For the purpose of supplying electricity to foundation customers:

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128 *Electricity Corporations Act 2005* (WA), Section 38(1)(b).

129 The ERA notes that distinguishing between these types of contracts is difficult in practice given the ambiguities surrounding their definitions. When analysing Synergy transaction information for these transactions, the ERA was made aware of the difficulty relating to classifying and distinguishing between these two different types of trades.

130 The foundation transfer price mechanism is an instrument which sets out the means by which the foundation transfer price is determined. Synergy publishes the Internal Synergy Wholesale Arrangement (ISWA) related to foundation transfer price mechanism on Synergy's website, (online), [accessed 31 May 2023].

a. state the transfer price for a *wholesale supply* of electricity under a supply transaction is the foundation transfer price.

b. comply with segregation arrangements and wholesale arrangements.

4. For the supply of electricity to new contestable customers:

a. set out or include a mechanism for determining the transfer price.

b. comply with non-discrimination requirements, segregation arrangements and wholesale arrangements.[131]

Third party generators and retailers can obtain *wholesale products* – referred in this report as wholesale contracts – from the WBU as customised products, which are negotiated between the WBU and the third party. Third parties can also obtain standard products from the WBU.[132].

The ERA's recommendation to capture both *wholesale products* and *wholesale supply* within the non-discrimination obligation would assist the EGRC scheme to meet its objective, by ensuring that WBU treats RBU and third parties on similar terms.

Summary of options assessment

The ERA considered two options to improve the disclosure mechanism:

1. Retain the disclosure mechanism and amend it by putting in place a high-level monitoring tool that can trigger a thorough investigation for anti-competitive conduct.
2. Remove the disclosure mechanism with no replacement as it provides no useful information to prevent or detect the exercise of market power.

These options were presented in the ERA's discussion paper for stakeholder feedback and are summarised below.[133]

As explained in section 5.2, the ERA considered stakeholder feedback in forming its recommendation. The ERA recommends the option to remove the disclosure mechanism without replacement, to improve the EGRC scheme's effectiveness. This appendix provides the ERA's analysis on the first option which is to enhance the disclosure mechanism.

Option one: Retain and amend disclosure mechanism

This option requires a responsible entity to monitor Synergy's confidential financial data for indicators of anti-competitive behaviour, which would trigger an investigation into Synergy's conduct in the wholesale contracts market and the contestable retail market.

This option seeks to create an effective disclosure mechanism by requiring Synergy to provide information that can be compared against a relevant benchmark to determine if anti-competitive conduct had occurred. The information will primarily be financial information related to the contestable retail segment. To minimise regulatory costs and avoid any

131 The segregation arrangements under the EGRC scheme requires Synergy to be divided into business units, with specific restrictions on the flow of information between Synergy's RBU, WBU and GBU.

132 The RBU can procure customised products from the WBU. However, the EGRC scheme prohibits the RBU or any subsidiary from procuring wholesale supplies through the standard products arrangements. Refer to Standard Products Arrangement 2.2 (b).

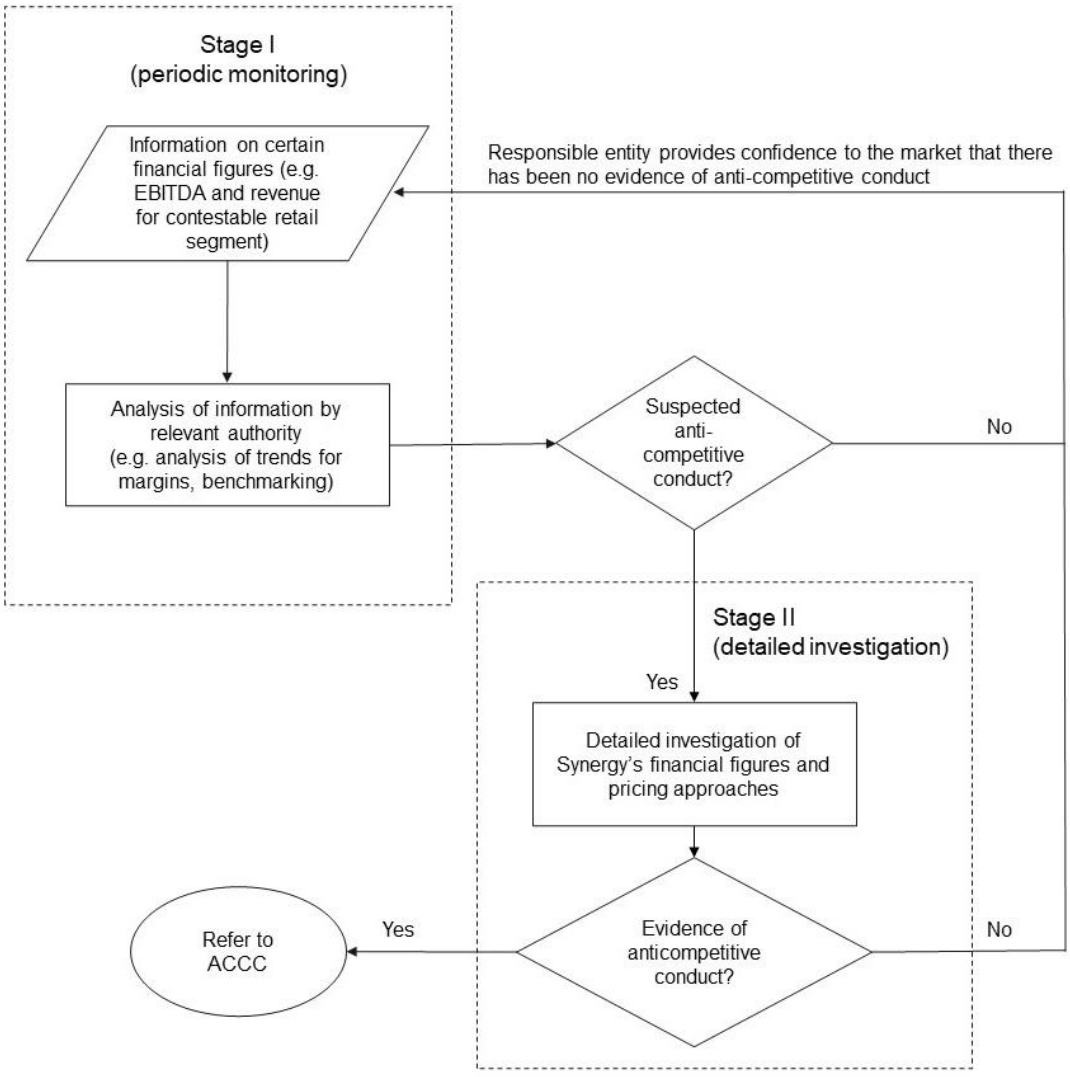
133 Economic Regulation Authority, 2023, *Discussion paper: EGRC regulatory scheme: 2023 effectiveness review*, (online).

detriment to Synergy from the public disclosure of sensitive financial data related to its contestable retail segment, this option includes:

- The disclosure of financial data to a responsible entity (not to the public).
- The responsible entity using specific financial data to regularly monitor and detect anti-competitive conduct. The monitoring process would use simple tests and a limited set of financial metrics produced by Synergy for its internal financial governance.
- The responsible entity initiating thorough investigations into Synergy's financial data and pricing approaches whenever potentially anti-competitive behaviour is identified during the monitoring process.

This option is based on Frontier Economics' report (see Appendix 9) and is illustrated in Figure 10.[134]

Figure 10. Option to improve the disclosure mechanism



Source: ERA's analysis

[134] Economic Regulation Authority, 2023, *Reviewing the EGRC Disclosure Mechanism*, Report prepared by Frontier Economics, p. 56 – see Appendix 9.

The responsible entity will periodically test the RBU's contestable electricity margin with a simplified 'imputation test' to assess if retailers 'as efficient' as Synergy's RBU would be able to earn a sustainable profit margin.[135] Synergy would be required to provide financial data such as earnings before interest, taxation, depreciation and amortisation (EBITDA) and revenue for its contestable electricity retail to allow the responsible entity to conduct this test.

The responsible entity would benchmark the margin (for example EBITDA divided by revenue) for the RBU's contestable electricity segment against an appropriate efficient margin, such as a set of equivalent retailers' margins. Where Synergy's contestable electricity margin is negative or below the benchmark, this might indicate the exercise of market power through price mark ups of wholesale contract prices or predatory pricing in the retail market. Either of these behaviours would result in a decrease in RBU's margin – provided that the margin for RBU is calculated based on arm's length transactions between WBU and RBU.

The responsible entity assures the market that there are no indications of anti-competitive behaviour when the monitoring process does not indicate any such conduct. However, in cases where the monitoring process raises concerns about potential anti-competitive conduct, the responsible entity would initiate a thorough investigation to confirm or rule out the exercise of market power.

For effective monitoring against a benchmark, the financial data provided by Synergy must be prepared based on arm's length transactions between WBU and RBU. The existing non-discrimination requirement (for Synergy not to favour RBU in trades with WBU) allows for Synergy to prepare the financial data on the basis of arm's length trading between WBU and RBU.

- Synergy's RBU faces competition from numerous market participants in the contestable retail market, including other large vertically integrated businesses. Predatory pricing is a strategy where a dominant firm intentionally sets its prices very low, often below cost, with the aim of driving competitors out of the market. Once competitors are forced out, the predatory firm can raise its prices back to profitable levels, effectively monopolising the market to make substantially more profit (than losses incurred for excluding competitors) over time.

The effectiveness of this option, however, depends on the extent to which the monitoring process could reveal anti-competitive behaviour. Frontier Economics explained that:

> The comparison of the net margin of RBU's retail electricity business and an efficient retail margin is unlikely to provide a definitive answer as to whether a price squeeze is occurring. This is because Synergy provides pricing to its customers *ex-ante* while the reporting of its financial performance is done *ex-post*. This will likely lead to some level of volatility in the net margin of all electricity retailers, that will depend on the movement of a retailer's costs and electricity prices, making the comparison of Synergy's net margin and an efficient margin imprecise.

The possibility of cost-shifting can confound the monitoring process. Frontier Economics explained the potential for cost-shifting between Synergy's contestable and non-contestable businesses, primarily due to the similarity in the services offered by both areas. Monitoring the movement of cost of sales and operating costs between the contestable and non-contestable retail electricity segments is unlikely to provide reliable evidence of cost-shifting as different factors might influence costs across the two segments over time.

[135] An imputation test can detect anti-competitive price squeeze by testing if a vertically integrated firm (with market power in providing an input that is required to produce an end product) sets the margin between the wholesale and retail prices such that equally efficient firms will not be viable.

Other barriers to effectiveness for this option are that:

- A thorough investigation of Synergy's financial data is required to uncover potential anti-competitive conduct give the range of factors that can influence the financial outcomes of Synergy's business units. In addition, the monitoring process in stage 1 may not be effective in revealing anti-competitive conduct.
- The need for a disclosure mechanism to address predatory pricing in the contestable retail market is minimal while the *Consumer and Competition Act 2010* (Cth) prohibits predatory pricing.[136]

The ERA's assessment of costs and benefits for each option is summarised in Table 7.

Table 7. Summary of options assessment to improve the disclosure mechanism

Options	Assessment
Option one: Retain and amend the EGRC scheme's disclosure mechanism (not recommended) A responsible entity will monitor specified financial data from Synergy. An indication of anti-competitive behaviour will trigger a detailed investigation.	**Benefits** • Provides confidential specified financial data to a responsible entity for periodic monitoring. • Monitoring may reveal inclusion of markups in wholesale contract prices, particularly if the behaviour persists over time. • Avoids possible detriments to Synergy of publicly disclosing sensitive financial information. **Costs** • Ongoing costs incurred to Synergy, the OAG and the responsible entity for compliance and administration. • Establishment and implementation costs to draft and introduce the appropriate regulatory framework. **Assessment** • There is risk that anti-competitive behaviour will not be detected as, for example, cost-shifting may confound the assessment of financial data. • This option can provide some limited additional benefit to an effective standard products regime. • The *Consumer and Competition Act 2010* (Cth) already deters predatory pricing in the retail market.
Option two: Remove the EGRC scheme's disclosure mechanism (Recommended) Remove all aspects of the EGRC scheme's disclosure mechanism with no replacement. Synergy will no longer be required to publish segmented financial statements, determine transfer prices or apply the associated part of the non-discrimination requirement between its retail business unit and competitors.	**Benefits** • Reduction in administrative and compliance costs for Synergy associated with producing information for a disclosure mechanism. • Lower costs are passed on to users of electricity. **Costs** • Risk that market participants perceive a simplified EGRC scheme as less effective. • Administrative and compliance costs for Synergy, ERA and OAG (expected to be low).

136 *Competition and Consumer Act 2010* (Cth) s46(1), (online).

Options	Assessment
	Assessment • Eliminates administration and compliance costs. • Effective provision of standard products and the *Consumer and Competition Act 2010* (Cth) mitigate the possible exercise of market power. • Option one (retain and amend) is not likely to provide additional benefits beyond that provided by the standard products regime and the *Consumer and Competition Act 2010* (Cth).

Appendix 9 Report by Frontier Economics

The ERA engaged Frontier Economics to assist in its analysis of whether the existing disclosure mechanism in the EGRC scheme is capable of effectively identifying anti-competitive conduct that Synergy could potentially engage in.

Frontier Economics' report, *Reviewing the EGRC disclosure mechanism*, is provided overleaf.

frontier economics

Reviewing the EGRC disclosure mechanism

Final report | 9 November 2023

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1 Executive summary

The aim of this report is to establish whether the current disclosure mechanism contained within the Electricity Generation and Retail Corporation (EGRC) scheme is capable of effectively revealing anti-competitive conduct that a vertically integrated entity, such as Synergy, could engage in. The report does not assess the effectiveness of the overall EGRC scheme, however the assessment of the disclosure mechanism is likely to form part of a broader consideration around the effectiveness of the EGRC scheme.

In reviewing the disclosure mechanism we have sought to answer two key questions:

- Is a disclosure mechanism still necessary to fulfil the purpose of the EGRC scheme?
- How effective is the current disclosure mechanism in revealing anti-competitive conduct?

Following our analysis are our recommendations to improve the disclosure mechanism.

Vertical integration exists where a business is present in multiple segments of a supply chain, in the case of Synergy, it is present in the generation, wholesale and retail segments of the electricity supply chain. Vertical integration has the potential to lead to anti-competitive conduct that may not have occurred when the businesses in different segments of the supply chain were separate. The integration of the businesses creates additional incentives for a firm, such as Synergy, to leverage its market power in the supply of wholesale electricity contracts, allowing it to undertake a price squeeze or engage in predatory pricing in the contestable retail electricity market.

A price squeeze would see a vertically integrated firm charge a high price for wholesale electricity, which its downstream competitors require as an input to their own retail products. This would force downstream competitors to increase their prices, while the vertically integrated firm can use the higher margin achieved on wholesale contracts to subsidise part or all of its downstream product and therefore maintain a lower price. This can prevent retail competitors as efficient as Synergy from competing in the market, as they are unable to generate a sufficient margin.

A mechanism that can reveal anti-competitive conduct is likely to deter vertically integrated firms from undertaking such conduct due to the increased transparency of the firm's conduct. It can also provide additional confidence to the market and ensure that efficient businesses can compete with vertically integrated entities on a level playing field. Such a mechanism was originally included in the EGRC scheme to mitigate the potentially adverse effects of the merger between Verve Energy (generation) and Synergy (retail) on competition in the Wholesale Electricity Market (WEM).

The current disclosure mechanism consists of the requirement for Synergy to:

- segregate and publish its financial performance by business unit;
- publish its transfer pricing mechanism;
- ensure its wholesale business unit (WBU) does not discriminate when supplying wholesale electricity contracts to retail businesses (including its own retail business unit (RBU)); and
- publish its Standard Product prices.

Elements relating to the maximum buy-sell price spread limit on Standard Products are also likely to interact with the disclosure mechanism.

Necessity of a disclosure mechanism to fulfil the purpose of the EGRC scheme

We consider there is sufficient evidence to suggest that a disclosure mechanism is still required to meet the purpose of the EGRC scheme. The availability of effective alternatives to Synergy's wholesale contracts is a key decisive factor when considering if a disclosure mechanism should be included in the EGRC scheme. Based on recent market feedback it is likely that there are limited alternative wholesale contracts available to competing retailers outside of contracting with Synergy.

Should there be limited or no effective alternatives to Synergy's offerings, then a disclosure mechanism is likely necessary to identify and deter Synergy from engaging in some forms of anti-competitive conduct such as a price squeeze. Should there be effective alternatives, then the justification for a disclosure mechanism is likely limited as Synergy will not have the ability to engage in anti-competitive conduct.

Effectiveness of the current EGRC disclosure mechanism

The current EGRC disclosure mechanism, and its associated elements, can reveal some anti-competitive conduct and therefore provides a level of deterrent to Synergy from engaging in certain types of anti-competitive conduct. However, following our review of the current disclosure mechanism, we consider the disclosure mechanism is unable to effectively reveal and therefore deter Synergy from engaging in a price squeeze and some forms of cross-subsidisation that might have anti-competitive purpose.

We consider that the high-level data provided through the publication of the financial performance for each of the business units is not sufficient to identify instances of cost manipulation and therefore not able to identify when Synergy may be engaging in a price squeeze. Synergy is also partially deterred from cross-subsidising between its generation business unit (GBU), WBU and RBU by the publication of financial performance for each of the business units. However, there is no clause in the EGRC scheme that would reveal if Synergy is attempting to cross-subsidise its contestable retail electricity operations through its non-contestable retail electricity operations. Shifting costs away from Synergy's contestable retail business that should be allocated to the contestable retail business could mean that retail competitors 'as efficient' as Synergy will no longer be able to compete, as Synergy's contestable retail cost base has been inappropriately reduced to an anti-competitive level.

Alternative assessment

Based on these findings we have established an alternative assessment and associated recommendations that may improve the effectiveness of the disclosure mechanism in revealing anti-competitive conduct related to price squeeze and cross-subsidisation.

To ensure that a price squeeze is not occurring, the following is required to be established:

- that Synergy's segmented financial information in its financial statements reflects arm's length transactions between WBU and RBU.
- that RBU's contestable electricity business earns an appropriate net margin on its market-based contracts (MBCs) (i.e. above an 'as efficient' retailer's margin). This would be established by comparing the net margin of RBU's contestable electricity business with an efficient net margin for similar businesses.

The first condition ensures that Synergy is charging its own retail business the same price for wholesale electricity contracts as it is charging third parties, and is adequately reflecting these costs in its financial statements.. The second condition ensures that RBU's contestable electricity

business is generating an appropriate net margin that is not restricting 'as efficient' competitors from competing with Synergy in the retail electricity market. Without satisfying the first condition the comparison of Synergy's contestable electricity net margin may not be on a comparable basis with the established efficient net margin.

Any attempt to inflate the price of wholesale contracts would likely reduce Synergy's retail electricity net margin below an efficient level. Similarly if Synergy attempted to cross-subsidise its contestable retail business this would also likely be evident through a change in either margin or costs of the contestable retail business and one of the other business segments. We consider that these margins and costs should be considered over time, with:

- a decreasing trend in Synergy's retail electricity margin of its contestable business below the efficient retail margin, potentially indicating a price squeeze.
- a decrease in Synergy's contestable retail electricity costs with an associated increase in another business segment's costs, potentially indicating anti-competitive cross-subsidisation.

Where identified, a more thorough investigation into Synergy's conduct can be undertaken by the relevant authority to ascertain whether a price squeeze or anti-competitive cross-subsidisation has occurred. Such an investigation could also be undertaken without an identified instance, if the relevant authority suspects anti-competitive conduct may be occurring.

To meet the first condition of the assessment, we recommend:

- introducing a clause that requires WBU and RBU to operate at arms-length. Monitoring of this clause could then be undertaken in a similar format to the current audit undertaken for the non-discrimination clause.
- expanding the non-discrimination clause to include wholesale electricity contracts that do not require the physical delivery of electricity (such as contracts for difference), so that all wholesale electricity contracts are covered by the non-discrimination clause.

To meet the second condition of the assessment, we recommend:

- expanding the current financial reporting requirement to include separate reporting of RBU's:
  - contestable retail electricity;
  - non-contestable electricity and other RBU businesses; rather than reporting on RBU as a single entity.
- comparing the net margin of Synergy's contestable retail electricity business with an efficient net margin to identify instances where a price squeeze may be occurring.
- comparing movements in costs between Synergy's contestable retail electricity business and other business segments to identify instances of potential anti-competitive cross-subsidisation.

We do not consider that this further breakdown of RBUs financial information should be required to be published and that provision of the information to the relevant authority is sufficient.

We consider our alternative assessment is likely to:

- provide additional benefits to the EGRC scheme through its ability to reveal potential anti-competitive conduct related to price squeeze and anti-competitive cross-subsidisation;
- impose limited additional costs on Synergy, given much of the information required is likely already being captured by Synergy.

2 Introduction

This section provides an overview of:

- the problem with vertically integrated entities that possess market power;
- how the problem applies to the electricity sector in Western Australia; and
- the EGRC scheme implemented to mitigate this problem.

2.1 Overview of the problem

A vertically integrated entity may have an incentive to leverage market power from one market in which it supplies a key input into another (downstream) market that uses that input.

The incentive to leverage will arise where increasing market power downstream allows for the entity to increase its profits.

Assuming that there are incentives to leverage, an integrated entity can leverage its market power using (at least) five different kinds of conduct. They may:

1. stop supplying the input to firms reliant on it (refusal to supply).
2. offer to sell the input to competitors, but only at a very high price (price discrimination). This can make it impossible for even efficient suppliers to be viable in the downstream market (a price squeeze). A price squeeze would lead to even efficient suppliers being unable to make a reasonable return due to the high input costs, and likely cause exit or otherwise undermine rivalry between downstream firms.
3. degrade the quality of service offered to buyers (non-price discrimination).
4. utilise cost-shifting and cross-subsidies to minimise cost for its downstream business, where the integrated firm uses its discretion to inappropriately shift allocable costs from its downstream business to the input, and lower the margin associated with the competitive activity. In the case of Synergy this may also occur between Synergy's contestable and non-contestable retail businesses. This has similar effects to a price squeeze, in that it can eliminate equally efficient competitors downstream. Cost shifting is only anti-competitive to the extent the purpose of the conduct is to undermine competition.
5. use confidential information acquired from downstream competing retailers from the supply of the input.

2.1.1 Equivalence between different forms of leverage conduct

The relationship between the forms of leverage conduct was noted in two well-known competition cases in Australia more than 30 years ago: Queensland Wire[1] (1989) and Pont Data v ASX (1990)[2].

In the Queensland Wire case, BHP sought to maintain its monopoly on the supply of star pickets for fencing by restricting the supply of Y-bar – an effective refusal to sell:

> *"I use the expression 'constructive refusal' as descriptive of an offer to sell at an uncompetitive price; B.H.P. is prepared to sell to (Q.W.I.) at a price which, relatively to B.H.P.'s other rolled products, is excessively high. I find that it is designed to be so; that is, the offer made by B.H.P. was pitched at a level which B.H.P. knew would make it impossible of acceptance, because (Q.W.I.) could not manufacture star picket from Y-bar purchased at that price and sell it competitively."*[3]

In the Pont Data case, the conduct of the ASX in the supply of information about transactions on its exchange was at issue. ASX noted the fundamental trade-offs as follows:

> *By retaining our valuable data products exclusively for our retail network we will win market share. Clients of Reuters, Pont etc. will cease using those services and subscribe to our product. The financial implication is that we will lose $1,600 p.a. royalty from wholesaling but will generate a substantial income, $10,000 to $15,000, on the sale of a new system at nominal marginal cost. It is highly profitable to acquire additional retail clients.*[4]

ASX then sought to impose terms that heavily circumscribed use of its data and at terms that favoured its own retail data service, JECNET:

1 Queensland Wire Industries Pty Ltd v Broken Hill Pty Co Ltd ("Star Picket Fence Post case") [1989] HCA 6; (1989) 167 CLR 177 (8 February 1989)

2 Pont Data Australia Pty Limited v Asx Operations Pty Limited and Australian Stock Exchange Limited [1990] FCA 30 (9 February 1990)

3 Queensland Wire, reasons of Toohey J.

4 Re Pont Data Australia Pty Limited v Asx Operations Pty Limited and Australian Stock Exchange Limited [1990] FCA 30 (9 February 1990), at [23].

> *Thirdly, although ASX accepts the reality of competition with JECNET, it does so only after forcing on those competitors contractual terms, and a price structure, which inhibit that competition.*[5]

The conduct in both of these cases was effectively characterised as a constructive refusal to supply. Prices for the key input were offered at terms that would inhibit competition between downstream competitors and the supplier of the key input's downstream operation. In the economics literature, the type of conduct has more recently been characterised as a 'price squeeze' or 'margin squeeze'.[6] The squeeze in this instance comes from setting the margin between the incumbent wholesale charges on competitors and the incumbent's own retail prices at a level that squeezes out competitors.

While the ultimate effect of a refusal to supply will invariably result in no competitive supply to downstream customers, a price squeeze is a more subtle form of anti-competitive conduct. Although exit of competitors is a likely effect of a sustained price squeeze, in the shorter-term, price squeezes are likely to hinder existing competitors from acquiring new customers (or retaining existing customers), expanding product offerings or deploying alternate technologies to offer new services. These are to the detriment of consumers.

A price squeeze may allow the integrated company to mark-up the price of its wholesale products (which its competitors purchase), reducing the margin available to businesses operating in the retail electricity market. This reduced margin could lead to retailers no longer being able to compete in the retail market, as there would no longer be a sufficient margin to generate normal profits due to the inflated wholesale costs.

These impacts are likely to be consistent with a lessening of competition in downstream markets, which is against the objective of the EGRC scheme.

2.2 Possibility of a price squeeze in the WA electricity sector

Electricity retailers are required to offer fixed price contracts to customers for given levels of electricity, however the price of purchasing that electricity fluctuates with every 30-minute trading interval. If spot-market prices rise above the wholesale price included in a customer's retail tariff, then the retailer will make a loss for that given interval. The higher the spot-market price the larger the loss for the retailer. To limit their risk, retailers generally engage in hedging which effectively limits the price they are required to pay. Generators are also exposed to the same risk, however they will benefit when spot-market prices are higher and suffer losses when spot-market prices are lower. To mitigate this price risk, hedging contracts are often provided by generators, who will agree to sell electricity to the retailer at a given price, regardless of what happens in the spot-market. This provides price certainty for both the generator and the retailer.

Previously the two state-owned electricity companies operated in different sections of the market, with Verve Energy operating the generation business and Synergy operating the retail

5 at [110].

6 See e.g. S.C. Salop, "Refusals to Deal and Price Squeezes by an Unregulated, Vertically Integrated Monopolist" (2010) 76(3) Antitrust Law Journal 709, Bruno Jullien, Patrick Rey, Claudia Saavedra, *The Economics of Margin Squeeze*, Discussion Paper No. 9905 March 2014.

business. This changed in 2014 with the merger of the two businesses to create a new Synergy that was dominant in the retail market, as well as a large component of the generation market.

The merger of the two businesses does not create a problem unless Synergy is able to leverage its market power in generation into retail markets for the sale of electricity. Under this scenario, Synergy would have an increased ability to undertake a 'margin' or 'price squeeze', given Synergy is the main provider of risk management contracts which electricity retailers use to hedge their exposure within the Wholesale Electricity Market (WEM).

Wholesale electricity contracts are an important feature of the electricity market given how retail participants offer electricity to consumers. Retail products are generally provided on fixed terms, while the underlying electricity price required to service these products is based on the balancing market price. If the clearing price from the balancing market increases during the fixed term of the retail product, then the electricity retailer is exposed. To counteract this financial risk, retailers enter into wholesale electricity contracts with generation participants that allows them to obtain an agreed upon amount of electricity at an agreed upon price. This limits the retail participants exposure to the price fluctuations in the balancing market.

Here a margin squeeze may occur if Synergy were to charge a higher price for wholesale electricity contracts, which adds to the costs of the competing retail businesses. This reduces the margin in the downstream retail market and could lead to existing retailers no longer being able to generate a normal profit and eventually lead to them likely withdrawing from the market. It may also deter potential competitors from entering the market.

Synergy may also be able to inappropriately shift costs away from its contestable retail business, creating a similar effect to a price squeeze, where equally efficient retail competitors are unable to compete with Synergy. This cost shifting is most likely to occur between Synergy's non-contestable and contestable retail businesses, given the types of costs associated with these two businesses are likely to be very similar, and therefore more easily shifted. Cost shifting may also occur between the contestable retail and wholesale businesses.

Cost-shifting could occur through an inappropriate allocation of a cost that should rightly be attributed to Synergy's contestable retail business but is instead allocated to another business segment. For example, Synergy could choose to allocate the cost of LGCs purchased at times of high prices to its non-contestable customers while allocating the cost of LGCs purchased at times of low prices to its contestable customers. A more subtle form of anti-competitive cross-subsidisation could occur through the inappropriate allocation of a shared cost between the two retail businesses, where Synergy may attempt to over-allocate the shared cost to the non-contestable retail business. This could involve inappropriate allocation of shared overheads (such as shared IT systems or corporate overheads) or inappropriate allocation of the costs of managing wholesale price risk, which generally would be incurred in common to cover the cost of Synergy's entire customer portfolio. Re-allocating the cost may give Synergy justification for charging a higher wholesale price, or in terms of its non-contestable retail business, may allow Synergy to add these costs to the regulated tariff.

The overall effect of this cost-shifting allows Synergy to generate a margin on its contestable retail business that, similar to a price squeeze, is below what an equally efficient retail competitor could achieve.

2.3 The EGRC scheme

To detect and deter price squeezes, the behaviour of an integrated firm can be monitored through a disclosure mechanism. Such a mechanism over time can allow regulators to monitor and track changes in the market with the aim of deterring the exercise of market power. In this instance the disclosure mechanism that has been implemented (detailed below) was included in the Electricity Generation and Retail Corporation Regulatory Scheme (the EGRC scheme).

The EGRC Scheme was implemented to mitigate the potentially adverse effects of the merger between Verve Energy and Synergy, the two State owned electricity corporations in Western Australia on competition in the Wholesale Electricity Market (WEM). These two corporations were the largest electricity retail and generation businesses operating in the South West Interconnected System (SWIS).

The EGRC Scheme consists of:

- *the Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* (EGRC Regulations);
- segregation arrangements approved under regulation 18(1) of the EGRC Regulations, currently these comprise the *Segregation and Transfer Pricing Guidelines 2020* (Segregation and Transfer Pricing Guidelines); and
- wholesale electricity arrangements approved under regulation 26(1) of the EGRC Regulations, currently these comprise *the Electricity (Standard Products) Wholesale Arrangements 2014* (Wholesale Arrangements).

The EGRC Regulations require the operations of Synergy to be divided into discrete business units for generation, wholesale and retail, as well as a shared services segment with segregation obligations relating to the flow of staff and information between these business segments. It also requires disclosure of the transfer pricing mechanism governing the transactions between the business units. Each business segment is also required to prepare its own separate quarterly financial reports.

The Scheme also requires Synergy to transact in Standard Products, which are financial contracts with fixed quantities of wholesale electricity that it must offer to sell or purchase at published prices.

The EGRC Regulations mandate oversight of the Scheme by:

- requiring the Auditor General to conduct financial and calendar year audits of Synergy's compliance with various aspects of the EGRC Scheme; and
- requiring the Economic Regulation Authority (ERA) to conduct an effectiveness review of the EGRC Scheme at least once every 2 years (previously every year).[7]

Within the EGRC scheme there are regulations that require Synergy to disclose certain pieces of information, these can be referred to collectively as the disclosure mechanism. For the remainder of this report, we consider the EGRC disclosure mechanism to consist of the requirement for Synergy to:

[7] Public Utilities Office, *Electricity Generation and Retail Corporation Regulatory Scheme – Response to 2016 Report to the Minister for Energy on the effectiveness of the Scheme – Directions Report*, 1 June 2019, p. 1

- segregate and publish its financial performance by business unit;
- publish its transfer pricing mechanism;
- ensure its wholesale business unit (WBU) does not discriminate when supplying wholesale electricity contracts to retail businesses (including its own retail business unit (RBU)); and
- publish its Standard Product prices.

Elements relating to the maximum buy-sell price spread limit on Standard Products are also likely to interact with the disclosure mechanism. Each of the disclosure mechanism elements, as well as the related elements are discussed in more detail in Section 5.3.

3 Developing an effective disclosure mechanism

This section examines the costs and benefits of disclosure mechanisms before identifying the components of an effective disclosure mechanism. We also identify the types of anti-competitive conduct that is likely to be constrained by a disclosure mechanism.

3.1 Benefits of a disclosure mechanism

There are a number of benefits created by the disclosure of information, these include:

- Restricting a vertically integrated entity from leveraging the power it has in the upstream market;
- Reducing information asymmetry to allow better price signals in the downstream market; and
- Increasing liquidity in contract markets.

We outline each of these benefits below.

3.1.1 Restrict a vertically integrated entity from leveraging the power it has in the upstream market

A disclosure mechanism may deter an integrated entity from leveraging the power it has in the upstream market. This is predominately driven by the relevant regulatory authority being more readily able to detect and proscribe anti-competitive conduct. Where the integrated entity considers itself more likely to be caught engaging in anti-competitive conduct it will likely be less willing to engage in the conduct as the payoff associated with that conduct will be reduced.

3.1.2 Reduce information asymmetry to allow better price signals in the downstream market

Information disclosure may provide benefit where there is a lack of information or information asymmetry in the market. The disclosed information has the potential to provide signals to downstream competitors which may encourage them to expand or encourage efficient entry into the market. A lack of public information was a key concern for the New Zealand Electricity Authority, which led to the introduction of the New Zealand Electricity Hedge Disclosure system (see **Box 1**). Under the system, participants in the wholesale electricity market are required to provide a range of information on their wholesale contracts, which is then anonymised and publicly displayed. The Electricity Authority implemented the system to:

- facilitate the ready comparison of electricity prices and other key terms of risk management contracts; and
- address the lack of information available to persons to formulate their own historic contract curves for electricity; and

- provide a more informed basis for persons to assess the competitiveness of the market for risk management contracts in respect of electricity. [8]

Box 1: New Zealand Electricity Hedge Disclosure system

Under Part 10 of the *Electricity Industry Participation Code 2010* participants in the New Zealand wholesale electricity market are required to disclose their risk management contract information.

Participants are required to submit their information no later than 5 business days after the trade date for contract of differences or options contracts and 10 business days for other risk management contracts.

Due to the commercially sensitive nature of the data the data is anonymised. To achieve this anonymisation, while still providing indicative historical prices, New Zealand is divided into five representative disclosure zones where all contracts that occur within each of these zones are normalised by a location factor to create representative contracts for each of the individual zones. This normalisation means that actual contract prices are not made publicly available but are part of the underlying calculation of the representative contract.

The data required to be submitted for options contracts is limited, however for contract for differences or physical supply contracts participants must provide:

- whether the contract is a contract for differences or a fixed-price physical supply contract;
- the trade date;
- the effective date;
- the end date;
- the quantity;
- whether or not the contract applies to all trading periods within its term;
- whether there is an adjustment clause;
- whether there is a force majeure clause;
- whether there is a suspension clause; and
- whether there are any other clauses providing for the pass-through of certain costs, levies or tax or some form of carbon-related cost.

For all contracts for differences and physical contracts less than 10 years, participants must provide, in addition to the previously specified data:

- the contract price; and
- the grid zone area in which the contract price is determined or applies.

Contracts that include more than one price schedule (such as contracts with peak and off-

[8] Electricity Authority, *Electricity Industry Participation Code 2010*, 1 April 2023, Part 13 p. 125

peak prices), must use the following formula to calculate a single contract price:

$$CP = \left\{ \frac{\sum_{i=1}^{n} P_i \times TP_i}{\sum_{i=1}^{n} TP_i} \right\} \div LF \times LAF$$

Where:

CP is the contract price

n is the number of different prices within the contract

P_i is the price specified in the contract (for contracts with an adjustment clause it is a starting price)

TP_i is the number of trading periods during which each price in the contract applies

LF is the location factor for the node at which the price is set in the contract

LAF is the loss adjustment factor.[9]

The contract price is a trading interval weighted price which is then adjusted for the location factor of the disclosure zone and an additional loss adjustment factor for physical contracts.

Source: New Zealand Electricity Authority

The Australian Energy Market Commission (AEMC) and ACCC recommended a similar approach to the New Zealand Electricity Authority. The AEMC and ACCC recommended that a repository be created for over the counter (OTC) wholesale electricity contracts. In its Retail Electricity Pricing Inquiry report, the ACCC considered that the lack of transparency in the OTC market was impeding the transmission of price signals in the market. It considered that trades should be reported to a registry and then published in a de-identified format.[10] The AEMC made a similar recommendation in its 2018 Retail Energy Competition Review which recommended that OTC electricity contract information should be made available to the market in a form that enhanced transparency of the wholesale cost of energy.[11] Both Commissions referred to the New Zealand Electricity Hedge Disclosure system as an example of such a repository.

However, it should be noted that a lack of information or information asymmetry is only a problem insofar as an integrated entity can leverage that information gap in an anti-competitive way. This is more likely to be a concern when the vertically integrated entity has a monopoly or near monopoly of the upstream business.

By contrast, where there are alternatives to the upstream input, the publishing of prices may reinforce collusive or coordinated pricing.[12] Under this scenario competitors in the upstream market will immediately detect a price reduction, with the price reduction likely to trigger a

9 Electricity Authority, *Electricity Industry Participation Code 2010*, 1 April 2023, Part 13 pp. 126-128

10 ACCC, *Retail Electricity Pricing Inquiry – Final Report*, June 2018, p. 122

11 AEMC, *2018 Retail Competition Review Final Report*, June 2018, pp. 36–37

12 OECD, *Unilateral Disclosure of Information with Anticompetitive Effects*, 11 October 2012, p.24

punishment episode, thereby reducing the benefit of a price reduction and reducing the incentive for upstream providers to undercut one another. This outcome is further outlined in Section 3.2.

3.1.3 Increase liquidity in contract markets

There may be situations where an electricity retailer is hedging their exposure to the spot market at a sub-optimal level. This may be due to the retailer over-estimating the transaction costs of entering into hedged positions if there is a lack of information available in the market to evaluate such costs. In this scenario, the retailer will remain at this sub-optimal level of hedging unless there is information to suggest that the benefit of further hedging outweighs the cost of entering into that hedge. In addition, the retailer may also be unwilling to adjust its initial position once entered into, believing the transaction costs in changing its position may outweigh the incremental benefits from altering its original position. For both of these scenarios a disclosure mechanism may provide the necessary information for the retailer to accurately assess the transaction costs and alter its level of hedging to an optimal level. This is likely to have the effect of increasing liquidity in the wholesale contract market, as retailers are more willing to engage with the upstream providers of wholesale contracts.

3.2 Costs of a disclosure mechanism

While a disclosure mechanism can create benefits it can also create costs. These include:

- Unfairly disadvantaging the vertically integrated entity;
- Facilitating coordinated or collusive conduct in the upstream market;
- Removing the ability of the integrated entity to price discriminate; and
- Creating additional resourcing costs for both the vertically integrated entity and relevant regulatory bodies.

We outline each of these costs below.

3.2.1 Unfairly disadvantage the vertically integrated entity

Disclosure mechanisms that require a vertically integrated entity to release market sensitive information to its competitors could unfairly disadvantage the integrated firm. This would have an even greater cost in circumstances where the vertically integrated entity is also required to provide a service in addition to providing the market sensitive information. The EGRC scheme applies only to Synergy, therefore it is subject to the costs of the disclosure mechanism while other vertically integrated entities operating in the same market are not. If there is effective competition between these integrated entities then Synergy may be unable to provide its contracts at the same price due to the additional costs of the disclosure mechanism.

3.2.2 Facilitate coordinated or collusive conduct in the upstream market

As noted in Section 3.1, the release of information may facilitate coordinated or collusive conduct in the upstream market. Under normal market conditions, upstream competitors compete by offering products to downstream retailers without necessarily knowing the offers of the competing businesses, with a time lag before a competing upstream business is aware that it has had its offering undercut. This time lag is important as it provides an incentive for an upstream

firm to undercut its rivals, knowing that it will receive a benefit until such time as its rivals become aware of the undercutting behaviour and subsequently lower their own prices.

If a disclosure mechanism immediately, or near immediately, reveals the lower price offering, there is little benefit for the upstream firm to undercut its rivals, which gives it no incentive to price below the standard level. As each of the upstream competitors knows this, it is likely that none of the firms will be willing to cut their prices. Instead, the firms will be able to use the disclosed prices to coordinate their pricing at a price that is higher than the price that would likely be achieved without the disclosure of prices.

3.2.3 Remove the ability of the integrated entity to price discriminate

For disclosure mechanisms that included equivalence or non-discrimination terms, the mechanism may remove the ability of the integrated firm to price discriminate between downstream retailers. Price discrimination can allow for more efficient pricing, particularly in contract markets where there is counter-party risk, such as the wholesale electricity contract market. Requiring equivalent prices to be offered to all participants reduces the ability of the vertically integrated entity to adapt its pricing based on the risk profile of the counterparty. This may result in lower-risk counterparties having to effectively subsidise higher-risk counterparties, given the inability of the upstream provider to price discriminate. This is likely to lead to retail prices converging and potentially lead to higher prices than what might have been available to retail electricity consumers had price discrimination occurred.

3.2.4 Create additional resourcing costs for the vertically integrated entity and the relevant authority

Where a disclosure mechanism is implemented, it will likely require additional resourcing costs by both the vertically integrated entity and any relevant authorities required to ensure compliance with the disclosure mechanism. The more complex the disclosure mechanism the more costs are likely to be incurred in complying with and enforcing the mechanism.

An example of where the regulatory costs of a mechanism have outweighed the benefits is the Secure and Promote licence condition in the UK (see **Box 2**). In this case, Ofgem removed its market making obligation because of the costs imposed on the entities. Originally the costs of meeting the condition were to be borne by the 6 gentailers operating in the Great Britain electricity market. However, as the number of gentailers captured by the condition decreased, the cost of meeting the obligations increased for each of the remaining gentailers. Eventually the costs of the scheme outweighed the benefits, given that much of the market was no longer required to meet the Secure and Promote licence condition, thereby reducing the benefits, while imposing significant costs on the remaining gentailers.

Box 2: Secure and Promote Licence conditions in the UK

In 2014 Ofgem implemented the 'Secure and Promote' special licence condition.

It had previously found that liquidity in the wholesale electricity market in Great Britain was in a period of decline since 2001. Ofgem's Energy Supply Probe in 2008 found that low liquidity in the electricity market was a concern, as it created a barrier to new entry into supply markets and a source of competitive disadvantage for independent suppliers.

The Secure and Promote special licence condition was introduced in 2014 to improve liquidity in the Great Britain wholesale power market to help underpin well-functioning, competitive generation and supply markets. This was designed to benefit customers through downward pressure on bills, and greater choice of suppliers.

The licence condition had three key objectives:

1. to promote the availability of products that support hedging by introducing minimum service standards for trading between eligible suppliers and the largest eight generators, called Supplier Market Access (SMA) rules.
2. to promote robust reference prices for forward products through imposing a market making obligation (MMO) on the six largest vertically integrated companies.
3. to secure near-term market liquidity through a reporting requirement of day-ahead trading of the six largest vertically integrated companies and the largest independent generators.[13]

While the condition was found to improve the liquidity inside the market marking windows and for mandated products, it appeared to have an unintended consequence of potentially worsening liquidity outside of those windows and mandated products.

An additional problem also emerged relating to the number of gentailers captured by the condition. At the onset of the program in 2014 there were six gentailers to which the obligation of market making and reporting would apply, however over the next few years a number of these gentailers sold their retail businesses or restructured their business in a way that resulted in their no longer being required to meet the special licence condition.

As the number of gentailers subject to the condition decreased, the individual costs of providing the market marking services increased for the remaining gentailers. In early 2019, Ofgem considered that *'the policy could become less effective in meeting its objectives and that the remaining obligated parties could be subject to disproportionate and potentially unfair costs."*[14]

On 14 November 2019, following the removal of another gentailer from the licence condition, Ofgem decided to suspend the Secure and Promote Marker Making Obligation, due to:

- Cost evidence that indicated the move to a two-party MMO has materially increased the costs incurred by the remaining parties, even in the absence of market volatility; and
- Mandating only two parties under the current obligation placed disproportionate costs on these parties; and
- Evidence that indicated the policy has become less effective in meeting its objectives, specifically in enabling the development of robust reference prices along the curve.[15]

Source: Ofgem

13 Ofgem, *Secure and Promote review: Consultation on changes to the special licence condition*, 13 December 2017, p. 7

14 Ofgem, *Decision to suspend the Secure and Promote Market Making Obligation with effect on 18 November 2019*, 14 November 2019, p. 1

15 Ofgem, *Decision to suspend the Secure and Promote Market Making Obligation with effect on 18 November 2019*, 14 November 2019, p. 2

3.2.5 Create unintended consequences of implementing a disclosure mechanism

Finally, the introduction of a disclosure mechanism has the potential to distort the market or to create unintended consequences to the detriment of consumers. This was evident following the introduction of the Secure and Promote licence condition in the UK, where the introduction of the conditions caused a worsening of liquidity in the contract market for periods outside of the market making window and for products not mandated by the condition.

3.3 Components of an effective disclosure mechanism

An integrated entity can leverage its market power through different forms of conduct. For this reason, an effective regulatory scheme will need to restrict an integrated entity from engaging in these types of conduct, particularly if these types of conduct are likely to deter 'as efficient' competitors from entering the downstream market or lead to the removal of 'as efficient' competitors in the downstream market.

Section 2.1 previously outlined the kinds of conduct that an integrated entity may engage in to leverage its market power. The principal forms of this conduct were:

1. stop supplying the input to firms reliant on it (refusal to supply).
2. offer to sell the input to competitors, but only at a very high price (price discrimination). This can make it impossible for even efficient suppliers to be viable in the downstream market (a price squeeze). A price squeeze would lead to even efficient suppliers being unable to make a reasonable return due to the high input costs and likely cause exit or otherwise undermine rivalry between downstream firms.
3. degrade the quality of service offered to buyers (non-price discrimination).
4. utilise cost-shifting and cross-subsidies to minimise cost for its downstream business, where the integrated firm uses its discretion to inappropriately shift allocable costs from its downstream business to the input, and lower the margin associated with the competitive activity. In the case of Synergy this may also occur between Synergy's contestable and non-contestable retail businesses. This has similar effects to a price squeeze, in that it can eliminate equally efficient competitors downstream. Cost shifting is only anti-competitive to the extent the purpose of the conduct is to undermine competition.
5. use confidential information acquired from downstream competing retailers from the supply of the input.

To restrict the ability of an integrated entity to engage in conduct of this kind, an effective regulatory scheme may contain:

- Obligations to supply;
- Robust prohibitions covering price and non-price discrimination against competitors;
- Ring fencing or separation of business units, to improve the ability of regulators and other stakeholders to monitor conduct to avoid cost shifting, cross-subsidies and price squeezes; and
- Strong protocols dealing with treatment of commercially sensitive information of downstream competitors.

The question then becomes whether a disclosure mechanism is required as part of an effective regulatory scheme, and to what extent disclosure of information can reveal the conduct likely to lead to foreclosure of 'as efficient' competitors in the downstream market.

The remainder of this section examines which of these forms of conduct can be deterred without a disclosure mechanism and which types of conduct may benefit from disclosure.

3.3.1 Anti-competitive conduct that may be deterred without a disclosure mechanism

Industry-specific access regimes, such as those registered under Part IIIA of the *Competition and Consumer Act 2010* have historically been successful in dealing with conduct relating to a restriction of access to a key input or bottleneck, and also ensuring that the owner of that bottleneck provides access to the input to third parties under equivalent terms to its own entities. Where the upstream market is seen to be heavily concentrated, creating bottleneck-like conditions, a scheme should have in place appropriate terms relating to access and equivalence of terms to account for problems related to:

- A refusal of access to the service, and
- Offering better terms to its own or related entities.

These access regimes have typically not required a disclosure mechanism to deal with the kinds of conduct listed above. However there are some exceptions to this, as is discussed in Section 3.3.2.

Conduct related to the misuse of confidential information provided by downstream competitors is likely best accounted for by ensuring appropriate separation between the upstream and downstream businesses within the integrated entity. This is often referred to as operational separation, which restricts the flow of people and information between the two business units, ensuring that competitors cannot be harmed by the transfer of confidential information from the upstream business to its related downstream business. Operational separation or ring-fencing will ensure that confidential information is not able to be leveraged by an integrated entity's downstream business. Therefore, conduct related to sensitive information is also unlikely to require a disclosure mechanism to effectively deter the anti-competitive conduct.

3.3.2 Where a disclosure mechanism may deter anti-competitive conduct

While a disclosure mechanism may not be required to deter price or non-price discrimination, there may be some situations in which a market could benefit from additional disclosure. This is particularly relevant in sectors where downstream competitors are not able to easily compare prices and terms offered to themselves and the integrated entity's own downstream business. This is likely to be pertinent to the wholesale electricity market, where retailers sign a range of wholesale contracts with varying prices, terms and conditions that make it difficult to compare one retailer's treatment to another. In these circumstances, requiring the integrated entity to demonstrate that it is providing equivalent treatment to all downstream businesses may provide some additional deterrence, as downstream competitors and relevant regulatory authorities will be able to more clearly assess whether equivalent terms are being provided.

However, deterring the conduct addressed so far does not necessarily protect downstream competitors from a price squeeze. This is because the integrated firm may be willing to charge its own downstream business higher prices on an equivalent basis, knowing that it can offset any

reductions in profit from its downstream business through the higher profits it receives from charging a higher wholesale price. Similarly, the use of cost shifting or cross-subsidies can create similar outcomes to a price squeeze, whereby the integrated entity is able to shift allocable costs to the upstream input, which in turn justifies charging a higher price for the input. This also has the ability to eliminate 'as efficient' downstream competitors.

Therefore, it is likely that a disclosure mechanism is most likely to be appropriate when used to reveal when an integrated entity is marking up the price for a wholesale component, either through a price squeeze or cost shifting and cross-subsidisation. Disclosure of information may also assist in instances where it is difficult to compare the prices and terms offered in the market and there is market sentiment that an upstream provider may be leveraging its market power.

3.3.3 Public or private disclosure

A key distinction should be drawn between a public disclosure mechanism and a disclosure mechanism that only provides information to the required authority. A public disclosure mechanism may be employed when there is concern in the market that the vertically integrated entity is leveraging its market power, and this concern is deterring efficient participants from actively engaging in the downstream market. Engagement could take many forms, such as new businesses entering the downstream market, existing businesses expanding within the market or businesses developing new innovative products. Where there is concern that these types of engagement may be restricted due to a perception of misuse of market power, the publication of key information relating to a dominant firm's conduct may dispel these concerns and encourage efficient downstream participants to enter/expand in the market. However the competition benefits associated with improved market signals must also be considered against the increased ability of upstream competitors to engage in collusive behaviour.

When the information to be published is likely to be commercially sensitive it is best provided directly to the relevant authority, so as not to put the vertically integrated entity at a disadvantage to its competitors. Following review of the information, the relevant authority may decide to publish a statement to provide confidence to the market that the vertically integrated entity is meeting its obligations and not undertaking anti-competitive conduct.

Finally, to limit any unintended or unforeseen consequences of publicly releasing information related to the vertically integrated entity, it may be prudent to restrict publishing information disclosed by the vertically integrated entity unless there is a clear net benefit to the market from publishing the information. If a statement from the relevant authority outlining compliance with an aspect of the EGRC scheme is likely to have a similar effect as publishing Synergy's information, then publishing a statement is preferred.

4 Necessity of a disclosure mechanism to fulfil the purpose of the EGRC scheme

In this section we examine a number of factors that may affect the necessity of including a disclosure mechanism to fulfil the purpose of the EGRC scheme. This includes:

- Changes in generation and retail market share since the merger;
- The availability of alternative wholesale electricity products; and
- The structure of the WEM

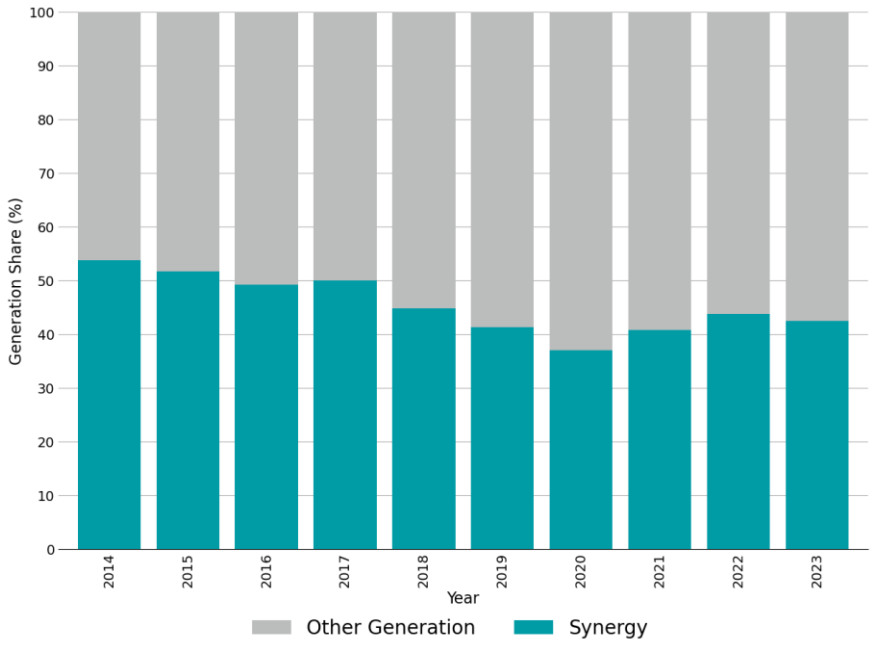
4.1 Market share trends

We have examined trends in both generation and contestable retail market share to understand how competition has changed since the merger occurred in 2014. It is likely that efforts by Synergy to leverage its market power will appear in market shares, given this leverage will likely force some competitors from the market and potentially lead to Synergy expanding its own share of the market.

4.1.1 Generation market share

Figure 1 provides Synergy's share of the electricity generation market annually since the merger in 2014. During this time Synergy's overall share of the generation market has decreased, reaching a low of 37 per cent in 2020. As of 2022, which is the last full year of data, Synergy had increased its share of the generation market to 44 per cent, still well below the 54 per cent share it had in 2014. This indicates a decrease in generation market share of 10 per cent since the merger. This evidence would suggest that generation competitors have been able to effectively compete with Synergy in the electricity generation market following the merger.

Figure 1: Synergy share of the electricity generation market

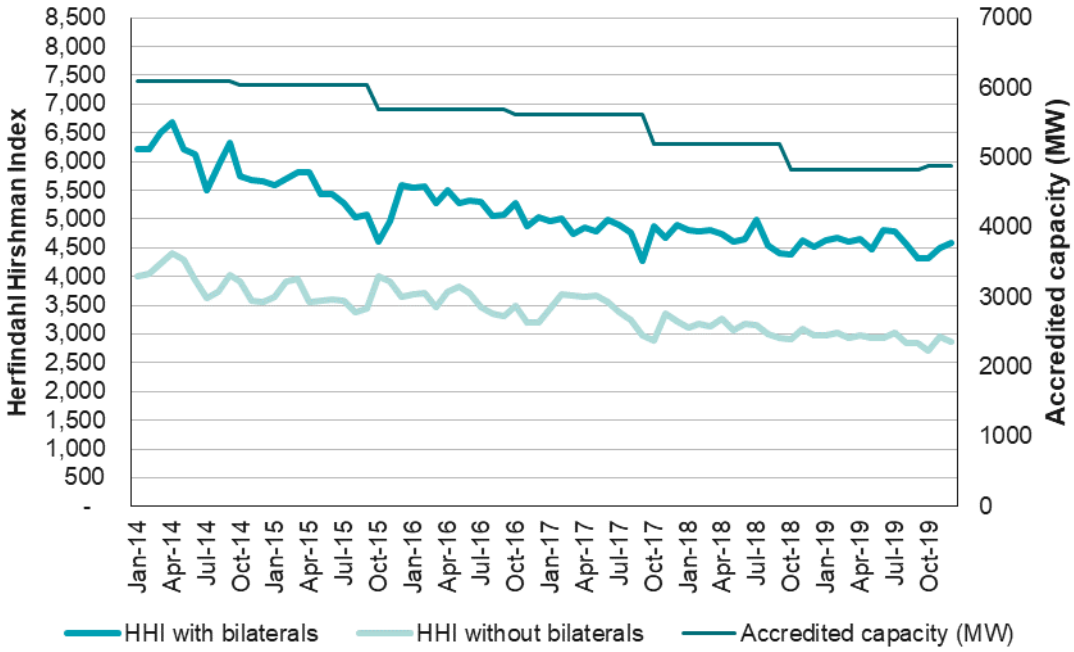


Source: Analysis by the ERA

However, the above analysis does not include the impact of Power Purchase Agreements (PPA). A PPA is a long term agreement between a generator and a customer, where the customer agrees to purchase the electricity that a generator produces at a negotiated price. PPAs are generally not public information. Once PPAs are included in generation market share calculations, Synergy's share of controlled generation is likely to increase if and where Synergy is the purchaser of that electricity.

To better assess the impacts on the market with and without these PPAs (and associated bilateral contracts), we include analysis of the Herfindahl Hirschman Index (HHI) for the generation market since the merger. Under the HHI a higher value corresponds to more concentration in the market. **Figure 2** analyses the change in HHI from the merger until the end of 2019 under two scenarios. The first reflects the concentration in the generation market when including relevant bilateral and PPA agreements, while the second does not include these agreements. It shows that over the specified time period the HHI fell under both scenarios, representing a decrease in market concentration. However concentration in the market remains high, with a value above 2,500 indicating a highly concentrated market.

Figure 2: Herfindahl Hirschman Index for the generation market



Source: Analysis by the ERA

4.1.2 Retail market share

Previous analysis conducted by the ERA into the state of competition in the retail electricity sector suggests that 'the retail market, where it has been exposed to competition, is trending towards an unconcentrated market with what appears to be a reasonable level of competition.'[16]

Table 1 looks at the number of electricity retailers competing in the retail electricity market in each financial year since the merger of Verve Energy and Synergy. The number of electricity retailers in Western Australia has increased since the merger in 2014, with 13 retailers in the retail electricity market as of 2021/22, which is the latest year data is available for the number of electricity retailers.[17] Looking at the list of electricity retailers from 2016/17, only one retailer no longer provides these retail services in 2021/22. This evidence suggests that new entrants have been able to enter and remain in the market following Synergy's merger in 2014.

16 ERA, *EGRC regulatory scheme: 2020 effectiveness review – Discussion paper*, 31 August 2021, p. 45

17 ERA, *Annual data report 2021/22 – Energy retailers*, 30 January 2023, p. 2.

Table 1: Number of licenced electricity retailers in Western Australia

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/2020	2020/21	2021/22
Electricity retailers	10	11	11	12	12	13	13	13

Source: 2021/2022 ERA Data Report

The above findings across generation and retail electricity markets would suggest that since the merger of Verve Energy and Synergy's retail assets in 2014, the generation and retail markets have not seen a worsening of competition. While it is not clear what may have happened in the market without the merger, there is some evidence to suggest that Synergy's historical conduct has not restricted competitors from competing in the generation and retail electricity markets.

4.2 Availability of alternative wholesale electricity products

A key consideration in relation to the necessity of a disclosure mechanism is the degree to which electricity retailers are able to obtain alternative products to reduce their exposure to the STEM and balancing markets.

The contract market for the WEM is different from the NEM or the New Zealand electricity market, where financial institutions also offer products into the contract market. These institutions generally offer financial products, known as derivatives, that provide effective substitutes to wholesale supply agreements. Rather than contracting for supply, a retailer is able to enter into a financial contract that will provide them with a payment if the spot price is above a certain price, while requiring them to provide payment should the price be below that price. This effectively creates a fixed price for the retailer even when it is purchasing electricity in the spot market. These financial contracts are able to be transacted on the Australian Stock Exchange (ASX) providing additional liquidity in the contract market.

While retailers in the WEM do not have access to these types of financial contracts, we note the following comments from Alinta Energy in its 2016 submission to the Public Utilities Office's position paper on design recommendations for wholesale energy and ancillary service market reforms. Here Alinta stated that:

> *'Synergy offers bespoke contracts as well as its mandated standard products while others offer bilaterals and even products that directly compete with Synergy's standard product offering.'*[18]

It also stated that:

> *'In addition to the existing bilateral market, new products have recently emerged that provide liquid hedging opportunities ranging from bespoke arrangements to platform based standard products.'*[19]

[18] Alinta Energy, *Submission to Position Paper: Design Recommendations for Wholesale Energy and Ancillary Service Market Reforms*, 27 April 2016, p. 8

[19] Alinta Energy, *Submission to Position Paper: Design Recommendations for Wholesale Energy and Ancillary Service Market Reforms*, 27 April 2016, p. 9

These comments would suggest that retailers have choice when it comes to covering their risk positions, and when viewed in conjunction with the historically wide spreads offered by Synergy on its standard products, could explain the limited take up of Standard Products offered by Synergy. That is, that retailers may have been able to put in place strategies that limited their risk exposure to the balancing market without requiring the Standard Products offered by Synergy. It would also suggest that there is a level of substitutability between these alternative products and Synergy's product offering.

However, we also note comments made by the ERA in its 2020 effectiveness review discussion paper, which noted:

> *There is little competition in the bilateral contract market for standard products and little competition for customised products. Retailers advised the ERA that they have limited opportunities for trading forward contracts with entities other than Synergy.*[20]

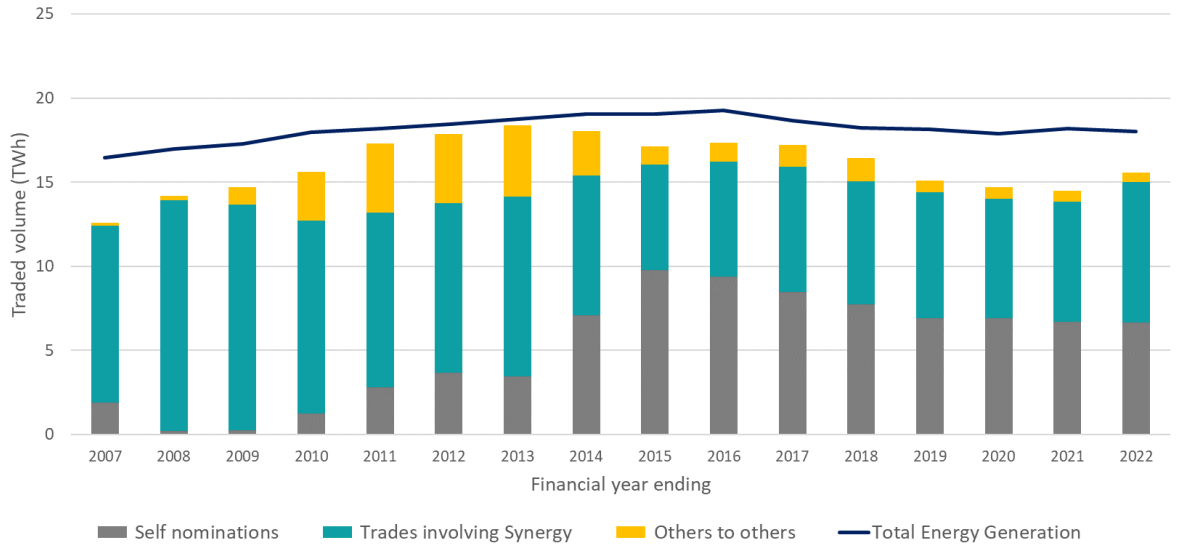
Further to this, recent feedback received by the ERA from market participants indicates that there are currently limited alternatives to Synergy's wholesale contracts.

Figure 3 provides an analysis of scheduled bilateral quantities and the parties involved in these bilateral contracts. This includes bilateral quantities declared to AEMO, however market participants might also enter into bilateral contracts that are not disclosed to AEMO, for example by writing a contract for differences. Therefore the following figure may not represent the full spectrum of bilateral contracts.

The contracts are aggregated into three main categories; the first category is bilateral contracts that are self-nominated (where a gentailer nominates its own generation to meet its retail customer load), the second involves all trades where Synergy is one of the participants to the bilateral contract, while the third is bilateral contracts that have been entered into by parties other than Synergy. This third category represents the current use of alternative bilateral contracts. Based on this analysis, there may be limited alternative volumes of wholesale electricity available for retail providers to contract outside of engaging with Synergy, with volumes appearing particularly limited since 2019.

[20] ERA, *EGRC regulatory scheme: 2020 effectiveness review – Discussion paper*, 31 August 2021, p. 11

Figure 3: Scheduled bilateral quantities



Source: Analysis undertaken by the ERA

The above figure provides an indication of the current usage of bilateral contracts in the wholesale electricity market, however it does not indicate whether retailers have the ability to contract with other parties, but choose to engage with Synergy instead. This may eventuate where Synergy is offering a comparable or superior product to the market and retailers therefore prefer Synergy's products over available alternatives.

To identify whether participants are able to provide effective alternatives, information about each participants' relevant generation and retail loads, risk preferences and current contract commitments would be required. This information is not currently available and without it, it is not possible to accurately comment on the current ability of participants to offer wholesale electricity contracts into the market. Where other regulators have been interested in answering the question of effective alternatives they have generally requested this information from market participants directly, rather than trying to use available information to come to their own conclusion.

4.3 Structure of the WEM

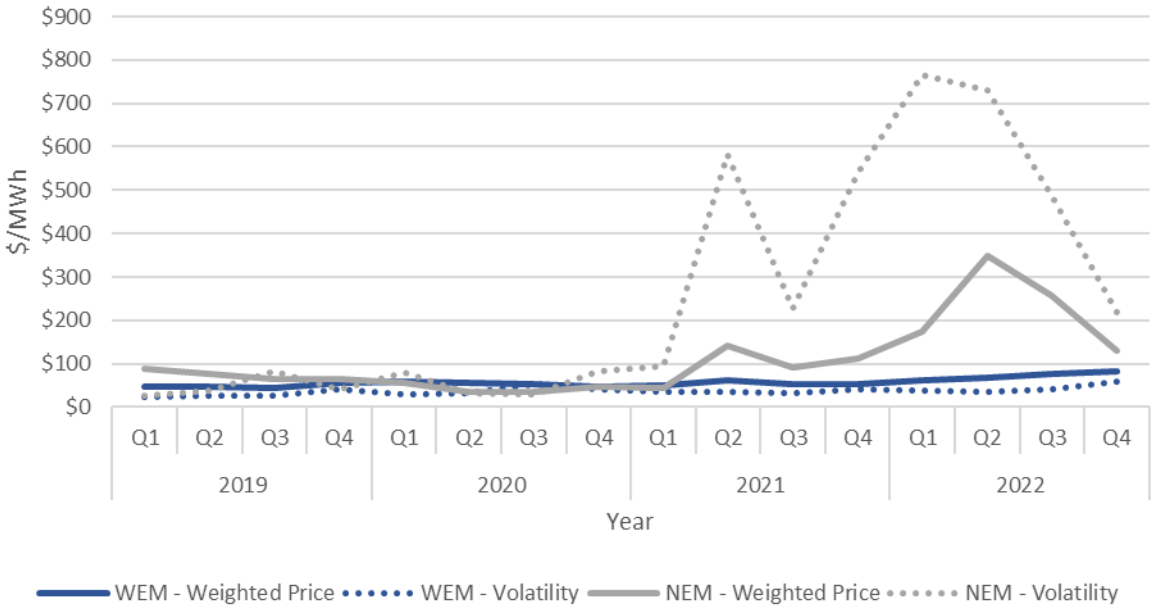
The structure of the WEM is likely to impact how retailers hedge their exposure to the Short Term Energy Market (STEM) and balancing market.

The WEM currently has separate capacity and energy markets compared to energy only markets like the NEM. Under a separate capacity and energy market, energy costs are linked to short run marginal costs (SRMCs) of generating electricity, rather than having to recover both fixed and variable costs like in an energy only market. This has the effect of lowering price spikes during periods of high demand or restricted supply.

The WEM also has a low price cap compared with the NEM. Under Section 6.20 of the WEM rules the current maximum STEM price and balancing market price is set at $324.[21] This is based on the SRMC of a proxy for the most expensive facility in the generation fleet, currently a 40MW Open Cycle Gas Turbine peaking plant. In addition to the Maximum STEM price there is an Alternative Maximum STEM price of $833 which assumes the facility is required to be fuelled by liquid fuel rather than gas. The NEM on the other hand has a price cap of $16,600/MWh for the 2023/24 financial year[22].

Prices linked to SRMCs of generating electricity, plus lower price caps are likely to result in more stable wholesale prices with lower levels of volatility. This is particularly relevant in periods of increased uncertainty such as occurred in 2021 and 2022. **Figure 4** provides load weighted prices and the associated volatility[23] in prices for both the WEM and NEM from 2019 to 2022. During the events of 2021 and 2022 both prices and volatility jumped significantly higher in the NEM, while price rises and volatility in the WEM were only moderate in comparison.

Figure 4: Comparison of price and volatility between the WEM and NEM



Source: Frontier Economics

By having a more stable day ahead and spot market, the level of hedging required by retail participants in the WEM compared to retail participants in the NEM, who are more exposed to extreme levels of volatility, may be lower. Given lower levels of wholesale electricity hedging may be required, this may limit the amount of wholesale electricity contracts that are required to adequately meet the demands of the retail market. It may also allow retailers to consider leaving part or all of their expected load unhedged if Synergy attempts to increase its prices of wholesale electricity contracts.

21 AEMO, *Energy Price Limits*, available at: https://aemo.com.au/en/energy-systems/electricity/wholesale-electricity-market-wem/data-wem/price-limits. This also includes an Alternative maximum STEM price that assumes a facility is fuelled by liquid fuel rather than gas.

22 AEMC, *Schedule of reliability settings for 2023-24*, available at: https://www.aemc.gov.au/sites/default/files/2023-02/Schedule%20of%20reliability%20settings%20-%20Calculation%202023-24%20financial%20year.pdf

23 Volatility is measured as the standard deviation of all trading interval prices during each quarter.

Alternatively, there may be changes in the WEM, such as the continuing transition towards renewable energy, that may increase uncertainty in the market. Greater uncertainty in relation to future prices may see retailers choose to hedge more of their expected load to protect themselves from potential future episodes of price volatility and/or source specific energy related to renewable energy sources.

4.4 Conclusion

Following analysis of market conditions since the merger and the structure of the WEM, we consider there is insufficient evidence to suggest that a disclosure mechanism is not necessary to meet the purpose of the EGRC scheme.

The necessity of the disclosure mechanism may be reduced due to:

- Synergy's market share in the generation market having decreased since the merger, with Alinta and Summit Southern Cross Power also having large shares of the generation market. Typically disclosure mechanisms to deter instances of price squeezing have been introduced in sectors where the wholesale supply is controlled by a monopoly or near-monopoly.
- Reduced concentration in the contestable segment of the retail market and evidence of new entrants, suggesting that there is an ability for efficient competitors to enter the retail electricity market and/or expand.
- A low volatile market structure which may allow retailers to hedge a lower percentage of their load compared to retailers in energy only markets like the NEM. This may constrain Synergy's ability to implement a price squeeze as retailers may consider remaining unhedged should Synergy attempt to increase the price of wholesale electricity contracts above a competitive level.

However, we consider there is insufficient evidence to clearly indicate the level of effective alternative products available to retail competitors. The availability of effective alternatives to Synergy's wholesale contracts is a key decisive factor when considering if a disclosure mechanism should be included in the EGRC scheme. Based on recent market feedback it is likely that there are limited alternative wholesale contracts available to competing retailers outside of contracting with Synergy. Should there be limited effective alternatives to Synergy's own offerings, then a disclosure mechanism is necessary to restrict Synergy from engaging in some forms of anti-competitive conduct such as a price squeeze.

Should further analysis find there are effective alternatives to Synergy's wholesale contracts, then the justification for a disclosure mechanism is likely limited. This is due to costs of the disclosure mechanism likely outweighing the benefits, and may potentially limit Synergy's ability to compete in the upstream market. Competitors in the upstream market, who are providing effective alternatives to Synergy, are not required to meet the terms of the disclosure mechanism or EGRC scheme and therefore the related costs that it imposes.

5 The effectiveness of the current EGRC disclosure mechanism

This Section examines whether the current EGRC disclosure mechanism is meeting its objective in relation to the purpose of the EGRC scheme. We first outline what the current purpose of the scheme is before considering what anti-competitive conduct the EGRC scheme is currently deterring followed by what the disclosure mechanism itself is deterring.

5.1 Purpose of the EGRC scheme

While the EGRC scheme has no prescribed objective, in its response to the ERA's 2016 Report to the Minister for Energy on the effectiveness of the Scheme, the Public Utilities Office agreed with the ERA that:

> *'the primary purpose of the Scheme should be to mitigate the increased potential for market power that arises due to the merger, to ensure a level playing field for competitors and new entrants in order to facilitate competition.'*[24]

The effectiveness of the current EGRC disclosure mechanism should therefore assess how the EGRC scheme meets this objective. Levelling the playing field for competitors and new entrants will likely follow from successfully mitigating the increased ability of Synergy to leverage its market power. The purpose of the scheme refers only to the increased potential for market power that arises due to the merger, rather than referring to the leverage of market power that may arise from the increase in market power. We note that an increase in market power is not of itself an outcome that needs to be protected against, there are legitimate reasons why Synergy may increase its market power following the merger that would be consistent with competition principles. We therefore consider that the effectiveness of the current EGRC disclosure mechanism should be assessed based on the mechanism's ability to deter Synergy's ability to leverage its market power through anti-competitive conduct.

5.2 Anti-competitive conduct deterred by the EGRC scheme

To assess how the EGRC scheme currently addresses the types of anti-competitive conduct most related to a vertically integrated entity, we have attributed relevant clauses and regulations under the EGRC scheme to each type of anti-competitive conduct. This summary is provided in **Table 2**.

[24] Public Utilities Office, *Electricity Generation and Retail Corporation Regulatory Scheme – Response to 2016 Report to the Minister for Energy on the effectiveness of the Scheme – Directions Report*, 1 June 2019, p. vi

Table 2: Summary of anti-competitive conduct covered by the current EGRC scheme

Anti-competitive conduct	Elements of EGRC scheme that address each conduct
Refusal to supply	*Electricity (Standard Products) Wholesale Arrangements 2014* Requires the EGRC to provide Standard Products to market participants.
Price and non-price discrimination	*Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* Regulation 22 provides that the EGRC must ensure that a wholesale supply of electricity is not offered to the retail business unit on terms and conditions that are more favourable than the terms on which a wholesale supply of electricity is offered to retail competitors or generation competitors. Nor may it consider the financial interests of the retail business unit when determining the terms and conditions of offers. Regulation 9 requires Synergy to have a written arrangement that sets out the terms and conditions that will apply to the supply transaction, which includes a transfer price for supply of electricity for Synergy's foundation load (ISWA) and a mechanism to determine a transfer price for the supply of electricity for Synergy's new load (NWLA). *Segregation and Transfer Pricing Guidelines 2013* Requires the EGRC to establish transfer pricing arrangements for trading wholesale electricity between its wholesale and retail business units. *Segregation and Transfer Pricing Amendment Instrument 2019* Requires the EGRC to publish its updated foundation transfer pricing mechanism on its website (see also Regulation 12A of *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013).* *Electricity (Standard Products) Wholesale Arrangements 2014* Clause 5.1(a) requires the EGRC to publish Standard Product prices

Price squeeze	*Electricity (Standard Products) Wholesale Arrangements 2014* Clause 5.2I requires that the EGRC ensures the spread between the buy and sell price of its Standard Product is not more than 15%. *Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* Regulation 5 provides that the EGRC must segment its operations into four segments, consisting of: • a generation business unit; • a wholesale business unit; • a retail business unit; and • a shared services segment Regulation 6 requires each of these segments to publish a separate statement of financial performance each quarter.
Sharing of confidential information	*Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* Regulation 13 requires that retail restricted information is not disclosed to retail staff Regulation 17 requires each business be managed by its own separate staff
Cost shifting & cross-subsidisation	*Electricity Corporations (Electricity Generation and Retail Corporation) Regulations 2013* Regulation 5 provides that the EGRC must segment its operations into four segments, consisting of: • a generation business unit; • a wholesale business unit; • a retail business unit; and • a shared services segment Regulation 6 requires each of these segments to publish a separate statement of financial performance each quarter.

Source: Frontier Economics

We consider that there are elements of the EGRC scheme that go towards each of the five types of anti-competitive conduct; however these elements differ in their effectiveness in deterring these types of anti-competitive conduct. The aim of this report is to focus on the disclosure mechanism itself, rather than a review of the full EGRC scheme. However we briefly consider the effectiveness of some related elements of the full EGRC scheme that aim to deter anti-competitive conduct.

As discussed in Section 3.3, a disclosure mechanism is most likely to deter conduct related to price and non-price discrimination (given the difficulty of comparing prices and terms in the wholesale electricity market), price squeezes and cost-shifting and cross-subsidisation. Each of these forms of conduct and the related elements of the EGRC scheme are addressed in Section

5.3 below. Of the remaining conduct, we consider that the EGRC scheme includes elements that should sufficiently restrict Synergy's ability to refuse to supply contracts, as well as its ability to share confidential information between its business units without the need for a disclosure mechanism.

5.3 How the elements of the disclosure mechanism relate to anti-competitive conduct

5.3.1 Publication of separate financial performance for GBU, WBU and RBU

Regulation 6 of the EGRC regulations requires Synergy to prepare a separate quarterly statement of financial performance for each of its business segments.

This Regulation may reveal some instances of Synergy engaging in a price squeeze, as separate financial accounts will indicate if the wholesale business is generating a large margin while the retail business is making low/no margin. The margin may be established by comparing the revenue and earnings before interest, tax, depreciation and amortisation (EBITDA) for each business segment. While this is not definitive proof of a price squeeze, it may indicate that a price squeeze is occurring in the downstream market and warrant further investigation. The intention of this disclosure is that the separate reporting can be tracked over time, so that changes in relative margins of each business unit can be monitored. In practice, the highly aggregated level of the current financial reporting may not provide sufficient detail for the relevant authority to accurately determine why margins have changed and whether this could be related to a price squeeze.

The separate reporting of performance between the generation, wholesale and retail business units will also not disclose how margins are being generated within the retail business. It may be possible that Synergy is using its non-contestable retail business to cross-subsidise it operations in the contestable segment of the retail electricity market. The ERA has previously reported on concerns raised by competing retailers around Synergy's ability to subsidise its retail business in the contestable market. Retailers have previously suggested that Synergy could pass-through Tariff adjustment payment (TAP) related revenues from Synergy's non-contestable business to subsidise its contestable business, potentially allowing Synergy to offer contestable customers lower retail prices than its competitors.[25] This likely contradicts the purpose of the EGRC scheme to ensure a level playing field for competition. There may therefore be benefit in separating the performance of RBU's non-contestable and contestable electricity operations, to monitor if Synergy is cross-subsidising its retail offer in the contestable segment of the electricity market.

There should also be consideration of whether Synergy's retail segments should be considered in isolation, regardless of whether there is cross-subsidisation occurring. The ability of Synergy to achieve scale in its retail operations through its non-contestable business may create an unequal playing field for electricity retailing, particularly if there are large economies of scale present in the market. While this is not necessarily anti-competitive, as using economies of scale to provide cheaper services is a legitimate way to compete, the use of a monopoly market to generate this scale may not be consistent with the purpose of the scheme, which seeks to ensure a level playing field for competition.

[25] Public Utilities Office, *Electricity Generation and Retail Corporation - Response to 2016 Report to the Minister for Energy on the effectiveness of the Scheme,* 1 June 2019, p. 21

There are two potential scenarios related to economies of scale:

1. A retailer requires a certain number of customers to achieve the necessary economies of scale to compete in the retail electricity market. After this point there are no longer economies of scale and therefore no advantage from having a larger customer base.
2. A retailer receives continuing economies of scale as the number of customers grow. Here having a larger customer base will provide a competitive advantage.

Under the first scenario, there is unlikely to be much benefit from separating the operations of Synergy's retail business because there are no further economies of scale to having a customer base above a certain threshold. This outcome also requires the assumption that acquiring the number of customers to achieve this threshold is achievable in the contestable retail market, which is highly likely given the number of retail electricity providers currently servicing the contestable retail electricity market.

Under the second scenario there will likely be benefit in separating the operations of Synergy's retail business. Without the separation of Synergy's contestable and non-contestable retail businesses it is unlikely that other retailers in the market will be able to effectively compete with Synergy, who is likely to be able to offer retail services at a lower price point if it can leverage these economies of scale. Generating economies of scale in a non-contestable segment of the market to offer lower retail prices in the contestable segment of the market is likely to contradict the purpose of the scheme, which aims to '*ensure a level playing field for competitors and new entrants in order to facilitate competition*', as no other competitor will have this option.

We consider the first scenario is likely to better represent the current state of the contestable retail market. Given the contestable market only comprises large and industrial customers the number of customers in the market is likely to be small, however as of 2021/22 there were 12 retailers active in the business electricity market.[26] This likely indicates that only a small customer base is required to efficiently compete in the contestable retail market and that benefits derived from economies of scale do not seem to be driving smaller competitors out of the market.

5.3.2 Transfer pricing mechanism

The transfer pricing mechanism requires Synergy to record the price that WBU charges RBU for the supply of electricity.[27] However it is not clear whether Synergy is required to use this price in the calculation of its financial information. The transfer price mechanisms set out the terms and conditions offered to RBU by WBU. The Internal Synergy Wholesale Arrangement (ISWA) applies for load already being provided by RBU at the time of the merger; and the New Load Wholesale Arrangement (NLWA) applies for all new load or any contracts re-negotiated after the merger.

Based on our review of the current EGRC regulations there does not appear to be a clear link between the calculation of transfer prices and the price RBU pays for its wholesale electricity. Without a clear link between these two prices, Synergy may be able to effectively discriminate between the price it charges its own retail business and competing retail businesses. Regulation 22 of the EGRC regulations requires Synergy to not discriminate between the RBU and retail competitors when offering wholesale supply. While the wholesale electricity contract between WBU and RBU itself may indicate equivalent treatment of RBU and competing retailers, if the internal transfer price does not correspond with that price and is actually lower than the

[26] ERA, *Annual data report 2021/22*, 30 January 2023, p. 4.

[27] But does not appear to include the supply of wholesale products as defined under Regulation 8.

wholesale contract, then Synergy may be able to reduce the costs of supplying the contestable retail market due to the reduced transfer price it charges itself.

We consider that a profit maximising wholesale business would be likely to charge RBU using the principle of 'opportunity cost'. This would mean that the internal transfer price should be equivalent to the price WBU could achieve by selling its supply contract to a third party retailer. Together with the non-discrimination clause we would expect that the price being provided to RBU is therefore in line with the supply of electricity contracts offered to competing third party retailers. However the transfer price do not appear to take into account the cost of wholesale products that WBU may enter into with RBU in addition to any supply of electricity. For the internal transfer price to be equivalent to the actual wholesale cost between WBU and RBU, the transfer price methodology needs to be updated to include wholesale products, rather than just the costs associated with the supply of electricity.

However, even if Synergy's internal transfer pricing does correspond with wholesale cost between WBU and RBU, it does not prevent Synergy from charging all downstream competitors, including RBU a high price, squeezing retail electricity margins.

In their current format, we do not consider the transfer pricing provisions within the EGRC scheme are providing information that will be able to reveal anti-competitive conduct.

5.3.3 Publication of Standard Product prices

While the provision of Standard Products is a market making obligation, we consider the requirement to publish the prices of these products to be a form of disclosure, as the market making obligation could be met without the requirement to publish the associated prices.

The publication of daily standard product prices allows downstream competitors to calculate Synergy's expected forward electricity prices, based on its contract offerings, which competitors can compare with their own internal estimates. The ERA has previously stated that the publication of Standard Product prices acts as '*a price-discovery mechanism to provide greater transparency and predictability for short-to-medium dated energy contracts.*'[28] This information can then be used to assist retail electricity businesses when negotiating with Synergy for customised contracts.

The requirement to publish Standard Product prices is focused predominately on reducing the economic rent that Synergy may be able to extract from the downstream retailers, particularly smaller independent retailers. However, given Synergy is required to not discriminate between RBU and downstream competitors, there is likely little room for Synergy to extract additional economic rents from these smaller providers, given it must offer supply contracts on the same terms as it offers larger competing retailers. It would therefore be limited by the bargaining power of the largest competing retailer.

The requirement to publish Standard Product prices may meet the purpose of the scheme in its efforts to facilitate competition in the downstream market, however of itself it is unlikely to restrict any additional anti-competitive conduct that is not already restricted by other EGRC Regulations. The requirement to publish prices may also incur some of the costs of disclosure, such as increasing the risk of collusive behaviour between providers of wholesale electricity contracts.

[28] ERA, *EGRC regulatory scheme: 2020 effectiveness review – Discussion paper*, 31 August 2021, p. 8

5.3.4 Maximum spread on Standard Products

While the maximum spread between the price that Synergy will purchase and sell electricity for its Standard Products is not a form of disclosure itself, it is likely to offer additional constraint against instances of price squeeze.

If an appropriately sized maximum spread is chosen, then any mispricing by Synergy in an attempt to overcharge some wholesale products will leave Synergy likely to incur a loss on the opposite trade. For example, if Synergy charges a high price to sell electricity, the maximum spread will require them to also raise their buy price, potentially exposing Synergy to expected losses if competitors choose to enter into buy contracts. However, if the spread is too large then competitors will be unlikely to enter into the opposing trade, as the trade is still not efficiently priced. It may also be the case that competitors are not in a position to take up these buy offers, which would require them to sell electricity to Synergy. This may allow Synergy to successfully maintain a high price for its sell contracts, squeezing those downstream competitors reliant on sell contracts from Synergy.

The recent movement from a 20 per cent spread to a 15 per cent spread will put an additional constraint on Synergy from charging above cost-based prices for its wholesale contracts, however the spread may still be too wide to prevent an above cost-based price being charged. In its 2020 review, the ERA found that since 2018, Synergy would only have required a maximum spread of 11 per cent on quarterly products and 5 per cent on calendar and financial year products to provide Synergy with a reasonable chance of making a profit on possible trades.[29] This is far less than the maximum spread of 20 per cent that has historically been allowed and still below the new 15 per cent maximum spread. These lower implied spreads also coincides with Synergy's implementation of improved forecast modelling of future electricity prices.[30] If an improvement in forecasting accuracy has been implemented then a further reduction in the maximum spread for wholesale Standard products may be necessary to prevent Synergy from implementing a price squeeze on its sell products.

5.3.5 No more favourable terms

Regulation 22 of the EGRC regulations requires Synergy to not discriminate between RBU and competitors when offering wholesale supply of electricity.[31] While this regulation is not in itself a form of disclosure, the perception in the market that Synergy is abiding by these conditions is important to encourage competition in the downstream retail market. The mere perception that Synergy may be engaging in discrimination could be enough to deter new entrants in the retail market.

Evidence that Synergy is complying with these terms comes in the form of an annual audit by the Office of the Auditor General as required under Regulation 29 of the EGRC regulations. We are not able to comment on the methods used by the Office of the Auditor General to assess whether Synergy is complying with its non-discrimination requirements, however we consider that comparing wholesale electricity arrangements is complex. There are a wide variety of wholesale electricity supply contracts available in the market that vary in the amount of electricity

29 ERA, *EGRC regulatory scheme: 2020 effectiveness review – Discussion paper*, 31 August 2021, p. 71

30 Synergy,, Annual Report 2019, 26 September 2019, p. 17

31 Similar to the point raised in section 3.5.2, Regulation 22 does not extend the non-discrimination obligation to wholesale products that WBU may provide to RBU and competing third parties.

provided and also the time period that electricity will be delivered. Not only this but the underlying cost of electricity is also constantly changing according to future expectations of electricity prices. This means that two contracts that are otherwise identical may have different prices if entered into on different dates. Customised products may also include variation in the terms of supply, and if these terms provide additional value to the downstream retailer, these would need to be accounted for in any comparison between contracts. All of these factors make it particularly difficult to establish equivalency between contracts.

The threat of detection is a key component of a regulatory scheme as it reduces the incentive for a firm to engage in anti-competitive conduct, as any benefit received from the anti-competitive conduct will be reduced by the expected cost of being caught. It is therefore important that there is confidence in the relevant authority's ability to detect instances of discrimination in the wholesale electricity market.

We consider that the requirement for non-discrimination should also be extended to wholesale products that do not require the physical delivery of electricity, such as contracts for differences, to ensure consistency across wholesale electricity contracts and products that competing retailers may wish to enter into.

5.4 Conclusion

The current EGRC scheme's disclosure mechanism, and its associated elements, can reveal some anti-competitive conduct and therefore provides a level of deterrent to Synergy from engaging in certain types of anti-competitive conduct. However, following our review of the current disclosure mechanism, we consider the current disclosure mechanism is unable to effectively reveal and therefore deter Synergy from engaging in a price squeeze and some forms of cross-subsidisation.

Price squeeze

Synergy is partially deterred from engaging in a price squeeze due to:

- The publication of separate financial performance for WBU and RBU;
- The maximum spread limit which applies to prices of Standard Products; and
- The requirement to not discriminate between RBU and other downstream competitors.

However, it is unlikely that the current mechanism is able to effectively deter Synergy from engaging in a price squeeze.

We consider that the current disclosure mechanism may be improved by increasing the ability of the disclosure mechanism to reveal instances of price squeeze. This may include:

- requiring WBU and RBU to transact at arm's length and ensuring that these arm's length costs are reflected in the financial statements required under Regulation 6 of the EGRC Regulations.
- expanding the non-discrimination clause to include wholesale electricity contracts that do not require the physical delivery of electricity (such as contracts for difference), so that all wholesale electricity contracts are covered by the non-discrimination clause.
- ensuring the maximum spread for Synergy's Standard Products is narrow enough to constrain Synergy from selling wholesale electricity at an above cost-based price. This will require the maximum spread to be set so that Synergy is only able to recover, on average, an appropriate margin for the level of risk Synergy undertakes in providing these products. However, this change likely falls outside of the review of the EGRC disclosure mechanism.

Anti-competitive cross-subsidisation

Synergy is partially deterred from engaging in cross-subsidisation between GBU, WBU and RBU by the publication of financial performance for each of the business units. However, there is no restriction that stops Synergy attempting to cross-subsidise its contestable retail operations through its non-contestable retail operations. We also consider that the high level of data provided by this disclosure requirement is not sufficient to identify instances of cost manipulation.

We consider the disclosure mechanism would better reveal instances of cross-subsidisation if it requires Synergy to provide the financial results of its contestable and non-contestable retail electricity businesses separately. We do not consider that this further breakdown should be required to be published and provision to the relevant authority is sufficient.

Finally, we note that the effectiveness of non-discrimination terms will be dictated by the ability of the relevant authority to detect instances of discrimination and the perception that downstream retailers have of this ability. The comparison of terms and prices of different customised wholesale electricity products is complex and unlikely to be able to be effectively undertaken by market participants. If there is limited ability to effectively monitor these terms, then it may provide Synergy with a greater ability to engage, or be perceived to be engaging in, anti-competitive conduct such as a price squeeze, reducing the effectiveness of the disclosure mechanism.

Given the limitations of the current disclosure mechanism, the next section of this report considers alternative ways that anti-competitive behaviour could be detected. In particular it focuses on methods to detect instances of price squeeze and anti-competitive cross-subsidisation.

6 Application of a test to identify price squeezes

This section of the report considers how a test may be applied to identify instances of price squeeze and the potential limitations of implementing a test in the context of the Western Australian electricity sector. We first consider how an imputation test may be implemented to address this concern in practice, before discussing an alternative method of identifying a price squeeze using Synergy's net retail margin.

6.1 Summary of the interjurisdictional review

We have conducted an interjurisdictional review of regimes both domestically and internationally that have addressed issues of price squeeze by vertically integrated businesses. The full review is available in Appendix A, however we have included a short summary of the key findings below.

- Price squeeze tests are generally implemented in circumstances where there is an upstream bottleneck, and that bottleneck provides competing downstream businesses with no effective alternative but to use the bottleneck.
- The availability of effective alternative inputs for a downstream competitor reduces the ability of a vertically integrated firm from engaging in a price squeeze and should be a key consideration when deciding whether a price squeeze test is required.
- An 'as efficient' competitor test is the preferred test to identify instances of price squeeze.
- A price squeeze test can be applied to either the whole or segments of a customer base. As customer segments become smaller, the complexity and therefore the costs of implementing a price squeeze test will likely increase.
- Both forward looking and backward-looking tests can be effective in deterring price squeezes. Investigations involving alleged conduct will, by necessity, require a backward-looking test, while regimes seeking to promote competition and new entry into a market may be better suited implementing forward looking tests.

6.2 Overview of the imputation test

An imputation test has proved popular as it relies on a single test to consider both the wholesale and retail markets simultaneously, rather than considering a price squeeze through the individual dynamics of both the upstream and downstream market.

An imputation test seeks to identify whether the combination of a vertically integrated entity's wholesale charges and retail prices are such that a competitor at least as efficient as the vertically integrated entity can make a normal profit and remain viable in the downstream market. The test is set out as follows:

$$P \geq A + C$$

Where:

- ***P*** is the retail price of the vertically integrated entity;
- ***A*** is the price of the wholesale input that the vertically integrated entity charges a downstream competitor; and
- ***C*** is the retail costs of an 'as efficient' downstream competitor

If ***P*** is less than the combination of ***A*** and ***C*** then the test would identify a price squeeze.

In the current context it would test whether RBU is setting its own retail price such that its retail price at least covers WBU's wholesale charges (which are the same to RBU and to Synergy's downstream competitors) and the other costs that electricity retailers face. If a retailer 'as efficient' as Synergy is unable to generate a normal profit in the contestable retail market it would likely indicate that Synergy is engaging in a price squeeze.

There are a number of ways that an imputation test can be calculated and these methodological choices may result in different outcomes being reached. **Table 6** and **Table 7** in Appendix A of this report highlight some of these considerations, which includes decisions such as whether to use a forward or backward looking test, whether incremental or total costs should be used and what time period the test should be conducted over.

6.3 Key considerations in developing an imputation test for the EGRC scheme

In order to formulate imputation test(s) for Synergy, we need to establish the prices to be tested. We consider that prices related to the contestable retail market are the key prices that should be used in any imputation test, however currently Synergy offers its contestable load via two options, government regulated tariffs or customised MBCs. We consider that customised MBCs should form the basis of any imputation testing.

To develop an imputation test we have reviewed information from Synergy relating to its pricing approach, including documentation relating to the structure of MBCs, it's pricing strategy and internal guidelines. Based on this review, we consider Synergy's pricing methodology presents several issues for a traditional imputation test. We address some of these issues in Section 6.5.

6.4 Key inputs and construction of the imputation test

The key input into the imputation test will be the 'as efficient' retail price that will be compared against Synergy's own retail price. Developing this price in the retail electricity sector will likely look very similar to retail price regulation in other jurisdictions. This requires a retail tariff to be built up using the relevant energy, network and retail costs. For example, this process is undertaken annually by the Queensland Competition Authority (QCA) to set retail electricity prices in regional Queensland[32] while a similar approach is also used by the AER and the Essential Services Commission (ESC) to determine the Default Market Offer[3334].

We consider that the following inputs would need to be established in order to build an 'as efficient' retail price:

32 QCA, *Regulated retail electricity prices in regional Queensland 2023-24*, 9 June 2023

33 ESC, *Victoria Default Offer 2023-24: Final Decision*, 25 May 2023

34 AER, *Final determination – Default market offer prices 2023-24*, 25 May 2023

- Establish a load shape (ideally aggregated, e.g. by segment type);
- Establish a forecast of balancing costs;
- Establish energy hedging costs (which will be the same as RBU) and a risk preference (the amount of load to be hedged);
- Calculate a wholesale energy cost;
- Identify a capacity price and capacity obligation;
- Establish a green obligation and forward prices;
- Identify relevant network fees;
- Add 'as efficient' retail costs, including an efficient margin;

In addition to establishing the costs listed above, the calculation of an 'as efficient' retail price would require:

- Establishing a representative customer for which the retail tariff will be based on; and
- Transforming the costs for this customer into a tariff, as well as transforming Synergy's costs into the same representative customer.

Alternatively, a sampling approach could be used for the calculation of an 'as efficient' retail price. Under this method a subset of the MBCs contracts would be assessed, which would not require the transformation of costs based on a representative customer.

Ideally, Synergy would provide tariffs that represent significantly large groups of similar customers, as well as a representative customer in each group and the cost components of each calculated tariff.

6.5 Limitations of an imputation test

There are a number of limitations relating to an imputation test in the electricity sector. Below we outline some of the challenges involved in developing such a test for the EGRC scheme.

Assumptions may reduce the utility of the test

The construction of the imputation test is likely to involve a number of assumptions. For example the imputation of the wholesale component of the test will likely require assumptions regarding the risk preference of an efficient retailer, while a multitude of assumptions will be required to develop an 'as efficient' retail cost.

Given the number of assumptions required to generate the inputs into the imputation test, the variation in values generated by using different assumptions may be larger than the actual price squeeze. This would undermine the utility of the test given the choice of assumptions could drive the outcome of the test rather than Synergy's underlying behaviour. It also means that updating the test in the future will be non-trivial as all of the assumptions would need to be revisited to ensure they are still accurate.

Synergy does not use a standard retail tariff for MBCs

Due to the number of retail prices it would likely be necessary to undertake the tests on a representative basis which would require the inclusion of additional assumptions. There may also be insufficient data to calculate cost stacks at a customer segment level.

The wholesale component of the test will be the same for Synergy and third party retailers

Synergy has a non-discrimination obligation based on the wholesale electricity contracts it offers RBU and competing retailers. Therefore, the ***A*** in the imputation equation should be identical for both Synergy and other retailers, once the risk preferences of the retailers have been made equivalent. This would reduce the imputation test to:

$$P \geq C$$

and would limit the imputation test's ability to detect prices squeezes. Instead the test essentially becomes a test for predatory pricing and will only be breached if Synergy engages in this type of conduct.

Cross-subsidising from Synergy's non-contestable retail business could alter the outcome of the test

If Synergy is able to over-allocate costs to its non-contestable retail business rather than applying them to its contestable retail business, then it may result in the retail component of the test being set lower than what should be expected from an 'as efficient' competitor. A lower retail cost would mean that Synergy could charge a lower price for its retail services without breaching the test, even though a competitor would be unable to generate a normal profit at that same price.

In regard to the price squeeze test, the cross-subsidisation would reduce the retail costs of an 'as efficient' competitor on the right-hand side of equation. All other things being equal, this would allow Synergy to either charge a lower price for their retail tariff, or a higher price for its wholesale energy without breaching the price squeeze test. This results in a situation where a price squeeze may be occurring in the contestable retail market but is not identified by the imputation test.

6.6 Alternative identification of a price squeeze

Given the limitations identified in the previous section, an imputation test is likely to be of limited use in identifying price squeeze behaviour. We have therefore considered an alternative process that may better identify if Synergy is engaging in a price squeeze.

In order to identify that a price squeeze is not occurring, we would need to establish:

- that Synergy's WBU engages with RBU on an arm's length basis that is consistent with how it engages with competing retail electricity providers and this is reflected in Synergy's segmented financial information.
- that RBU's contestable electricity business earns an appropriate net margin on its MBCs (i.e. above an 'as efficient' retailer's margin).

The first condition ensures that Synergy is charging its own retail business the same price for wholesale electricity contracts as it is charging third parties, and is adequately reflecting these costs in its financial statements.. The second condition ensures that RBU's contestable electricity business is generating an appropriate net margin that is not restricting 'as efficient' competitors from competing with Synergy in the retail electricity market. Without satisfying the first condition the comparison of Synergy's contestable electricity net margin may not be on a comparable basis with the established efficient net margin.

For anti-competitive cross-subsidisation the same first condition would need to be satisfied, while also ensuring:

- that RBU's contestable electricity business is not inappropriately shifting costs to other business segments.

Any attempt to inflate the price of wholesale contracts would likely reduce Synergy's retail electricity net margin below an efficient level. Similarly if Synergy attempted to cross-subsidise its contestable retail business this would also likely be evident through a change in the costs of the contestable retail business and one of the other business segments. We consider that these margins and costs should be considered over time, with:

- a decreasing trend in Synergy's retail electricity margin below the efficient retail margin, potentially indicating a price squeeze.
- a decrease in Synergy's contestable retail electricity costs with an associated increase in another business segment's costs, potentially indicating anti-competitive cross-subsidisation.

6.7 Application of the alternative

6.7.1 Assess whether WBU's contracts are provided at arm's length

The first condition that is required to be met is ensuring wholesale contracts are provided on a non-discriminatory basis, and that the prices charged to RBU are equivalent to third party retailers and reflected in Synergy's financial statements.

Ensuring wholesale contracts are provided on a non-discriminatory basis

As previously stated, Regulation 29 requires the Office of the Auditor General to complete an annual audit on Synergy's compliance with its obligation to not discriminate when providing supply of wholesale electricity contracts. Following the inclusion of wholesale products in the non-discriminatory clause, the ERA will be able to rely on this audit process to ensure that Synergy is not discriminating across either supply of electricity or wholesale product contracts.

Ensuring arm's length transactions between WBU and RBU are reflected in Synergy's financial statements

To meet this requirement the EGRC scheme could include a clause that requires Synergy's WBU and RBU to engage at arm's length. Monitoring of this clause could then be undertaken in a similar format to the current audit undertaken for the non-discrimination clause. This would ensure that the wholesale contract prices entered into by RBU is the price that is charged to the RBU business for the purposes of producing financial statements.

Analysis undertaken by the ACCC suggests that the majority of vertically integrated electricity businesses set their transfer prices on an 'opportunity cost' basis. This means that the retail arms of these businesses are receiving wholesale electricity at a price comparable to a standalone retailer, and therefore reflect an arm's length transaction.[35] If WBU is already charging RBU on an 'opportunity cost' basis, then Synergy will likely not be required to alter its methodology for producing the required financial statements following the inclusion of an arm's length requirement.

We note that it is currently unclear whether the EGRC scheme requires Synergy to price its retail products as if RBU is independent from the rest of Synergy (i.e. at arm's length). If arm's length

35 ACCC, *Retail Electricity Pricing Inquiry – Final Report*, June 2018, p. 128

transactions were intended under the scheme, then no additional cost will be incurred by the introduction of an arm's length clause.

Under an arm's length agreement WBU would be required to pass on the costs of its wholesale contracts to RBU at the same price it charges competing third party retailers, which would likely include some level of margin. However, whether this margin is passed on to RBU or not will not alter the revenue Synergy will receive overall, only which business unit it will be attributed to. It is also unlikely to impact retail prices given Synergy will continue to charge at the competitive level. We consider the main benefit of vertical integration to be the greater stability of revenue streams that is derived from the anti-correlation between generation and retail profits. This benefit is unaffected by the proposed requirement to engage in an arm's length transaction.

Should both of these requirements be satisfied then Synergy's retail business should be charged the same price for wholesale electricity as other third party retailers.

6.7.2 Assessing whether RBU recovers an efficient net margin

There are two potential scenarios relating to net margin that may indicate anti-competitive conduct:

- Synergy is generating a negative net margin on its MBCs;
- Synergy is generating a positive but inefficiently low net margin on its MBCs that would not allow an 'as efficient' retailer to generate a normal profit.

If Synergy is generating a negative net margin on its MBCs then this is an issue of predatory pricing. Section 46 of the *Competition and Consumer Act 2010* prohibits a firm with a substantial degree of market power from engaging in conduct that has the purpose, effect or likely effect of substantially lessening competition in a market. Specifically, Section 46(1) states that a:

> *corporation that has a substantial degree of power in a market must not engage in conduct that has the purpose, or has or is likely to have the effect, of substantially lessening competition in*
>
> *a) that market; or*
>
> *b) any other market in which that corporation, or a body corporate that is related to that corporation:*
>
> *i) supplies goods or services, or is likely to supply goods or services; or*
>
> *ii) supplies goods or services, or is likely to supply goods or services, indirectly through one or more other persons; or*
>
> *c) any other market in which that corporation, or a body corporate that is related to that corporation:*
>
> *i) acquires goods or services, or is likely to acquire goods or services; or*
>
> *ii) acquires goods or services, or is likely to acquire goods and services, indirectly through one or more other persons.*

Given Synergy is likely to meet the definition of a firm with a substantial degree of market power any attempt by it to price its retail products below the cost of providing retail electricity services will likely be captured by the CCA's misuse of market power provision. The only predatory pricing

that will not be captured is any predatory pricing that does not meet the threshold of a substantial lessening of competition. Should Synergy meet the definition of a firm with a substantial degree of market power, then it is unlikely that they would be able to effectively undertake a price squeeze.

If Synergy is generating a positive net margin on its MBCs it may not fall under the definition of predatory pricing, but still may be priced below an 'as efficient' retailer price, which includes an efficient margin. To monitor Synergy's net margin, the current financial reporting requirement should be expanded to include separate reporting of Synergy's non-contestable and contestable retail electricity businesses, rather than reporting on RBU as a single entity.

Assuming that the internal pricing between WBU and RBU is reflected in the financial information, the financial reporting should identify Synergy's net margin for its contestable customers in a comparable format to the efficient net margin. Ideally this margin would reflect only the costs and revenues associated with MBCs, however there are some contestable customers who are charged based on government regulated tariffs. Given the relatively small proportion of contestable customers on these regulated tariffs we consider they are unlikely to significantly alter the net margin of the entire contestable retail business and therefore should not have a significant impact on the overall net margin of Synergy's contestable business. The net margin can then be compared to an efficient net margin, similar to those calculated by other regulators. For example, the ESC has set an efficient retail margin of 5.3% in its latest Default Offer report.[36] Setting an efficient margin is discussed further in the section below.

The comparison of the net margin of RBU's retail electricity business and an efficient retail margin is unlikely to provide a definitive answer as to whether a price squeeze is occurring. This is because Synergy provides pricing to its customers *ex-ante* while the reporting of its financial performance is done *ex-post*. This will likely lead to some level of volatility in the net margin of all electricity retailers, that will depend on the movement of a retailer's costs and electricity prices, making the comparison of Synergy's net margin and an efficient margin imprecise. For example, if balancing market prices in a given year are higher than forecast, any unhedged load for a retailer will have been more expensive to acquire. Under this scenario it is likely that the net margin will be lower than forecast. The opposite would be true in the reverse scenario where balancing prices are lower than forecast and a higher net margin is achieved.

We consider the purpose of this comparison is to identify when a price squeeze may be occurring rather than it being able to definitively indicate the existence of a price squeeze. The monitoring of the margin over time (i.e. a decreasing trend in the net margin) is likely to provide the best indication of a potential price squeeze, which can then be followed by a more thorough investigation into Synergy's pricing.

Where identified, a more thorough investigation into Synergy's conduct could then be undertaken by the relevant authority to ascertain whether a price squeeze or anti-competitive cross-subsidisation has occurred. An investigation could also be undertaken without an identified instance if the relevant authority suspects anti-competitive conduct may be occurring.

Such an investigation could consider:

- whether the benchmark net margin is appropriately reflecting the efficient net margin of an electricity retailer in the WEM. Changes in retailer behaviour or the market may have altered the efficient net margin over time.

[36] ESC, *Victoria Default Offer 2023-24: Final Decision*, 25 May 2023, p. 47.

- whether the low retail margin is due to the timing of Synergy's wholesale contracts. Poorly timed purchases of contracts would make supplying its customers more expensive. Examining Synergy's contract book may allow the relevant authority to determine if this could explain the low net margins.
- Building up a cost stack, which would require the relevant authority to undertake a similar process to retail price regulation, building up an efficient retail price to be compared against Synergy's own retail prices.

Given the significant level of resources that would likely be required to undertake such an investigation, we only recommend undertaking such an endeavour in instances where anti-competitive conduct is suspected to have occurred, rather than as a monitoring measure.

6.7.3 Setting an efficient net margin

Regulators have determined an appropriate allowance for a retail electricity margin using one or more of three approaches:

- **The bottom-up approach** – is similar to the approach used to calculate the return on capital for regulated network businesses. It calculates the margin that is required to provide a return on capital that is based on an estimate of the weighted average cost of capital for the retailer multiplied by an estimate of the retailer's asset value (including intangibles and working capital).
- **The benchmarking approach** – relies on aggregating available public information on the retail margin.
- **The expected returns approach** – seeks to estimate the margin that is required in order to compensate investors in the business for systematic risk.

We consider using a benchmarking approach will likely deliver an appropriate efficient net margin while imposing limited additional costs to administer the EGRC scheme. We consider what an appropriate retail margin may be in the section below.

6.7.4 Retail margins approved by other regulators

In setting NSW regulated electricity prices from 2013-2016 (the final decision before NSW deregulated electricity prices), IPART had regard to the three approaches listed above to estimate the retail margin in NSW. The retail margin of 5.7 per cent was chosen from within a recommended range for the retail margin of 5.3 per cent to 6.1 per cent.[37] IPART also set the retail margin relative to a retailer's earnings before interest, taxes, depreciation and amortisation (EBITDA), as this ensures that allowance for depreciation and amortisation costs is only provided once. The same EBITDA method was also undertaken by the ACCC in its Retail Electricity Pricing Enquiry report. IPART's 5.7 per cent margin was subsequently used by a range of state-based regulators in setting retail margins.

More recently, the ESC considered the retail margin should be reduced from 5.7 per cent to 5.3 per cent because:

[37] IPART, *Review of Regulated Retail Prices for Electricity From 1 July 2013 to 30 June 2016 – Final Report,* June 2013, pp. 88-94.

- since 2020, most retailers have offered market offers below, and sometimes well below, the Victorian Default Offer;
- retail margins set by other regulators have decreased;
- additional retailers have sought to enter the market;
- 5.3 per cent is within the range of retail margins produced by the expected returns approach; and
- on average, retailers' reported retail margins have decreased.[38]

The ESC references a number of regulators who have also recently adjusted their retail margins. These have been reproduced in **Table 3** below.

Table 3: Recent decisions by other state-based regulators

Regulator	Margin for 2022-23
Independent Competition and Regulatory Commission (ICRC)	5.3 per cent[39]
The Officer of the Tasmanian Economic Regulator (OTTER)	5.25 per cent[40]
Queensland Competition Authority (QCA)	3.9 per cent[41]

Source: Essential Services Commission

These reductions appear to indicate that regulators believe that retail margins have fallen slightly over time and that applying a retail margin in the vicinity of 5.3 per cent would likely be consistent with a number of other retail electricity regulators across Australia.

We consider that retail margin estimates are likely transferrable between States given the services provided by electricity retailers are generally very similar. Given the similarity in services provided it is also likely that a similar margin is required to compensate for providing those services. However, we note the following differences that may alter the efficient retail margin:

- the WEM has a different type of electricity market (a capacity and energy market) compared to the NEM (which is an energy only market). This has generally meant that the balancing market is more stable in the WEM, meaning retailers may be exposed to lower risks than retailers in the NEM.
- net retail margins under other jurisdiction are focused on residential and small business customers that are captured under the non-contestable retail market in the WEM. The

38 ESC, *2023-24 Victorian Default Offer price review*, p.48.

39 Independent Competition and Regulatory Commission, *Retail electricity price recalibration 2022-23*, Report 3 of 2022, June 2022, p. 12

40 Office of the Tasmanian Economic Regulator, *2022 Standing Offer Electricity Pricing Investigation – Final Report*, April 2022, p. vi;

41 The Queensland Competition Authority no longer sets a separate retail margin. The ESC calculated an implied margin using retail costs for Energex from the Australian Energy Regulator's Default Market Offer 2023-24 draft decision.

efficient retail margin may differ for larger business and industrial users, if a different return is required by a retailer for providing retail services to these customers.

6.7.5 Comparing an efficient net margin to RBUs net margin

Table 4 outlines the net margin that would be calculated using RBU's recent revenue and EBITDA. This includes both Synergy's contestable and non-contestable retail electricity businesses. For the purposes of this example all businesses are included, however Synergy would be required to further separate the performance of these businesses before the desired comparison to the efficient retail margin can be made.

We consider that dividing RBU into two segments is likely sufficient for the identification of movements in margins and costs. This would require the individual reporting of the contestable electricity business segment, while the remaining segments within RBU could be provided in a consolidated format.

Table 4: RBU's net margins

Three-month period	RBU net margin
March 2023	7.4 per cent
December 2022	4.9 per cent
September 2022	4.9 per cent
March 2022	10 per cent
December 2021	9.8 per cent

Source: Synergy quarterly reports

The margins provided above indicate that there is a significant amount of fluctuation in Synergy's retail margin over time. Both three-month periods ending in December and September 2022 resulted in Synergy generating a net retail margin below the efficient retail margin of 5.3 per cent, while the remaining three-month periods all generated a net retail margin above the efficient retail margin.

It is therefore important that comparisons against an efficient retail margin are made over a period of time rather than a comparison of a single 3-month period. Identification of a potential price squeeze or cross-subsidisation is likely to be evident through a decreasing trend in the margin/costs of Synergy's contestable retail electricity business rather than a single 3-month period of low margins.

6.7.6 Assessing whether RBU is cost-shifting

We previously outlined how Synergy may use cost-shifting to anti-competitively cross-subsidise its contestable retail business in Section 2.2. In that section we outlined how equally efficient retail competitors may be unable to compete with Synergy's contestable retail business due to costs being inappropriately shifted away from the contestable business.

Should the updated financial statements that separate out the contestable retail business from other business segments show unexplained cost movements between the business segments, then a further investigation will likely be required.

We consider that cost-shifting between Synergy's contestable and non-contestable businesses is likely to be of most concern due to the similarity in services provided by the two business segments. An investigation could therefore focus on how costs are being apportioned between the two businesses. We consider the following types of costs may give Synergy more scope to shift costs away from Synergy's contestable retail business:

- environmental costs;
    - Synergy is required to purchase large scale generation certificates (LGCs) to meet renewable energy targets. Synergy may attribute higher cost LGCs to its non-contestable business while allocating the lower cost LGCs to its contestable retail business.
- wholesale costs.
    - Synergy may seek to purchase electricity and hedge their risk across its entire retail book, as it would likely be inefficient to separately build up its positions for different types of customers (contestable and non-contestable). These costs will then need to be apportioned to the different business segments, which may present Synergy with a number of avenues to assign a larger weight to its non-contestable business. Given that wholesale costs are a large component of the retail cost, even small movements between business units can result in significant cross-subsidisations.

7 Recommendations to improve the EGRC disclosure mechanism

This section provides recommendations for the EGRC disclosure mechanism to implement the alternative assessment presented in Section 6.

Market feedback to date suggests that there are currently limited alternatives to engaging with Synergy for wholesale electricity contracts. Our recommendations therefore reflect this state of the world. Should further analysis or changes in the market result in effective alternative wholesale contracts becoming available, then a disclosure mechanism is likely no longer required. This is because Synergy will no longer have the ability to engage in anti-competitive conduct such as a price squeeze. If there are sufficient competitive pressures on Synergy in the provision of wholesale electricity contracts, then any kind of disclosure required by Synergy is only likely to inhibit Synergy's ability to compete in the wholesale and retail markets (by raising Synergy's costs).

If there are limited or no alternatives for retailers other than to enter into contracts with Synergy for the supply of wholesale electricity, then the current EGRC disclosure mechanism is unlikely to be able to effectively deter Synergy from engaging in a price squeeze and some forms of cross-subsidisation. **Table 5** summarises our recommendations under this scenario, and where appropriate links them to the relevant clauses of the EGRC scheme.

Table 5: Summary of recommendations

	Recommendation	Relevant clause
1	expand the non-discrimination clause to include wholesale electricity contracts that do not require the physical delivery of electricity (such as contracts for differences).	EGRC Regulations, Regulation 22
2	introduce a clause that requires WBU and RBU to operate at arms-length.	New clause
3	expand the current financial reporting requirement to include separate reporting of RBU's: • contestable retail electricity; • non-contestable electricity and other RBU businesses. But only require this financial information to be provided to the relevant authority.	EGRC Regulations, Regulation 6
4	use the updated financial statements to compare the net margin of Synergy's contestable retail electricity business with an efficient net margin to identify instances of potential price squeeze.	No clause required
5	use the updated financial statements to compare movements in costs between Synergy's contestable retail electricity business and other business segments to identify instances of potential anti-competitive cross-subsidisation.	No clause required

As previously discussed, one method of detecting a price squeeze is through the use of an imputation test. We consider that an imputation test is likely not very well suited to the Western Australian electricity sector given the limitations of such a test (see Section 6.5). We consider that an alternative assessment to reveal instances of potential price squeeze be required to establish:

- that Synergy's segmented financial information in its financial statements reflects arm's length transactions between WBU and RBU.
- that RBU's contestable electricity business earns an appropriate net margin on its MBCs (i.e. above an 'as efficient' retailer's margin).

The first condition ensures that Synergy's internal prices are adequately reflected in its financial statements, while the second condition ensures that Synergy is generating an appropriate net margin. Without satisfying the first condition, the comparison of Synergy's contestable electricity net margin may not be on a comparable basis with the established efficient net margin.

7.1.1 Assess whether WBU's contracts are provided at arm's length

Section 5.3.2 identified a number of short comings with the Transfer pricing mechanism under the current EGRC scheme. This included no clear link between RBU's wholesale contract price and

its internal transfer price, as well as no requirement for Synergy to provide its internal transfer prices to the relevant authority.

To meet the first condition identified above, we recommend:

- introducing a clause that requires WBU and RBU to operate at arms-length. Monitoring of this clause could then be undertaken in a similar format to the current audit undertaken for the non-discrimination clause. Monitoring of this clause could then be undertaken in a similar format to the current audit undertaken for the non-discrimination clause.
- expanding the non-discrimination clause to include wholesale electricity contracts that do not require the physical delivery of electricity (such as contracts for difference), so that all wholesale electricity contracts are covered by the non-discrimination clause.

The above recommendations in conjunction with the annual audit undertaken by the Office of the Auditor General in relation to non-discrimination, should ensure that the internal pricing between RBU and WBU is reflected in the financial information provided under Regulation 6 of the EGRC Regulations.

7.1.2 Assessing whether RBU recovers an efficient net margin

To aid in the identification of price squeeze and cross-subsidisation, we recommend that the relevant authority:

- expand the current financial reporting requirement to include separate reporting of RBU's:
  - contestable retail electricity;
  - non-contestable electricity and other RBU businesses; rather than reporting on RBU as a single entity.
- compare the net margin of Synergy's contestable retail electricity business with an efficient net margin to identify instances where a price squeeze may be occurring.
- compare movements in costs between Synergy's contestable retail electricity business and other business segments to identify instances of potential anti-competitive cross-subsidisation.

We do not consider that this further breakdown of RBU's financial information should be required to be published and that provision of the information to the relevant authority is sufficient.

Any attempt to inflate the price of wholesale contracts would likely reduce Synergy's retail electricity net margin below an efficient level. Similarly if Synergy attempted to cross-subsidise its contestable retail business this would also likely be evident through a change in either margin or costs of the contestable retail business and one of the other business segments. We consider that these margins and costs should be considered over time, with:

- a decreasing trend in Synergy's retail electricity margin below the efficient retail margin, potentially indicating a price squeeze.
- a decrease in Synergy's retail electricity costs with an associated increase in another business segment's costs, potentially indicating anti-competitive cross-subsidisation.

Following the identification of a potential price squeeze event, the relevant authority could undertake a more detailed investigation into Synergy's retail pricing. We outline some key criteria for such an investigation in Section 6.7.2 and Section 6.7.6.

We consider our alternative proposal that compares Synergy's net retail margin with an efficient retail margin is likely to:

- provide additional benefits to the EGRC scheme through its ability to identify potential anti-competitive price squeeze and cross-subsidisation;
- impose limited additional costs on Synergy, given much of the information required is likely already being captured by Synergy.

A Interjurisdictional review

This section covers a number of regimes both domestically and internationally that have addressed issues of margin squeeze by vertically integrated businesses. Within each regime we have highlighted key considerations that regulators have made in attempting to establish the existence of margin squeezes. We draw on a range of industries including the Australian telecommunications and electricity sectors and European broadband and electricity sectors.

Summary of inter-jurisdictional review

- Price squeeze tests are generally implemented in circumstances where there is an upstream bottleneck, and that bottleneck provides competing downstream businesses with no effective alternative but to use the bottleneck.
- The availability of effective alternative inputs for a downstream competitor reduces the ability of a vertically integrated firm from engaging in a price squeeze and should be a key consideration when deciding whether a price squeeze test is required.
- An 'as efficient' competitor test is the preferred test to identify instances of price squeeze.
- A price squeeze test can be applied to either whole or segments of a customer base. As customer segments become smaller, the complexity and therefore the costs of implementing a price squeeze test likely increase.
- Both forward looking and backward-looking tests can be effective in deterring price squeezes. Investigations involving alleged conduct will by necessity require a backward-looking test, while regimes seeking to promote competition and new entry into a market may be better suited implementing forward looking tests.

A.1 Macquarie Generation – AGL Merger

A similar merger to the Verge Energy – Synergy merger occurred in NSW with the merger of AGL (a larger electricity retailer) and Macquarie Generation (a large electricity generator). A key consideration in the decision to allow the merger was the potential for the vertically integrated entity to foreclose competitors by exerting its market power in the supply of wholesale electricity contracts.

In 2014, AGL Energy Limited (AGL) sought to acquire the assets of Macquarie Generation. This included the key assets of Bayswater and Liddell power stations in NSW (which together accounted for 27 per cent of NSW capacity). The acquisition would have meant that the three largest retailers would now collectively own 70 percent of electricity generation capacity in NSW.

On 4 March 2014, the Australian Competition and Consumer Commission (ACCC) announced that it would oppose the acquisition, as it considered that the proposed acquisition was likely to result in a substantial lessening of competition in the market for the retail supply of electricity in New South Wales (NSW).

AGL subsequently made an application to the Australia Competition Tribunal (the Tribunal), seeking authorisation for the proposed acquisition.

The following is a short summary of evidence provided to the Tribunal, which disputed the ability of AGL to effectively foreclose competitors in the retail market.

Evidence provided to the Tribunal

For a vertical merger to give rise to foreclosure, three conditions need to hold:

- The upstream enterprise must have substantial market power. This, in turn, will require that: (i) entry into the upstream activity is difficult; and (ii) the activity of selling in the upstream market is reasonably concentrated.
- The resulting increase in the price of the upstream output (when the upstream output is an input in the downstream market) must cause an increase in the price of the output in the downstream market. This suggests that the downstream enterprises cannot substitute to other inputs without any cost; and
- The increased profit that the merged enterprise gains from the increase in the price of the downstream market more than compensates the merged enterprise for the reduction in its profit in the upstream market.

In regards to the specific nature of the Macquarie Generation – AGL merger, for foreclosure to occur the following 4 facts needed to be established:

1. That access to baseload swap contracts settled at the NSW regional reference node (RRN) (or ownership of a baseload power station located in NSW) is a pre-condition of entry to, or expansion within, the NSW retail electricity market. Given the NEM allows for the movement of electricity between states, spot prices are calculated at regional reference nodes to account for the electricity losses that occur when electricity is transmitted between two regions using regional interconnectors. To hedge their retail exposure a retailer will generally prefer a hedging contract based on a spot price most closely associated with the electricity load it is hedging. In this case given the customer base is in NSW a NSW RRN would be the preferred contract price;
2. That Macquarie Generation is the only supplier of sufficient volumes of baseload swap and customised hedge contracts necessary to support the entry or expansion of non-vertically integrated retailers in NSW;
3. That Macquarie Generation, if acquired by AGL, will refuse to supply swap contracts to non-vertically integrated retailers; and
4. That the merged AGL could profitably increase retail prices to benefit from the absence or exit of small retailers.

If all 4 of these facts were established, then AGL would likely be able to foreclose competitors in the retail market. The remainder of this review of the acquisition draws on economic evidence provided to the Australian Competition Tribunal (the Tribunal).

In relation to Fact 1, evidence provided to the tribunal considered that access to hedge contracts at the NSW RRN was not a pre-condition of entry into the retail market, and that an entrant looking to enter the market could employ the same strategy as AGL, in which:

- it purchased baseload swaps referenced to the Victorian RRN (possibly accompanied by Inter-regional Settlements Residues (IRSRs) which can be used to hedge risks associated with divergent prices between regions); and
- purchased caps referenced to the NSW RRN.

This is because Victorian regional reference price (RRP) generally moves together with the New South Wales RRP at times when the NSW RRP is relatively low. Temperature and hence peak price volatility in Victoria also tends to be greater than that of New South Wales, and at those rare times when the NSW RRP does jump unexpectedly, the acquisition of NSW RRP-referenced caps would enable the retailer to manage any material wholesale purchase costs risks.

This strategy provided a substitute for baseload swap and cap contracts referenced to the NSW RRN.

In relation to Fact 2, evidence provided to the Tribunal considered that Macquarie Generation was not the only viable supplier of sufficient volumes of baseload swap and customised hedge contracts necessary to support entrant retailers in NSW. It found that Snowy Hydro was an active seller of swap like products, while both Origin Energy and EnergyAustralia had a willingness and ability to sell contracts referenced to the NSW RRN. It also found that following the acquisition of Macquarie Generation, AGL would no longer require the hedges it currently purchases from Delta, which would become available for other retailers to purchase.

In relation to Fact 3, the ACCC had noted that market participants had claimed that a combined AGL would use its long generation position to support the other vertically integrated businesses at the expense of independent retailers. However, the economic evidence considered that observed behaviour of AGL in Victoria, following its acquisition of Loy Yang A power station in 2012, did not support this activity. It also considered that if AGL was the monopoly supplier of hedging contracts then it would be profitable to also withhold these contracts from Origin and EnergyAustralia, who were short generation at peak times.

Finally in relation to Fact 4, evidence provided to the Tribunal considered that even if AGL could increase input costs to small independent retailers, it is likely to be constrained by other, larger retailers such as Origin, EnergyAustralia and Snowy Hydro/Red Energy who would be able to undercut AGL's offering. This suggests that the benefits to a merged AGL-Macquarie Generation from engaging in vertical foreclosure are likely to be limited and unlikely to justify the costs. This is because there was sufficient evidence to suggest the level of retail competition was strong, with smaller retailers winning market share and competition remaining intense between the three largest retailers.

Australian Competition Tribunal Decision

The Tribunal ultimately allowed the acquisition to be completed as it was:

> *not persuaded by the key theory of competitive harm said by the ACCC to arise from the Proposed Acquisition. It is of the view for the reasons given that, following the Proposed Acquisition, retailers both large and small will be able to acquire hedges to support their retail activities in a liquid market for those hedges. Demand for hedges by such retailers will continue to be met from the range of hedge counterparties, including AGL, which will have clear incentives to continue to hedge against Bayswater and Liddell capacity.*[42]

The Tribunal considered that:

[42] Australian Competition Tribunal, *Application for Authorisation of Acquisition of Macquarie Generation by AGL Energy Limited [2014] ACompT 1,* Para 363

> *While this is tenable as a theory, the facts speak otherwise. Electricity retailing is a dynamic market that is conditioned by ever-changing supply and demand factors. AGL obviously thinks the acquisition of Macquarie Generation will help it compete more effectively in the retail market, and that, given the excess capacity of the Macquarie Generation plants, it will be able profitably to sell hedges to rival retailers. To deny hedges to potential buyers would lower its potential wholesale revenue and deny it a return on its very large financial investment in Macquarie Generation, and gift wholesale electricity market share to its gentailer rivals.*[43]

It also considered:

> *that after the Proposed Acquisition, AGL will not have the ability to exclude retailers of any size from the NSW retail market by refusing to supply them with hedge contracts. It finds that AGL will in fact continue to offer hedge contracts to retailers in NSW to the extent that it realistically is able to, after having regard to its natural hedge with its retail operations. A retailer to whom AGL were to refuse to supply a hedge contract could easily turn to another supplier, including generators in NSW or interstate or financial intermediaries. To refuse to supply would be not be profit maximising for AGL and would therefore be commercially irrational. It would be foregoing profit on the contract, and would have little or no effect on the retailer's ability to secure supply, given the alternative sources of hedges.*[44]

However the Tribunal did place some restrictions on the acquisition. The acquisition was granted on the condition that AGL was to offer not less than 500MW of electricity hedge contracts to smaller retailers in NSW per year for a period of seven years following the acquisition. These were the same conditions that were offered by AGL in its proposed undertaking to the ACCC.

It concluded that:

> *The Tribunal is satisfied that the Proposed Conditions would be likely to mitigate any risk that the Proposed Acquisition might raise barriers to entry by second-tier retailers by restricting their ability to obtain hedge contracts.*[45]

43 Australian Competition Tribunal, *Application for Authorisation of Acquisition of Macquarie Generation by AGL Energy Limited [2014] ACompT 1,* Para 343

44 Australian Competition Tribunal, *Application for Authorisation of Acquisition of Macquarie Generation by AGL Energy Limited [2014] ACompT 1,* Para 356

45 Australian Competition Tribunal, *Application for Authorisation of Acquisition of Macquarie Generation by AGL Energy Limited [2014] ACompT 1,* Para 386

A.2 European investigations into price squeezes in the electricity sector

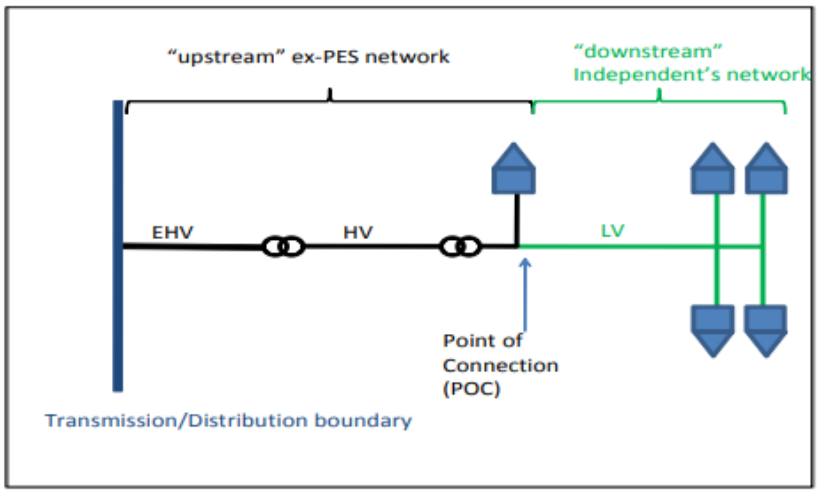
There are limited examples of where price squeeze tests have been implemented in the electricity sector. However, we note two instances of investigations in Europe where these tests have been utilised:

1. Ofgem, the UK's electricity regulator, conducted an investigation into alleged price squeezing in the UK's distribution network in 2009 under Section 25 of the *Competition Act 1998*.[46]
2. Conseil de la Concurrence (the Conseil), the French competition authority, conducted an investigation into alleged price squeezing by the country's largest vertically integrated supplier of electricity under Section IIIB of the *Commercial Code*.[47]

UK investigation

The UK electricity distribution network has a monopolistic market for the existing portion of the network, but has implemented a contestable market for extensions to the network. Extensions of the network could include, for example, extending the distribution network to a new housing development. Here both the Distribution Network Operator (DNO), who controls the existing distribution network, competes with Independent Distribution Network Operators (IDNO) to build, adopt, operate and maintain extensions to the electricity distribution network. In order to operate this extension, the network operator needs to use the existing electricity transmission and distribution networks up to the point of connection with the new expansion of the network. A visual example of this is provided in **Figure 5**.

Figure 5: Example of a UK transmission and distribution network



Source: Ofgem

[46] Ofgem, *Decision to accept binding commitments from Electricity North West Limited over connection charges – Final Decision*, 24 May 2012.

[47] Conseil de la Concurrence, *Decision No. 07-MC-04 of 28 June 2007 relating to a request for precautionary measures by Direct Energie*, 28 June 2007.

In this particular instance, the DNO involved was Electricity North West Limited (ENW) and the IDNO was Independent Power Networks Limited (IPNL). IPNL alleged that the level of ENW's charges gave it no opportunity to earn any margin on its segment of the network and as such amounted to a vertical price squeeze by a dominant company. To investigate the allegations, Ofgem developed a price squeeze test to check whether ENW's own downstream business could make a normal profit if it were charged for connection to its network on the same basis as third parties.

This approach stems from the decision in *Deutsche Telekom v Commission [2008]* where an abusive price squeeze was considered to have occurred:

> *"if the difference between the retail prices charged by a dominant undertaking and the wholesale prices it charges its competitors for comparable services is negative, or insufficient to cover the product specific costs to the dominant operator of providing its own retail services on the downstream market.*[48]

As discussed previously in the context of the Australian telecommunication market, this is known as an 'as efficient' test, where the test is carried out under the presumption that a competitor could make a normal profit if it operates as efficiently as the dominant business in the downstream market.

Table 6 outlines a number of Ofgem's methodological considerations in developing an appropriate margin squeeze test.

Table 6: Summary of Ofgem's methodology for conducting a margin squeeze test

Issue	Ofgem approach
Whose costs are relevant to the test	**"As efficient" approach:** The test should be constructed to identify whether the combination of upstream and downstream distribution charges is such that competitors at least as efficient as ENW can make a normal profit.
Cost standard for downstream costs of transforming wholesale product into retail product	**Used long run total costs**: Ofgem considered that the appropriate cost concept to be used in the margin squeeze test was long run total cost of operating the network
How to allocate long run costs	**Used peak demand:** Allocation was determined using ENW's charging model, which allocated costs between customer groups largely on the basis of their contribution towards system peak demand, which is the key driver of network costs. This was then used to calculate the average cost of providing services based on average consumption characteristics.

[48] See Deutsche Telekom v. Commission, [2008] ECR II-477 (para. 191).

How to calculate efficient costs in the downstream market	**An averaging approach**: To estimate efficient costs, Ofgem: • estimated the total cost (including a reasonable allocation of fixed costs) of operating the downstream part of the ENW network which approximates the business of IPNL; • split this cost between customer types (e.g. domestic/non-domestic); and • calculated the average cost of providing downstream network services to customer types based on average consumption characteristics.
Segment of the customer base, or the whole customer base?	**Apply to the relevant segment of the customer base**: The test was only applied to sites where all end users were domestic customers.
The time period over which to apply the test	**Time period should reflect the life of the investment**: The analysis used estimates of margins during the site development stage and when they are fully energised to calculate an implied gross margin over the life of the investment.
Forward looking or backward looking tests	**Used a backward-looking test**: A backward looking test was required given this was an investigation into alleged behaviour and not part of a regime to deter future anticompetitive behaviour.

Source: Frontier Economics, based on Ofgem's final decision

Ofgem found that the gross margins available to IPNL at the 9 identified sites were negative in 8 cases and that cumulatively across the sites the net income available to IPNL was negative.[49] The finding of a negative gross margin is indicative of a price squeeze. Ofgem also developed a price squeeze test for generic domestic customer sites. This secondary analysis also found that during the complaint period, the majority of opportunities available to IPNL would have resulted in IPNL being unable to fully recover their reasonable costs over the life of the investment.

Following the complaint ENW introduced a capacity ramping charging modification and agreed with IPNL that they would recover unpaid capacity in accordance with this new methodology. These modifications meant that following the signing of a connection agreement, for the next 3 years an IDNO would only be charged the capacity that is required at that time. Applying these modifications retrospectively to the complaint period resulted in:

- a reduction in the rate of energisation required at the sites for IDNO's to break even;
- a reduction in the number of plots on a site required before an IPNL can make a gross margin equal to the 'as efficient cost for providing similar services'; and
- the effective net income received by IPNL at the 9 complaint sites becoming 'markedly positive', and therefore indicating that a price squeeze was no longer occuring.[50]

[49] Ofgem, *Decision to accept binding commitments from Electricity North West Limited over connection charges – Final Decision*, 24 May 2012, p. 25

[50] Ofgem, *Decision to accept binding commitments from Electricity North West Limited over connection charges – Final Decision*, 24 May 2012, p. 28

French investigation

We also note briefly the French investigation into Electricité de France (EDF), where the Conseil (The French competition authority) found EDF guilty of imposing a margin squeeze on one of its competitors, Direct Energie.

Direct Energie accused EDF of abusing its dominant position in the French market by:

- Setting a wholesale price that prevented Direct Energie competing on the retail market (price squeeze);
- Discriminating by setting a higher wholesale price to Direct Energie than EDF charged to its own retail arm;
- Refusing to offer Direct Energie a 15 year contract reflecting EDF's costs of production; and
- Refusing to offer Direct Energie non-discriminatory access to EDF's nuclear production capacity.

We focus here on the price squeeze claim.

In coming to its decision, the Conseil considered 3 conditions were required to be met for a price squeeze to have occurred, these were:

1. That EDF was dominant in the relevant markets
2. That Direct Energie had no effective alternatives to buying from EDF
3. That the price EDF charged was too high to allow a supplier that is at least as efficient as EDF to compete with EDF's retail price offer.

The Conseil found that given EDF holds 87% of production capacity in France and produced 88% of total production in 2006, it is clearly dominant in the production and supply of electricity. It also found that there were no effective alternatives available to Direct Energie. This was somewhat contentious, as alternative contracts were available through virtual power plants, as well as the ability to enter into bilateral contracts. Competitors to EDF testified that they could not effectively compete with EDF, but this was due to wholesale prices being too high compared to regulated retail prices, rather than a lack of baseload electricity or being able to obtain alternative contracts. They considered this was due to their lack of access to low marginal cost nuclear baseload capacity, as EDF had a monopoly on nuclear investment in France, as other wholesale electricity was not able to be generated at such a low marginal cost.

To test the final condition set out above, calculations were undertaken by the Department of the Minister for Economic Affairs (DGCCRF) which compared Direct Energie's actual energy purchase costs with EDF's offer to the retail market. Tests were also conducted by Direct Energie itself and the French Energy Regulator (CRE). Unfortunately the tests themselves have not been published and limited detail was included in the setup of the tests, which limits the insights that we can draw from this investigation. However all 3 sets of tests found that Direct Energie would have earned a negative margin under most tariff categories, and therefore concluded that a price squeeze had occurred.

One drawback of the test conducted by DGCCRF is that it appears to have compared EDF's retail tariff price with the supply price offered by EDF to Direct Energie and Direct Energie's actual costs. This goes against the precedent set in the Deutsche Telekom case. The test should have been conducted using the costs of a provider at least as effective as EDF and not Direct Energie's actual costs. If Direct Energie is less efficient than EDF, then it may be that the negative margins

generated in the test are at least partially caused by this inefficiency and not due to EDF undertaking a price squeeze in the upstream wholesale electricity market.

A.3 Telecommunications services

The issue of price or margin squeeze as a form of anti-competitive conduct has received a large amount of attention in the telecommunications sector. Some of the key issues relevant to Synergy were also relevant in telecommunications, such as when margin squeezes are likely, and how margin squeeze should be assessed in a practical sense, including supporting regulations.

Issues of margin squeeze predominantly arose in telecommunications (both in Australia and many international jurisdictions) as most governments, when reforming the industry in the 1980s and 1990s to promote competition, generally decided not to pursue a policy of structural separation of monopoly network functions and more competitive downstream functions. That is in contrast to the Electricity sector. A commonly given reason for not pursuing separation was the potential loss of economies of scale and scope, particularly as there was thought to be scope for competition across network functions in the early 1990s.[51]

Government policy in Australia for telecommunications was initially directed at the development of an access regime for new entrants Optus and Vodafone (1991).[52] A broader telecommunications-specific access regime (Part XIC) and open competition took effect in 1997.

Access regimes can address issues of refusal to supply and the supply of access to equivalent services at reasonable prices. In terms of the taxonomy defined in Section 2.1 access regimes can deal with problems 1, 3, and 5. However, such regimes do not address problem 2, a price squeeze. The price squeeze concern in Australian telecommunications was highlighted in the conduct of Telstra in the early 2000s. Telstra, as the near-monopoly supplier of local network services, was selling retail products at lower prices than could be achieved by competitors that were being supplied with wholesale local network services. For example, through the course of 2001, the ACCC ran a series of investigations into Telstra's conduct in the supply of wholesale ADSL services.[53]

Telstra's conduct was the subject of a Competition Notice from the ACCC (issued under special anti-competitive conduct provisions in Part XIB) in September 2001. The ACCC used the notice to discipline Telstra's behaviour and bring about further promised pricing and network changes to reduce the potential impact of the price squeeze in the wholesale ADSL services market. The ACCC later made wholesale ADSL services subject to *ex ante* regulation under the Part XIC access regime, but this did not occur until 2012.[54]

51 See for example Report by the Independent Committee of Inquiry (Hilmer), *National Competition Policy*, 1993, p. 221. Optus partly duplicated Telstra's network via HFC technology, but further deployment was stopped in 1997 once around 2 million homes had been passed.

52 An access regime was later recommended in the Hilmer Committee of Inquiry into National Competition Policy for other sectors, ibid., p. xvii. A National Access Regime was codified into Part IIIA of the Trade Practices Act 1974 in 1995 reforms.

53 See for example https://www.accc.gov.au/media-release/telstras-wholesale-adsl-prices-falling-but-accc-to-maintain-watch-over-competition-for-high-speed-internet-services.

54 ACCC, Declaration of the wholesale ADSL service under Part XIC of the Competition and Consumer Act 2010, Final decision, February 2012, https://www.accc.gov.au/system/files/Declaration%20of%20the%20wholesale%20ADSL%20service%20%20final%20decision%20paper.pdf.

Imputation testing and equivalence

Further regulatory developments between 2002 and 2006 attempted to address margin squeeze and related monitoring and transparency issues in an *ex ante* fashion, to improve certainty for Telstra and access seekers.

A first set of reforms in 2003 introduced enhanced accounting separation of Telstra. The ACCC issued RKRs requiring Telstra to provide the ACCC with amongst other things, quarterly imputation testing reports comparing Telstra's retail prices and the costs faced by access seekers in purchasing core services from Telstra to supply competing retail services.

The primary objective of the reports provided under the imputation RKRs was to indicate whether Telstra was engaging in systemic price squeeze behaviour in relation to core telecommunications services. The direction required that the imputation tests be made public to improve transparency about potential price squeezes for core telecommunication services.[55] These imputation tests were applied on an *ex post* basis.

Further changes were made to deliver 'operational separation' of Telstra's upstream and downstream retail business units (see **Figure 6**), in response to concerns that existing safeguards to prevent discrimination and margin squeeze were not effective.[56]

A first aspect was to provide assurance of 'equivalence' of treatment. Equivalence was meant 'to provide transparency that Telstra was not favouring its own retail activities over the activities of its wholesale customers, while allowing Telstra to obtain legitimate benefits from vertical integration.'[57] As this related to the pricing of inputs, a framework for the calculation of equivalent *internal wholesale prices* (IWPs) was developed, which were based on the actual wholesale prices for designated wholesale services.

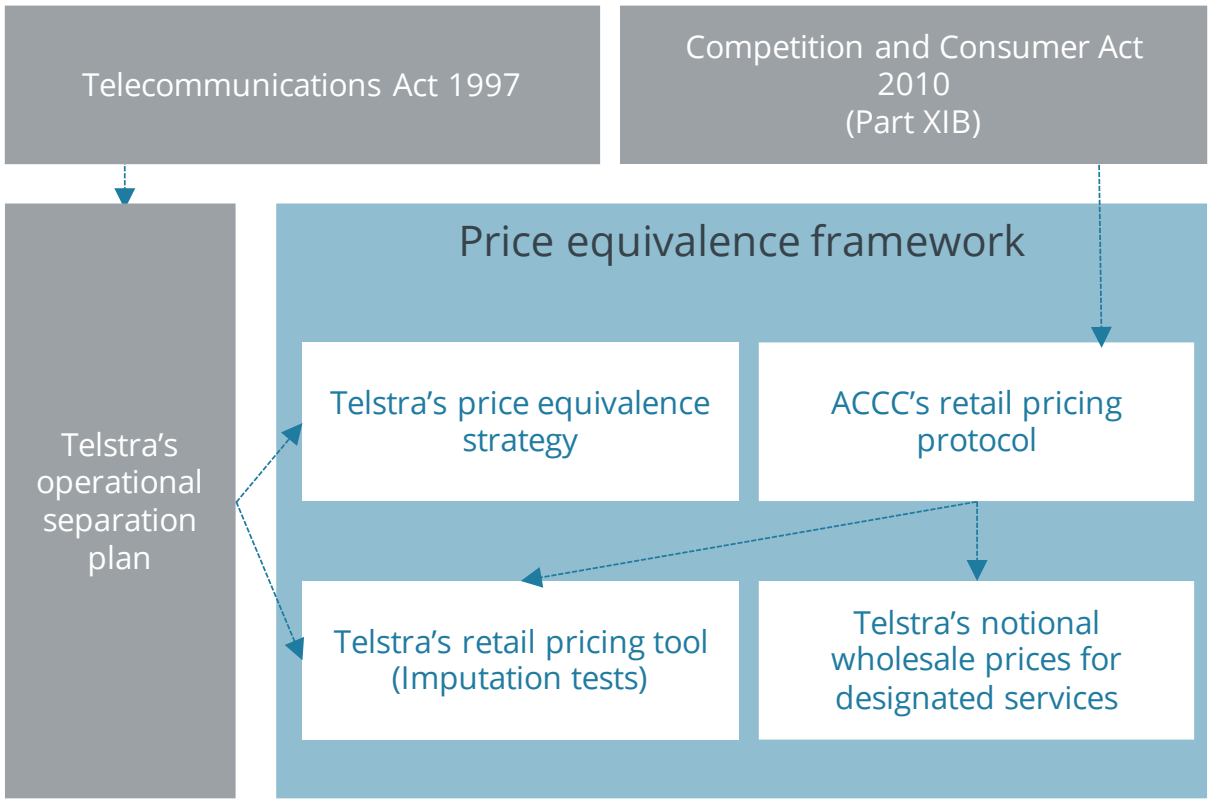
The second aspect was the development of a *Retail Pricing Protocol.* The Retail Pricing Protocol provided a framework for investigating *ex ante* allegations that Telstra was not treating its wholesale customers equivalently and for detecting a vertical price squeeze. The IWPs were one of the inputs used in the Retail Pricing Protocol to assist in monitoring Telstra's prices and assessing potentially anti-competitive conduct. The overlap between these obligations and those in the RKRs was noted,

55 ACCC, Retail Pricing Protocol, p.13.

56 RPP, p. 10.

57 Explanatory Memorandum to the *Telecommunications Legislation Amendment (Competition and Consumer Issues) Act 2005*, p 82.

Figure 6: Telstra's operational separation elements



Source: Frontier Economics, based on ACCC Retail Pricing Protocol

With respect to imputation testing, the ACCC noted that imputation testing involves a comparison of:

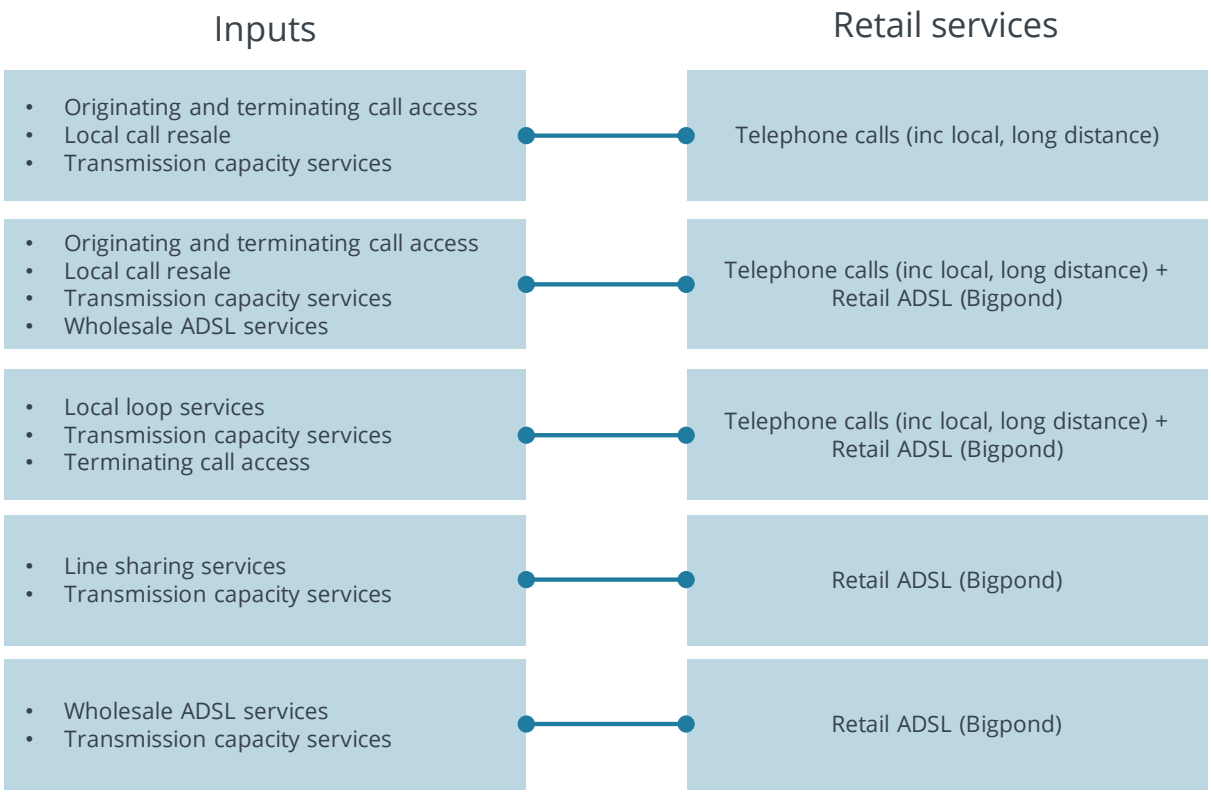
- the retail prices charged by the vertically-integrated firm for the downstream service; and
- the wholesale price charged by the vertically-integrated firm for the upstream service, plus the additional costs incurred in transforming the wholesale service into the retail service.

The ACCC considered that if an appropriately constructed imputation test shows that a price squeeze does not exist, this would be indicative of Telstra implicitly supplying the relevant wholesale service on equivalent terms.

The ACCC's retail pricing protocol touches on many important issues relating to the scope of the imputation tests, and methodological issues.

The scope of the imputation tests is summarised in **Figure 7**. Five separate tests were implemented. The first test relates to the supply of different types of telephone calls using wholesale telephony inputs. The second test was similar but added a bundle of telephony and ADSL services. The third test used the same retail services, but different wholesale inputs – using local loops rather than more complete wholesale telephony and wholesale ADSL products. The fourth and fifth tests used different inputs, reflecting that there were three wholesale products supplied by Telstra which could be used to supply retail ADSL services.

Figure 7: Imputation tests used under Telstra's operational separation



Source: Frontier Economics, adapted from ACCC's retail pricing protocol

The methodological issues noted in the application of the tests are outlined in **Table 7**.

Table 7: ACCC considerations relating to methodology for imputation testing

Issue	ACCC approach
Whose costs are relevant to the test	**"As efficient" approach:** Telstra's imputation tests should be constructed to identify whether Telstra's combination of wholesale charges and retail prices is such that competitors at least as efficient as Telstra can make a normal profit and / or remain viable in the relevant downstream market in which the retail services are supplied.
Which wholesale price to apply	**A wholesale yield approach**: the ACCC identified that there were often several wholesale prices in the market, so that it was not clear which price Telstra should be assumed to impute. For example, the lowest price that is available from Telstra to a wholesale customer for a designated service, or the highest price. The ACCC considered that a wholesale yield approach (i.e. revenues / volumes) would provide a reasonable basis for standard testing.
Cost standard for downstream costs of transforming wholesale product into retail product	**Use long run incremental costs**: The ACCC considered that the appropriate cost concept to be used in the standard imputation tests is long run avoidable or incremental cost.
Segment of the customer base, or the whole customer base?	**Apply to whole customer base at first instance**: The standard imputation test to be applied in Telstra's Retail Pricing Tool for the purposes of demonstrating price equivalence should consider the full customer base; however in specific instances it may be appropriate for Telstra's Retail Pricing Tool to consider particular sub-sets of customers.
Forward looking or backward looking tests	**Use a forward-looking test**: The ACCC identified that for relatively immature markets, it would be appropriate to use a forward looking test that assessed estimates of costs and revenues. An ex post accounting approach might be preferred in mature markets.
The time period over which to apply the test	**Time period should reflect service maturity**: The time period for these tests will need to reflect a balance between the expected life of key investments and future uncertainty. For more mature services, accurate results should be obtained over quite short reporting periods (including quarterly). But less likely to be true for ADSL services.
Whether tests should be applied to bundles or stand alone retail products	**If bundles are tested, they should be replicable by competitors**: The ACCC considered that where bundles could be commercially and technically replicated by competitors, the standard imputation tests should be implemented across the range of products that determine eligibility for the discount. However, where bundles cannot be replicated, a modified test (or stand-alone test) should be undertaken.

Source: Frontier Economics, based on ACCC retail pricing protocol.

A.4 UK regulatory approach to promote broadband competition

In Australia, the structural separation of Telstra that was effected with the creation of the National Broadband Network largely put an end to debates about price squeezing behaviour. While there were some legislative protections put into place regarding price discrimination, there has been broad acceptance that the competition issues regarding a separated network are relatively minor.

In other jurisdictions that did not pursue structural separation, further development of regulations to prevent leveraging behaviour by incumbents continued.

As an example of how regulators have applied remedies in wholesale telecommunications markets, consider the remedies proposed by Ofcom to address BT/Openreach's market power in the markets for Wholesale Local Access. The general remedies require BT to provide network access to services in this market, and includes a series of remedies designed to support and make effective that network access (**Table 8**).

Table 8: Overview of wholesale remedies on BT (Openreach)

Remedy
Requirement to provide network access on reasonable request
Requirement to publish and operate a process for requests for new forms of network access
Requirement not to unduly discriminate and Equivalence of Inputs^
Requirement to publish a reference offer
Requirement to notify changes to charges, terms and conditions
Requirement to notify technical information
Cost accounting
Accounting separation

Source: Ofcom Wholesale Local Access Market Review: Statement – Volume 1, 2018.

^ See following section for a discussion

In addition to the general remedies, Ofcom also applies specific access remedies to regulate charges for certain services. In the following two sections, we discuss two particular remedies – equivalence of inputs and price regulation.

Equivalence of inputs remedy

Ofcom developed a remedy for BT that delivered 'equivalence of inputs' across BT's fixed network. Equivalence is a principle used in the application of conduct regulation which is designed to address the problem of discrimination. Ofcom said that the concept of equivalence is that BT's wholesale customers should have access to the same set of wholesale products, at the

same prices and using the same transactional processes, as BT's retail divisions.[58] It is therefore a very strong form of separation in comparison to accounting separation or the creation of a wholesale, which can involve merely a reconstruction of transactions and not provide for equivalent treatment.[59]

Equivalence of inputs was focused on three areas:

- **product**: including the features, functionality and quality of service of the regulated wholesale product;
- **process**: including the processes and quality of the processes for forecasting, ordering, provisioning, migrating and fault repair of the regulated wholesale product as well as the systems they depend upon; and
- **price**: covering the price of the various aspects of the regulated wholesale product.

The equivalence of inputs remedy is significantly stronger than a remedy that merely required BT to demonstrate that it had priced in ways that were not discriminatory or had not caused a price squeeze. BT had to be able to show that access seekers were being treated in the same way as BT itself. Ofcom identified that the key difference between the equivalence of inputs obligation and a standard non-discrimination obligation was its strength and ability to monitor compliance. In particular, an obligation such as "no undue discrimination" can only be determined on a case-by-case basis. Conversely, an EOI obligation removes any degree of discretion accorded to the nature of the conduct – BT could not argue that a particular process or price was not discriminatory, but would be required to develop systems to deliver the same services at the same prices using the same processes to its retail arm and downstream competitors.

The distinction between these two forms of non-discrimination remedy comes down to the ability of the vertically-integrated entity to engage in discrimination – in the case of EOI the ability is addressed *ex ante* rather than considered *ex post*.[60]

The VULA margin condition remedy

In its 2015 market review, Ofcom implemented an approach to price regulation of access to BT's next generation, superfast broadband network through a wholesale product called Virtual Unbundled Local Access ('VULA').[61]

Ofcom imposed the price condition as it was concerned that BT could distort the development of competition in superfast broadband by setting an insufficient margin between its wholesale VULA and retail superfast broadband prices. The 'VULA margin' was a minimum margin that BT must maintain. The VULA margin requirement was simply a form of *ex ante* imputation test whereby

58 See https://www.ofcom.org.uk/consultations-and-statements/category-1/telecoms_p2.

59 The strength of different remedies is discussed in a European context in *BEREC Guidance on functional separation under Articles 13a and 13b of the revised Access Directive and national experiences*, 2011, available at: https://www.berec.europa.eu/sites/default/files/files/doc/berec/bor_10_44rev1.pdf

60 EOI is also important in relation to nonprice terms as it requires BT's downstream divisions to use the same systems, processes and information as its competitors in relation to the development, provision, maintenance and repair of access services. Drawn from Ofcom, *Wholesale Local Access Market Review: Statement – Volume 1 Markets, market power determinations and remedies*, March 2018, p. 120.

61 The application of this approach was contentious and appealed to the UK's Competition and Markets Authority (on price matters) and Competition Appeals Tribunal (non-price matters). Ofcom's decision was largely upheld. See https://www.catribunal.org.uk/cases/12383315-british-telecommunications-plc.

the access price was to be no more than the retail price less the retail and other costs of transforming the VULA input into a broadband retail service.

The approach was designed to ensure that other communication providers had sufficient margin to be able to compete with BT in the provision of superfast broadband packages to consumers. At the same time, BT had retail and wholesale pricing flexibility, so that it preserved investment incentives in relation to superfast broadband.

This approach was consistent with the approach recommended by the European Commission at the time (See **Box 3**).

Ofcom consulted extensively on the test, and adopted an approach whereby the VULA margin:

- was based on an adjusted equally efficient operator ('EEO') approach, which used BT's own costs and revenues, with the exception of two adjustments to reflect other communication providers' lower average customer lifetimes and bandwidth costs;
- used the LRIC+ standard to assess BT's costs; and
- was based on an assessment of BT Consumer's portfolio of fibre-based packages, rather than individual products or bundles.[62]

The VULA Margin Condition obliged BT to provide details to Ofcom of the costs and revenues necessary to demonstrate its compliance every six months. Ofcom indicated that, based on its cost and revenue analysis, at the time of the introduction of the condition:

- BT had to maintain a minimum margin of approximately £22-£25 per service; and
- BT was currently maintaining a sufficient margin.[63]

By 2018, Ofcom had decided that BT would no longer be subject to the detailed VULA Margin Condition that it had imposed in 2015.[64] Ofcom stated that the availability of certain VULA services on charge-controlled terms, coupled with access to higher bandwidth VULA services on fair and reasonable terms, would adequately protect ongoing retail competition in retail packages offering superfast broadband, and mitigated the risk of a margin squeeze such that the more prescriptive VULA Margin Condition was no longer required.

Box 3: Obligations in Europe and the 'economic replicability test'

The European Commission issues guidance to national regulatory authorities (NRAs) in Europe regarding consistent approaches to telecoms regulations. In a 2013 Recommendation, the Commission addressed non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment. This was because NRAs would soon have to decide how best to balance obligations to promote investment in superfast broadband networks and to promote retail competition.

62 Ofcom, Approach to the VULA Margin: statement, 2015, p. 3.

63 ibid.

64 Ofcom, Wholesale Local Access Market Review: Statement – Volume 1 Markets, market power determinations and remedies, March 2018.

The Commission's recommendations included that:

- One of the main obstacles to the development of a true level playing field … is the preferential treatment of the downstream businesses…of a vertically integrated operator with significant market power (SMP operator)… through price and non- price discrimination (for example, discrimination regarding quality of service, access to information, delaying tactics, undue requirements and the strategic design of essential product characteristics)…it is difficult to detect and address non-price discriminatory behaviour through the mere application of a general non-discrimination obligation. It is, therefore, important to ensure true equivalence of access by strictly applying non-discrimination obligations and employing effective means to monitor and enforce compliance.
- …it is important that… alternative access seekers can technically replicate the retail offer of the SMP operator on the basis of the regulated wholesale input they receive. While NRAs do not need to prescribe in detail the exact design of the relevant wholesale access products, they should ensure that a technical replicability test for a new retail service or bundle is carried out, ensuring that a number of factors are examined.
- The purpose of the economic replicability test is to ensure, in combination with the other competitive safeguards introduced such as EoI, the technical replicability test, and a demonstrable retail price constraint resulting from a copper anchor or alternative infrastructures, that SMP operators do not abuse this pricing flexibility in order to exclude (potential) competitors from the market.

Source: European Commission (2013/466/EU)

A.5 Key takeaways

The inter-jurisdictional review allows us to obtain some key insights into regimes and tests built around sectors exposed to instances of vertical leverage including price squeezing.

- There are two fundamental aspects when trying to address issues of foreclosure by a vertically integrated entity with upstream market power. The first is set up equivalence of treatment by the vertically integrated entity between its own downstream business and competing downstream businesses. The second is ensuring that there is an appropriate framework to detect when activities are not equivalent to deter the vertically integrated business from deviating from providing equivalent treatment and for detecting a vertical price squeeze. This was established in the operational separation of Telstra, where the first aspect related to the framework for calculating Internal Wholesale Prices and the second aspect related to the ACCC's retail pricing protocol.
- Price squeeze tests are generally implemented in circumstances where there is an upstream bottleneck, and that bottleneck provides competing downstream businesses with no effective alternative but to use the bottleneck. The term 'effective' proved to be important in the French price squeezing matter, where the competition authority considered that alternative electricity contracts were available, but they would not provide the same effectiveness as the contracts provided by the dominant wholesale business.
- The acquisition of Macquarie Energy by AGL is likely to be the case most similar to the merger of Verve Energy and Synergy, whereby a large retail business has acquired significant

electricity generation assets. The AGL acquisition, which was initially blocked by the ACCC, was subsequently approved by the Australian Competition Tribunal. The Tribunal did not consider the acquisition would restrict the ability of competitors in the retail electricity market to obtain hedge contracts as there were sufficient alternative sources of hedging available. However, the Tribunal did enforce conditions upon the acquisition, which required AGL to offer not less than 500MW of electricity hedge contracts to smaller retailers in NSW per year for a period of seven years following the acquisition.

- Where instances of price squeeze are considered a risk, an 'as efficient' competitor test is the preferred test to identify this behaviour. An 'as efficient' test should identify whether the vertically-integrated entity's combination of wholesale charges and retail prices is such that competitors at least as efficient as the vertically-integrated entity can make a normal profit and / or remain viable in the relevant downstream market in which the retail services are supplied. Unfortunately the price squeeze test that is most similar to the current context, the French price squeezing investigation, appears to have not used this methodology when applying the imputation test. In this instance the test has been conducted using Direct Energie's (the downstream retailer) actual retail costs, rather than adapting these costs to ensure they represent an 'as efficient' competitor. The use of a downstream competitor's actual costs could lead to a false positive result on a price squeeze test if Direct Energie is less efficient in its retail operations than EDF.
- Both forward-looking and backward-looking tests can be effective in deterring price squeezing behaviour. Investigations involving alleged conduct will by necessity require a backward-looking test, while regimes seeking to promote competition and new entry into a market may be better suited implementing forward looking tests.
- A price squeeze test can be applied to either whole customer bases or segments of a customer base. In relation to the electricity sector, tests could be conducted at an aggregate level across tariffs, at an individual tariff level or even for subsets of customers within an individual tariff. However, as the chosen segment becomes smaller and more targeted it may make setting up the test more complex. This is due to relevant costs needing to be allocated across smaller and smaller subsets of customers, as well as increasing the number of tests needing to be conducted. Therefore, it is likely that very narrow price squeeze tests will require additional resources from both the vertically integrated entity and the authority conducting or reviewing the tests.
- The time period over which to apply the test will likely vary with the specific circumstances in which it is applied. The ACCC considered that the time period will need to reflect a balance between the expected life of key investments and future uncertainty. More mature markets with limited future uncertainty can have tests implemented on a very short time period, while nascent markets or markets with high levels of future uncertainty may need to incorporate a longer time period, potentially needing to cover the full life of the investment within the test.

Frontier Economics

Brisbane | Melbourne | Singapore | Sydney

Frontier Economics Pty Ltd
395 Collins Street Melbourne Victoria 3000

Tel: +61 3 9620 4488
https://www.frontier-economics.com.au

ACN: 087 553 124 ABN: 13 087 553 124