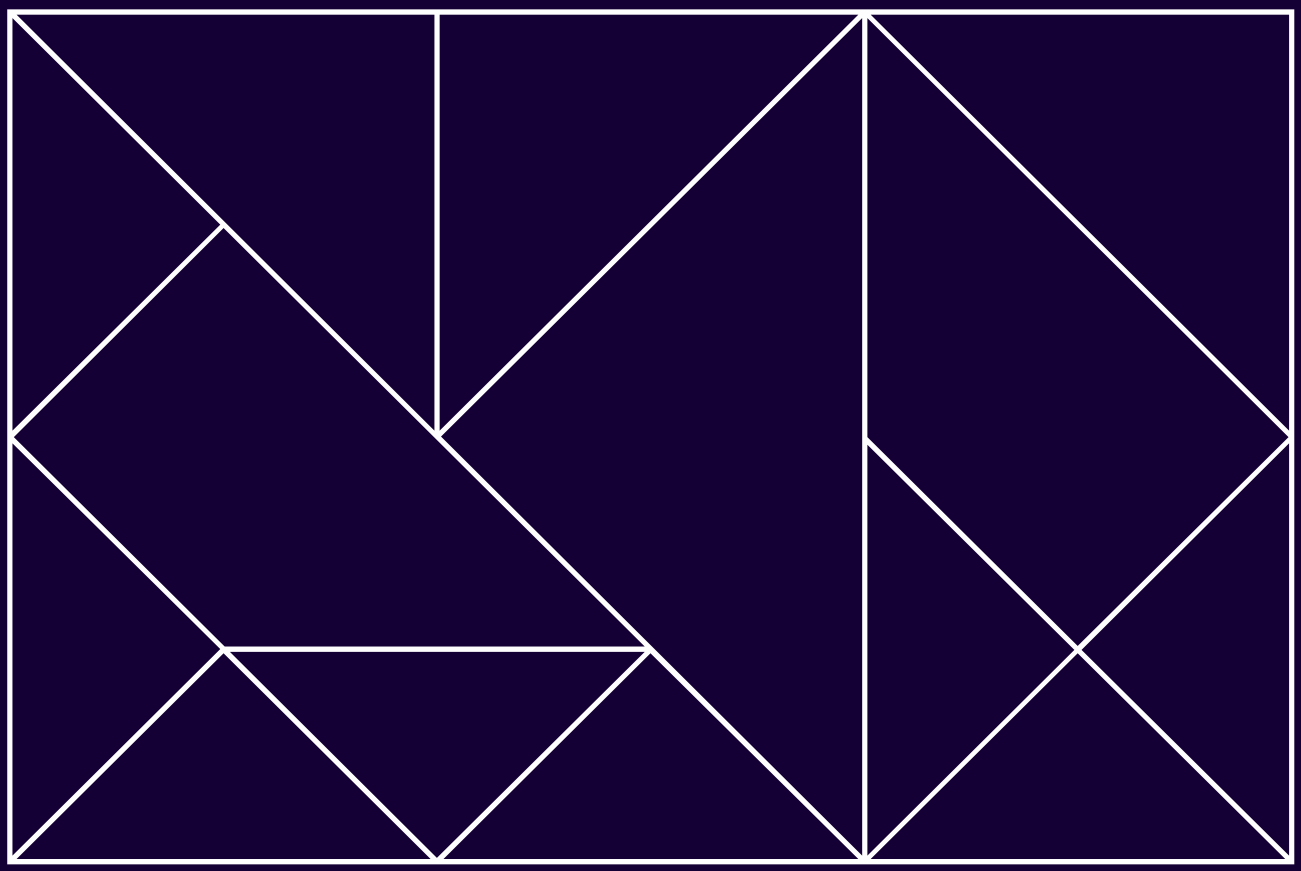
ACIL ALLEN

10 August 2023

Report to Australian Competition and Consumer Commission

Brookfield – Origin Energy acquisition:

Response to questions



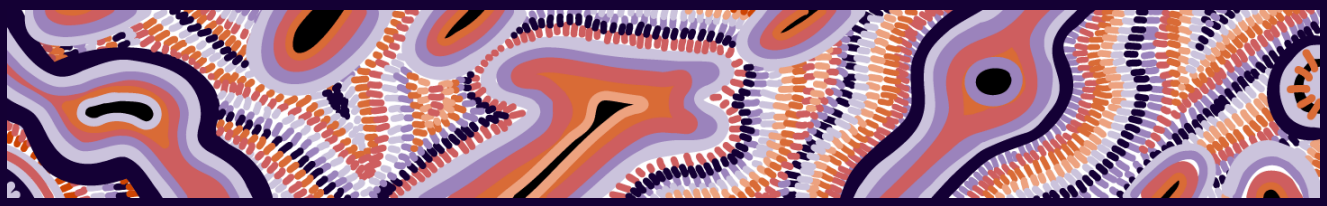
About ACIL Allen

ACIL Allen is a leading independent economics, policy and strategy advisory firm, dedicated to helping clients solve complex issues.

Our purpose is to help clients make informed decisions about complex economic and public policy issues.

Our vision is to be Australia's most trusted economics, policy and strategy advisory firm. We are committed and passionate about providing rigorous independent advice that contributes to a better world.

ACIL Allen acknowledges Aboriginal and Torres Strait Islander peoples as the Traditional Custodians of the land and its waters. We pay our respects to Elders, past and present, and to the youth, for the future. We extend this to all Aboriginal and Torres Strait Islander peoples reading this report.



Goomup, by Jarni McGuire

Contents

Figures

1 Introduction

1.1 Qualifications and Experience

1. I am Paul Hyslop, the Chief Executive Officer of ACIL Allen Pty Ltd. I have been in my current role since July 2009. My business address is L15/127 Creek Street, Brisbane, Queensland 4000.
2. I am a qualified economist and electrical engineer with 33 years of experience in operational, marketing, business development and consulting roles. I have worked at senior levels in various businesses and areas, including general management, business development, mergers and acquisitions and business regulation. I advise clients strategically across energy, water, and infrastructure markets. My advice typically involves optimising decision-making concerning investment and utilisation of infrastructure and assets. I regularly advise governments and policymakers concerning how policies and government decisions are likely to impact markets, including the price and reliability of supply of goods and services delivered by those markets. I also often act as an expert witness on the energy market and related matters.
3. I hold the following qualifications:
    a) Master of Economics – (University of New England – 2011)
    b) Graduate Diploma of Economics – (University of New England – 2008)
    c) Graduate Diploma of Applied Finance and Investment (Financial Services Institute of Australasia – 2004)
    d) Master of Business Administration (Deakin University – 1999).
    e) Bachelor of Arts (political science) (University of Queensland 1992)
    f) Bachelor of Engineering (Electrical, Honours) (University of New South Wales – 1985).
4. I have been cited as an Energy Expert in Australia and New Zealand Who's Who Legal in 2020, 2021 and 2022. My 2022 entry notes:

a) *The "highly regarded" Paul Hyslop at ACIL Allen Consulting is a leading name in the energy market thanks to his decades of experience advising large corporations on energy infrastructure.*[1]

1.2 Instructions

5. The Australian Competition and Consumer Commission (**ACCC**) has received an application for authorisation under section 88 (1) of the Competition and Consumer Act 2010 (**ACT**) from Eos Aggregator (Bermuda) LP (**Brookfield**) and Midocean Reef Bidco Pty Ltd (**MidOcean**) for the proposed acquisition of Origin Energy Limited (**Origin**) (the **Proposed Acquisition).**
6. Should the Proposed Acquisition proceed, Brookfield will retain the Origin electricity and downstream gas assets, and MidOcean will keep the upstream gas and LNG assets.
7. I have been provided with an expert report prepared by Greg Houston dated 8 June 2023 (**Houston Kemp Report**), which has been lodged with the ACCC by Brookfield in support of the Proposed Acquisition.
8. I have been asked to respond to a set of questions provided to me by the ACCC under section 90 (6) (d) of the ACT. The questions are directed at testing a number of statements in the Houston Kemp Report. The full set of questions are set out in Appendix A.
9. My responses to each question are set out in Chapter 2 below. My answers follow the order of the questions provided by the ACCC.
10. In responding to the questions, I have provided my opinion impartially based on my knowledge of the industry and, where relevant, research by me. My opinions in the report are based solely or substantially on specialised knowledge from my training, study, or experience.

[1] Refer to https://whoswholegal.com/analysis/australia--new-zealand-2022---energy-experts

2 Responses to questions

11. This chapter responds to the eight questions that were provided to me by the ACCC under section 90 (6) (d) of the ACT.

2.1 Question 1 and response

2.1.1 Question 1

12. In what ways do you consider that entities that are vertically integrated in each of the following ways could engage in discrimination or other conduct that is adverse to competitors?

    a) An electricity 'gentailer' (including embedded generation) integrated into each of:

        i) transmission, distribution, and/or

        ii) smart meter supply and installation services.

        iii) A gas distributor integrated into retail.

2.1.2 Electricity market competition

13. This section considers how generators, gas and electricity retailers and meter service providers practically compete in the east coast gas and electricity markets.

Generator competition

14. Generators compete in several dimensions, depending on the technology to be deployed:

    a) **Dispatch** – generators compete to be dispatched to provide energy and (where capable) ancillary services

    b) **Access to fuel** – thermal generators compete for access to coal or gas

        i) Coal can be exclusive mine mouth, shared mine mouth or remotely mined and delivered. Constraints in the supply chain can limit access

        ii) Gas access is often determined by pipeline capacity.

    c) **Location** – generators compete to position assets at favourable locations. Location supporting access to network capacity, especially where capacity already exists, and the risk of being constrained off is low, is relevant to all generator projects. Location is more important for wind and pumped hydro as wind resources or the suitability of pumped hydro sites are limited and location-specific. Location may also be important for thermal generators as it may affect access to fuel.

d) **Network connection and access** – generators compete for access to connect to transmission and distribution systems. Generally, larger generators (say >30 MW) seek access to transmission because of the network capacity required to transmit large volumes of electricity. Smaller generators may connect to either transmission or distribution, but connecting to the distribution system usually involves less cost. As noted in c) above, location can be important in gaining network access.

Electricity retail competition

15. Electricity is a low-involvement ubiquitous product for most mass-market consumers. Use within the mass market segment, where most of the retail value lies[2], is relatively homogenous (powering homes and small businesses). Therefore, electricity retailers sell a homogenous commodity and compete using classical marketing approaches:
    a) **Price** – compete on price by offering lower prices, discounts, smoothed bills, and more favourable payment terms
    b) **Product** – differentiate products through:
        i) value adds (e.g., include 12 months of free pay-television or streaming channels or membership of a football club)
        ii) adding related products (gas, broadband, insurance etc.)
        iii) co-investing in rooftop solar and behind-the-meter batteries (may be included in a virtual power plant
    c) **Brand** – brand recognition and, to a lesser extent, brand values, is a key device used by retailers in attracting new and retaining existing customers. Electricity retailers typically focus on attributes such as Australian-owned, environmental sustainability, competitive pricing, ease of access and management of account in promoting their brands.
    d) **Sector** – differentiation based on geography and market segment. Some retailers focus on specific segments, and some on specific regions or both. Other retailers offer services nationally and across all segments.
16. While retailers compete geographically, the specific customer location is usually unimportant. In particular, mass market customers are given access to networks by distribution network owners and can then choose their retailer, based on competitive offers available. Meters are provided by meter providers organised by the retailer, as the metering coordinator, but are transferable when a customer chooses to switch retailers.

Gas retail competition

17. Gas is similar to electricity in that it is a low-involvement product. However, it is only available (reticulated) in some parts of the NEM. Most potential customers in Victoria have access to reticulated natural gas. Use within the mass market segment is also largely homogenous (one or more of the cooking, space and hot water heating uses). Therefore, gas retailers also sell a homogenous commodity and compete using classical marketing approaches using price, product differentiation, branding and sector. However, some methods that work for electricity are not feasible for gas (e.g., smart meter-based services, behind-the-meter generation and VPP, etc.).

[2] Retail margins in the large commercial and industrial segments are small. The incentives for behaviour that discriminates against, or seeks to foreclose competitors, are weak in these segments.

Dual fuel competition

18. While not entirely distinct from gas and retail competition, gas and electricity retailers also compete in the dual fuel segment of the market – customers who consume both gas and electricity. Retailers with dual-fuel capability usually place a higher value on the segment compared with single-fuel customers because

    a) customers tend to be more sticky, and they can extract higher margins

    b) there are operating synergies around the back office (billing and payments) and customer interaction functions (call centre).

Meter service provider competition

19. Meter service provision encompasses the role of metering coordinator, metering provider and metering data provider. For small (mass market) customers, the retailer has the role of metering coordinator. The other services are contestable. For large customers, all three roles are contestable.

20. Providers of metering services primarily compete to roll out smart meters and replace existing meters. Supplying meters underpins selling additional services, including metering data provider services.

21. As meters have a relatively long life – typically 15 to 25 years – the bulk of competition currently is in the roll out of smart meters to replace legacy meters. Smart meters are programmable interval meters with additional capabilities that support other services to be provided to the customer. The capabilities vary but may include switching of demand and rooftop PV generation, smart charging of batteries and electric vehicles and security monitoring.

22. Meter providers purchase smart meter hardware, including software, from global smart meter manufacturers such as Honeywell and Landis & Gyr. They may add local capability to the meters and then on-sell them to electricity retailers in the mass market. For the large customer market, meters may be provided directly or through retailers (where they retain the role of metering coordinator).

Gentailer

23. Gentailer refers to companies vertically integrating electricity generation with a retail electricity customer base. Incentives to structure in this manner include the following:

    a) Each part provides a 'natural hedge' for the other and reduces each part's exposure to volatile electricity markets. The natural hedge reduces a firm's exposure to hedging in wholesale forward and futures markets, which are volatile and, at times, may not have sufficient capacity to meet the demand for hedging.

    b) Financing capacity and costs for a vertically integrated firm are much lower than for stand-alone generators and retailers because of the lower volatility of revenues and profits.

    c) The vertically integrated firm can take profits from both parts over the business cycle. Therefore profits tend to be more stable.

    d) Access to generation allows retailers to influence wholesale prices to the portfolio's advantage by increasing or withholding generation output (under the rules).

24. Notwithstanding vertical integration, in responding to the questions asked, I have considered the generation and retail components of the business separately. I think the issues concerning integration with networks are different for the generation and retail components of a vertically integrated business as I set out in the sections below.

2.1.3 Gentailer integrated into electricity transmission

Generation

25. The NEM operates as a constrained dispatch arrangement with generators subject to average marginal losses (calculated and applied annually) and facing the risk of output being constrained by network congestion. Generators may connect to the transmission network if they meet the required standards. This open access arrangement is intended to support competitive entry, especially where older, less efficient generators might otherwise block the entry of lower-cost and more efficient new generators.

26. The National Electricity Rules (NER) are evident in prohibiting a TNSP or equivalent from engaging in conduct to prevent or hinder access to prescribed or negotiated transmission services.

> *A Transmission Network Service Provider or a person who is provided prescribed transmission services or negotiated transmission services must not engage in conduct for the purpose of preventing or hindering access to those services.*[3]

27. Therefore, a gentailer integrated with transmission that acts to discriminate or engage in other conduct that is adverse to generation competitors would breach its obligations under the NER. To succeed, such conduct would need to be opaque to, or at least have a strong chance of not being discovered by regulators or generator competitors.

28. I don't consider it feasible for a gentailer integrated with transmission to use prices to discriminate against generator competitors for the reasons set out below.

29. A generator connecting to transmission must enter into a connection agreement with the relevant TNSP before being connected to the network.[4] The NER[5] sets out a detailed list of requirements that the TNSP must include in its offer to connect to a generator. An offer to connect by a TNSP to a generator must include, among other things, connection service charges and payment conditions. These prices are either regulated or contestable for new generators as follows:[6]

    a) Negotiated services are subject to negotiating principles set out in the NER and are limited to the stand-alone cost of providing the services.

    b) Shared connection assets above $10 million are contestable.

    c) Dedicated connection assets are contestable.

    d) Designated network assets are contestable beyond functional specification are contestable

[3] NER, rule 5.2A.3 (e)

[4] NER, rule 5.2.5 (b) (1)

[5] NER Schedule 5.6, Part A

[6] Prescribed entry services apply only to certain existing or committed assets, or replacement of those assets as at 9 February 2006; NER rule 11.6.11. I have not considered them as they do not apply to entry in 2023 and beyond.

30. A generator is provided the cost and charging arrangements before connecting and in most cases providing the connection is contestable. Therefore, a generator seeking connection can seek alternative competing offers to provide the connections services.

31. I consider that it may be feasible for a gentailer integrated with transmission, to misuse information in a way that is adverse to generator competitors, because, in my experience, the use of information by a TNSP is not fully transparent to generator and other market participants.

32. Network development, planning and operation is complex, and there are usually significant information asymmetries in favour of a TNSP compared with generators seeking to connect or already connected. The misuse of information could potentially include:

    a) The use of confidential information about a competitors development plan by the affiliated TNSP, derived through early notification required under the connection application process,[7] to frustrate or block the development. For example, the affiliated TNSP may use provisions of the NER[8] (requests for additional information, delays through requiring extra studies, etc.) to delay or stymie network development that would favour generator competitors. This may benefit existing affiliate generators or provide a first-mover advantage for affiliate generation that is also being developed.[9]

    b) Influencing the development of the transmission network such that generator competitors received unfavourable loss factors and greater risk of congestion. Network development objectives can be achieved via several different physical configurations, and there are often choices about the location of new network assets and replacement of existing aging assets that affect losses and congestion at different locations in the network. Also current choices about network development affect future choices which may disadvantage generator competitors even more in the future

    c) Influencing the timing of network outages that are unfavourable to generator competitors. While AEMO is the responsible TNSP, AusNet owns and maintains the transmission system. Therefore AusNet would be expected to develop maintenance schedules including taking equipment out of service to facilitate maintenance. AEMO is the authority to approve outages as the TNSP but would be expected to approve AusNet requests unless an outage would put power system security or reliability of supply at risk.

33. The Houston Kemp Report[10] argues that the misuse of information is not a matter of concern for the issues he considered because of the requirements for ring-fencing and prohibitions on TNSPs using confidential information under the NER. However, I have considered them in the context of behaviour that is opaque or at least has a strong

[7] For example, NER rule 5.2.5 (b) requires a generator applying to connect to comply with design requirements imposed by the TNSP and provide forecast generation to the TNSP. The provision of the information could be many months prior to the generator making its final investment decision (FID) and longer where a TNSP uses the provisions of the NER to extend the period prior to making an offer to connect (noting that the establishment of a connection agreement is typically a precondition to FID).

[8] For example, Response to Connection enquiry, NER rule 5.3.3 (c).

[9] Where an affiliate TNSP provides an affiliate generator with confidential information about a planned competitor development, the affiliate generator could speed up the development of its own competing project(s) to reach FID ahead of the competing development. Should this occur, the competitor development may be delayed or even shelved (economic outcomes may no longer support the competitor development).

[10] Houston, clause 268

chance of not being discovered by regulators or generator competitors because of the complexity of planning, development and operations and the asymmetry of information inherent in a TNSP's relationship with generators connected or seeking to connect.

34. The Houston Kemp Report[11] argues that the Origin Energy gentailer integrated with the Victorian transmission system owner will not discriminate against generator competitors because AEMO is the TNSP responsible for planning and operating the shared transmission network. I accept this is a significant factor in protecting generator competitors. However, AusNet, as the owner of the assets, may be able to influence AEMO's decision-making, especially concerning maintenance advice that may affect the timing and nature of transmission network outages as I described in clause 32 c) above.

35. The Houston Kemp Report[12] argues that generator competitors are large and sophisticated participants and "were a connecting party to consider that the price for a negotiated transmission service would undermine its ability to compete in the wholesale market", the party would use the relevant NER dispute resolution procedures. Assets that might expect to connect to the Ausnet transmission system in the future may not be large and sophisticated participants.[13]

36. Brookfield has proposed significant restrictions on the relationship between AusNet and Origin Energy Markets in a draft undertaking to the ACCC. The undertaking may satisfy the ACCC concerning the matters raised in paragraph 32 above.

37. The proposed arrangements rely on the legal and regulatory ring-fencing arrangements and separation of management and board control, rather than the absence of incentives. Some additional requirements could be included to further limit either the incentive or the ability to misuse confidential information to discriminate against generator competitors. I have suggested some additional requirements that may be considered in my response in section 2.8 below.

Retail

38. Very few customers consume electricity directly from the transmission system. Where they do, they are typically large consumers and place the most value on price and the quality and reliability of service. For these customers, transmission prices generally are negotiated directly between the customer and the TNSP.

39. In theory, a gentailer integrated with transmission could raise transmission prices to itself and its competitors and squeeze retail margins. At the extreme, the monopoly transmission service provider could take all or at least enough of the retail profit margin and drive competitor retail businesses out of the market. The transmission service provider would be willing to operate the gentailer retail business at a very small or no profit margin because it enables the transmission price squeeze strategy. Houston describes this as vertical foreclosure.

40. However, transmission businesses are regulated by the AER in line with the NER. Regulation includes scrutiny of capital and operating input costs and returns calculated prescriptively by processes predetermined by the AER. This

[11] Houston, clause 213

[12] Houston clause 197 and 211

[13] Solar PV and Battery Energy Storage Systems do not exhibit significant scale economies and are not necessarily large and sophisticated.

process assigns a revenue cap to a transmission business. The transmission business must then publish prices for various customer classes[14] following AER-approved pricing principles. These prices are then charged consistently to all parties accessing the transmission network.

41. It appears infeasible for a transmission service provider to raise transmission prices above the levels approved by the AER. And where it could do so, there would be incentives to do so anyway, without being integrated with a gentailer. Electricity is a relatively inelastic product. If transmission prices could be raised above the approved level, a gentailer integrated with transmission would have incentives to raise prices to capture additional profits rather than "leave money on the table".

42. Assuming that a transmission service provider will charge the maximum amount possible, there would appear to be little incentive to subsidise the gentailer retail business in the short term. Otherwise, the integrated business would forgo substantial profits over this time frame. A retailer could use subsidies provided by an affiliate to undercut competitors in the medium- to long-term as a means of capturing market share and potentially moving to a position of market dominance (noting that such a strategy would need to be cognisant of the Misuse of Market Power provisions within the Competition and Consumer Act) . However, any retailer can enact this strategy with the support of an affiliate with sufficient resources, not just one affiliated with a transmission service provider.

43. It is theoretically possible for a transmission service provider to offer lower prices to its affiliate gentailer servicing retail customers. However, transmission costs are charged to DNSPs and then charged to retailers. This makes discrimination infeasible except where the transmission is also integrated with distribution.

44. Brookfield owns slightly less than half of AusNet. The interests of the shareholders in AusNet will not be fully aligned with the Brookfield interest in the Origin gentailer. Therefore, there is a substantial disincentive for the majority shareholders in AusNet Brookfield to subsidise the Origin gentailer through direct subsidies or lower tariffs. Notwithstanding the question over feasibility discussed above, should Brookfield seek to move to a 100 per cent (or close to it) interest in AusNet, or the current AusNet shareholders seek to acquire stakes in the Origin gentailer in rough proportion to their interests in AusNet, the incentive to engage in this form of discrimination would be increased.

45. Based on the above discussion, I consider that a gentailer integrated with transmission would have little capacity or incentive to engage in discrimination or other conduct that is adverse to competitors in retail markets.

2.1.4 Gentailer integrated into electricity distribution

Generation

46. The distribution entity of a gentailer integrated with distribution has an incentive to block or stymie development of competitor generators seeking connection to the distribution system or act to negatively impact the operation of existing competitor generators connected to the distribution system. The incentives exist because the actions would reduce competition for the gentailers existing generation assets and for development of new generation assets.

[14] These classes are typically based on voltage at which the customer is connected and the customer size in terms of maximum demand and/or annual consumption. These three factors are typically highly correlated.

47. Generators (including energy storage) seeking access to the distribution system are considered embedded and are usually small relative to generators connected to the transmission system. The constraint on size is primarily created by two factors:

    a) The capacity of the distribution system to transfer power from a single location is limited because of the sizing of the rating of equipment and the voltage at which it operates.

    b) Distribution systems are predominantly located in and around urban or built-up areas, limiting the physical footprint available to locate a generator and creating social and environmental opposition to large developments. Rural distribution elements do not face the same issues, but the ability to transfer electricity is usually lower, and the losses associated with transfers are generally much higher, making connecting to rural distribution an inferior proposition in most locations.

48. A gentailer integrated into distribution, through its affiliated DNSP, would have incentives to delay or block entry of generator competitors, as this delay or blocking of generator competitor generators would benefit the affiliate gentailers as outlined in 46 above.

49. The types of embedded generators vary and can be broadly classified as follows:

    a) Small, embedded generators which are likely to be solar PV or solar PV with batteries. These generators are likely large in number but small in capacity (100 kW to say 2 MW) constructed on the top of buildings or on adjacent land and connected at low voltages. The process of connecting is relatively straightforward, and location and size are diverse and are not easily frustrated by the DNSP affiliated with the gentailer. There is also a higher transaction cost per project to frustrate or delay such projects.

    b) Mid-sized embedded generators (typically up to 10 MW) would be smaller in number and are often affiliated with a consumer of a substantial portion of the generator's generated electricity (e.g., cogeneration or trigeneration in a hospital or small industrial site). There is potential for the affiliated DNSP to frustrate or delay these types of projects as they tend to have bespoke connection arrangements, which give the DNSP more grounds on which to delay access. Also, the transaction cost per project in acting to frustrate or delay is lower.

    c) Large, embedded generators would be few and are more like large-scale grid-connected generators but smaller in size because of the transfer limits on the distribution system. They may connect at up to 66kV.

50. In my opinion a gentailer integrated with distribution has limited scope to use prices to discriminate against competing generators because of the combined effect of the following:

    a) The NER[15] authorises the AER to develop ring-fencing guidelines which prohibit discrimination by a DNSP between an affiliate of the DNSP and competitors of the affiliate.[16]

    b) For negotiated connection arrangements, section 5.3AA of the NER is prescriptive as to the costs that may be included by a DNSP and the negotiating framework that the DNSP must follow.

    c) In the case of Victoria, the ESC requires distribution connection services to be contestable.[17]

[15] NER, rule 6.17

[16] AER Ring-fencing Guideline Electricity Distribution Version 3, clause 4.1

[17] ESC (2023), Electricity Distribution Code of Practice, p 28

51. Similar to transmission, I consider that it may be feasible for a gentailer integrated with distribution, to misuse information in a way that is adverse to generator competitors, because, in my experience, the use of information by a DNSP is not fully transparent to generator and other market participants. The lack of transparency occurs because distribution network development, planning and operation has some complexity, and there are reasonable levels of management discretion concerning development, operations and maintenance. There are usually significant information asymmetries in favour of a DNSP compared with generators that seek to connect or are connected. A DNSP is not required to disclose information to the level of detail that would be required to remove the information asymmetries.

52. I acknowledge that the NER[18] and the AER Ring-fencing guidelines[19] prohibit disclosure of information that could be misused. However, the prohibitions do not remove the incentive, and the lack of transparency potentially creates an environment where disclosure and misuse of information may not be perceptible to either affected participants or the AER (in its role as enforcer of the NER).

53. The misuse of information could potentially include:

    a) The use of confidential information about a competitor's development plan, derived through early notification required under the connection application process,[20] to frustrate or block the development. For example, the affiliated DNSP may use its discretion for various steps in the connection process to delay or stymie network access, especially where augmentations or extensions on transmission or distribution networks are required to support the necessary power transfer from the embedded generator. This may benefit existing affiliate generators or provide a first-mover advantage to affiliate generation also being developed.

    b) Use of its discretion in relation to network operations and maintenance to disadvantage competitor generators through network outages and poorer quality.

54. Similar to the arguments concerning generation and transmission, the Houston Kemp Report[21] argues that Ausnet does not have the ability to misuse information because:

    a) Ring-fencing requirements prevent this misuse of confidential information by prohibiting the disclosure of confidential information to affiliates that might be competitors.

    b) The AER or its customers would discover any breach of its ring-fencing obligations, and the consequences for a DNSP would be severe, including significant financial penalties and loss of reputation.

55. For the reasons set out I don't agree with the Houston Kemp Report on the misuse of information in the context of a gentailer integrated with distribution.

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[18] NER, rule 5.3.8 and rule 8.6.

[19] AER Ring-fencing guidelines, 4.3.2.

[20] For example, NER, rule 5.2.5 (b) requires a generator applying to connect to comply with design requirements imposed by the DNSP and provide forecast generation to the TNSP. The provision of the information could be many months prior to the generator making its final investment decision (FID) and longer where a DNSP uses the provisions of the NER to extend the period prior to making an offer to connect (noting that the establishment of a connection agreement is typically a precondition to FID).

[21] Houston, clause 352

Retail

56. The Houston Kemp Report[22] raised three potential ways in which a gentailer integrated with distribution could engage in discrimination or other conduct adverse to competitors:

    a) Lowering network quality to retail customers serviced by competitors

    b) Raising network prices for connection and use of system for retail customers to squeeze competing retail margins.

    c) Misuse of information to the detriment of competitors.

57. I consider lowering quality for specific customers would, in practice, be infeasible. Retail customers connected to the distribution system rely on shared distribution network assets, including substations, high-voltage feeders, low-voltage transformers and low-voltage distribution lines, to deliver electricity. In my view, discriminating quality by customers is not feasible because the assets that supply electricity, including quality, are not separable. In addition, customers are contestable. Therefore, even if discrimination based on quality was feasible, customers could switch with the benefits shifting to a competing retailer.

58. I consider raising prices to squeeze competitor retail margins is also not feasible. As I argued for transmission, the DNSP would be expected to charge the maximum amount possible already (if it could raise prices, it would have done so already). As revenues and pricing methodologies are regulated, the scope to raise prices beyond approved levels is not feasible.

59. The DNSP could lower prices only for the affiliated retailer. However, the DNSP is required to submit an annual pricing proposal to the AER each year for approval. The approved pricing proposal is published on the AER website and sets specific tariffs for customer classes based on voltage and usage patterns.[23] If the DNSP provided preferential pricing to an affiliate retailer, competitor retailers would quickly discover it. Also, the other owners of AusNet have no interest in subsidising the affiliated retail business as it is not affiliated with them, and they gain no benefit from the distribution network offering discounts for the Gentailer to increase its market share.

60. In my opinion, misuse of information is feasible in certain circumstances for a gentailer integrated with distribution to engage in discrimination adverse to retail competitors. A specific example is where an affiliated retailer receives early notice of lowering distribution tariffs from the affiliated DNSP, which allows it to undercut its competitor offerings, which are set based on published higher tariffs.

61. While potentially detrimental to competitors, the benefits would subside once the updated tariff information was provided. Networks receive draft and final decisions. The draft is typically a good indicator of the final decision and final decisions come into effect some time after being handed down by the regulator. These factors would limit affiliated retailers' ability to use such information.

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22 Houston, clause 354

23 For example, AusNet Services, Schedule of Network Use of System Tariffs (1 July 2022), retrieved from https://www.aer.gov.au/system/files/Attachment%204%20-%20AusNet%20Services%20-%20Schedule%20of%20Tariffs%202022-23-%20%206%20April%202022.pdf

2.1.5 Gentailer integrated into electricity smart meter supply and installation services

62. Smart meter suppliers and installers purchase smart meters, mostly from global manufacturers and contract with retailers (as Metering Coordinators) to provide metering provider and metering data provider services.

63. Meter supply and installation services are contestable. Houston states retailers have tended to enter relatively long contracts which may offer exclusivity or minimum volume incentives.

64. A gentailer integrated with a smart metering service supplier would be incentivised to engage in discrimination or other adverse conduct to competitors. Potential forms of discrimination could include raising prices or refusing to provide meters to competing retailers. The affiliate retailer could also seek to damage competing smart meter service providers by refusing to purchase their services (purchase only from the affiliated smart meter service provider).

65. However, in my view, the above incentives and potential forms of discrimination are adequately mitigated by a combination of:

    a) metering services being contestable

    b) metering services being a relatively small component of the costs of retailing

    c) Origin not holding a dominant position in any retail market segment

    d) possibilities for other large retailers to sponsor the entry of metering provider services where it is considered there is insufficient competition

2.1.6 Gas distributor integrated into retail

66. A gas distributor integrated into retail could engage in discrimination in similar ways to the gentailer integrated into distribution:

    a) Lowering network quality to retail customers serviced by competitors

    b) Raising network prices for connection and use of system for retail customers to squeeze competing retail margins.

    c) Misuse of information to the detriment of competitors.

67. While there are differences in how electricity and gas are supplied and consumed, my conclusions regarding the feasibility of engaging in the identified forms of discrimination are similar.

68. I consider lowering quality for specific customers would, in practice, be infeasible. Retail customers connected to the distribution system rely on shared distribution network assets to receive gas. Key quality parameters are pressure, availability and gas content. Gas is delivered on common pipelines running by each customer location. Discriminating quality by customers is, in my view, not feasible. In addition, customers are contestable. Therefore, even if discrimination based on quality was feasible, customers could switch with the benefits shifting to a competing retailer.

69. I consider raising prices to squeeze competitor retail margins is also not feasible. Almost all revenue AusNet earns is for reference services that the AER regulates. As I argued for electricity transmission and distribution, the gas distributor would be expected to charge the maximum amount possible to maximise its profitability (if it could raise prices, it would have already done so). As revenue and pricing methodologies are regulated, the scope to raise prices beyond approved levels is not feasible.

70. The gas distributor could lower prices only for the affiliated retailer. This would breach the requirements of the National Gas Law (**NGL**). Also, the other owners of AusNet have no interest in subsidising the affiliated retail business as it is not affiliated with them and they gain no benefit from it squeezing its competitors and increasing its market share.

71. As for electricity retail, misuse of information is feasible in certain circumstances for a gentailer integrated with distribution to engage in discrimination adverse to retail competitors. A similar example to electricity is when an affiliated retailer receives early notice of lowering distribution tariffs, which allows it to undercut its competitor offerings based on the higher published tariffs. I note it would have the same transitory benefits and subside once the updated tariff information was provided. Gas distribution networks receive draft and final decisions. The draft is usually a good indicator of the final decision and final decisions come into effect, some time after being handed down by the regulator. These factors would limit affiliated retailers' ability to use such information.

2.2 Question 2 and response

2.2.1 Question 2

72. In what ways does the ability of an upstream entity to control or influence a downstream entity (or vice versa), or the flow of information between them affect your views on potential discrimination expressed in question 1?

2.2.2 Response

73. In my view, the question of how much an upstream (or downstream) entity may control or influence a downstream (upstream) entity or the flow of information is highly relevant to whether a vertically integrated entity could successfully discriminate against competitors. In the absence of influence or control and of flow of information, any incentives to discriminate would be unlikely to be feasible.

74. My views in section 2.1 above rely heavily on the legal and regulatory prohibitions on discrimination and limitations on the misuse of information that apply to TNSP and DNSP in both the NER and the AER Ring-fencing guidelines. In particular:

    a) A TNSP or DNSP must follow the requirements and timetable to connect a competitor seeking to access a network and, therefore, the market.[24]

    b) The AER Ring-fencing guidelines prohibit the sharing of confidential and other information gained through its obligations as a network service provider that may be used to achieve a first mover advantage against competitors or take action to delay or prevent a competitor from proceeding with a competitive investment (e.g., acquire rights to easements or lands that could prevent an investment).

2.3 Question 3 and response

2.3.1 Question 3

75. In respect of each potential form of vertical integration and type of discrimination outlined in response to question 1, what do you consider are the incentives for an integrated firm to engage in such discrimination and why do they arise?

[24] NER, rule 5.3

2.3.2 Response

76. I have described the various forms of discrimination and the incentives for an integrated firm to engage in such discrimination in section 2.1 above. I have summarised them below:

a) **Gentailer integrated with transmission**

i) The transmission entity acting to delay or prevent competing generators accessing the network to reduce competition with the integrated firm's existing generation assets and the development of future assets (delay/prevent physical access and misuse of information).

ii) Development and operation of a network to favour the integrated firm's generation assets to enhance or maintain the firm's revenues and restrict competing firms' revenues (the nature, location and timing of network development and the timing of outages affecting competitor plant revenues).

iii) Raising network prices for connection to generators above the stand-alone cost (noting generators currently do not pay use of system charges) to squeeze competing generator profit margins and deter competing generators from investing.

b) **Gentailer integrated with distribution**

i) The distribution entity acting to delay or prevent competing generators from accessing the network to reduce competition with the integrated firm's existing generation assets and development of future assets (delay/prevent physical access and misuse of information).

i) Development and operation of a network to favour the integrated firm's generation assets to enhance or maintain the firm's revenues and restrict competing firms' revenues (the nature, location and timing of network development and the timing of outages affecting competitor plant revenues).

ii) Raising network prices for connection in excess of the stand alone cost and use of network by generators (noting generators currently do not pay use of system charges) to squeeze competing generator profit margins and deter competing generators from investing.

iii) Raising network prices for connection and use of system to retail customers to squeeze competing retail margins to reduce competition by forcing existing retailers to exit the market and deter entry.

iv) Misuse of information; for example gaining early insights into lilkely falls in network tariffs which are then used as a first mover advantage by the retail business to capture customers.

c) **Gentailer integrated with smart meter supply and installation services**

i) Raising prices to competing retailers for smart meter services to squeeze retail margins of competing retailers to reduce competition by forcing existing retailers to exit the market and deter entry.

ii) Refusing to provide smart meter services to competing retailers.

iii) Not purchasing or purchasing fewer metering services from competing smart meter service providers to reduce competition by forcing existing smart meter service providers to exit the market and deter entry.

d) **Gas distributor integrated into retail**

i) Raising network prices for connection and system use for retail customers to squeeze competing retail margins to reduce competition by forcing existing retailers to exit the market and deter entry.

ii) Misuse of information; for example, gaining early insights into likely falls in network tariffs, which the retail business uses as a first mover advantage to capture customers.

2.4 Question 4 and response

2.4.1 Question 4

77. What are some of the factors relating to the process for connecting to the Victorian transmission network that currently delay or deter new generation connections? Do you consider that the proposed transaction is likely to exacerbate any of these factors?

2.4.2 Response

78. The Victorian transmission system is unique in the NEM in that the responsibilities for planning, coordination and grid development are split between several parties as follows:

    a) AEMO has the role of TNSP, is responsible for planning and operating the transmission system, and determines which development projects proceed.

    b) AEMO runs contestable procurement processes for developing projects' design, construction, ownership and operation.

    c) AusNet owns the existing transmission system and is responsible for these assets' maintenance and physical operation. AusNet may also be the successful tenderer for AEMO-sponsored development projects.

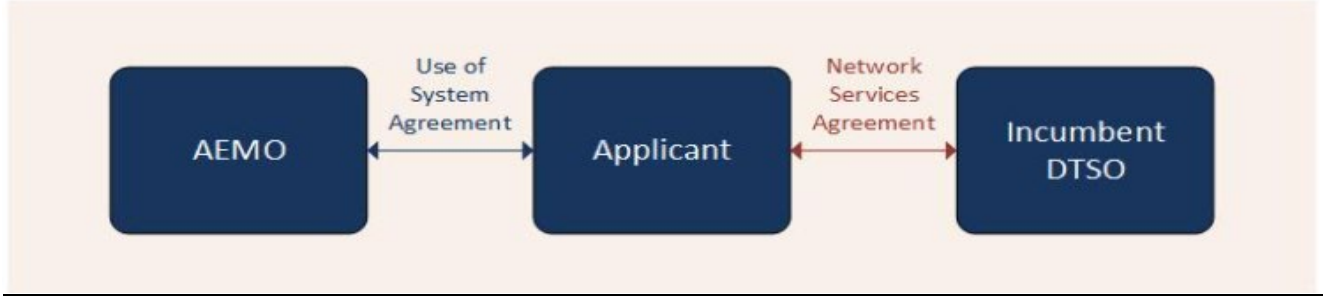
    d) The Victorian Government, through VicGrid, coordinates the planning and development of renewable energy zones and is also involved with AEMO in identifying network investments. The Victorian Government will establish a new transmission planning and development framework in 2024. This framework will incorporate environmental objectives, consider rural and regional community views before determining final transmission routes and design and involve benefit sharing, including payments to affected parties.

79. Victoria is small and densely populated compared with the other mainland NEM states. Rural land use tends to be more intensive. Social and environmental objections to development tend to be more pronounced in Victoria.

80. Connections may or may not require augmentations to the shared network. Where the connection does not require shared network augmentation, the connecting generator is responsible for designing and constructing the connection assets. The connecting generator would normally contract this requirement to a suitably skilled entity. Where the shared network requires augmentation, AEMO tenders to complete the augmentation. The successful tenderer may be AusNet or another party tendering to provide the facilities.

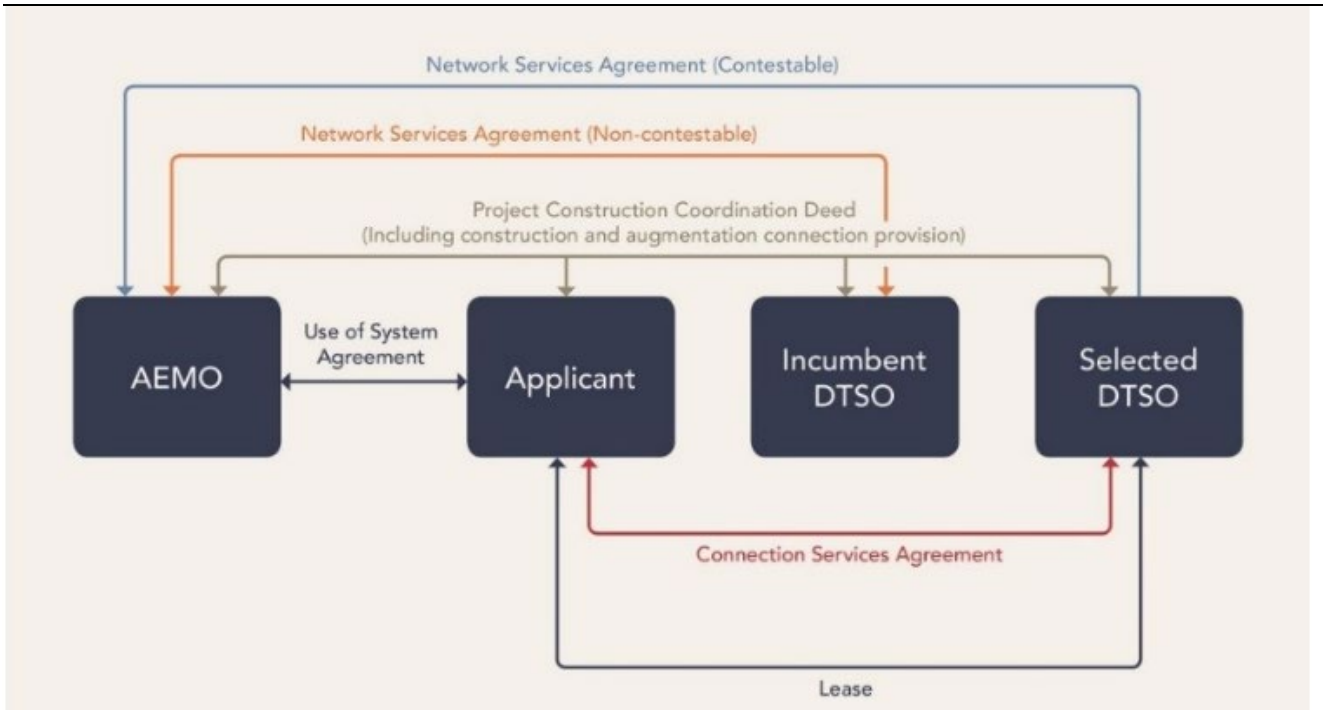
81. Figure 2.1 and Figure 2.2 show the contracting arrangements for where a shared network augmentation is not or is required. The incumbent Declared Transmission System Operator (**DTSO**) is AusNet.

Figure 2.1 Contracts for a project that doesn't require augmentation



Source: AEMO Website, Stage 4 - Contracts

Figure 2.2 Contracts structure for a contestable project requiring augmentation



Source: AEMO Website, Stage 4 - Contracts

82. Therefore, the process of connecting generation to the transmission system in Victoria is more complex than in other NEM regions. It is also more likely to face local community concern and opposition because of the dense population and more intensive land use. The Victorian transmission system cannot currently connect sufficient renewable generation capacity to meet the Commonwealth and Victorian government decarbonisation targets. The ability to connect in the future for most generation developments will depend on the effective development of the renewable energy zones to provide adequate transmission capacity to connect and transmit the renewable energy to consumers.

83. While the connection process is complex, the proposed transaction is unlikely to exacerbate these factors. AusNet remains as the incumbent DTSO, and the connecting generator has the right to contract AusNet or another party to provide the connection assets. AEMO continues to manage the process for augmenting shared transmission assets based on tendering for the most cost-effective solution.

2.5 Question 5 and response

2.5.1 Question 5

84. Do you agree with the opinions expressed in the Houston Kemp Report in relation to the effectiveness of the legislation and regulations (including ring-fencing) that apply to electricity or gas markets in Australia, and the operation of those markets? Specifically:

    a) Are there forms of conduct available to a transmission or distribution network that would not be captured, or effectively controlled by, the existing regulations and that would allow the network operator to confer an advantage to a related generation or retail entity?

    b) Generators might be able to rely on 'dispute resolution procedures', but will the possibility/likelihood that they will need to be relied on act as a deterrent to new generators?

2.5.2 Response

85. The NER provisions and AER Ring-fencing guidelines outlined by Houston are effective if the transmission and distribution networks fully comply.

86. The Houston Kemp Report[25] argues that networks will comply because the risk of being caught is high, and the consequential financial and reputational penalties are a deterrent. However, if incentives to not comply exist, and the benefits of not complying outweigh the risk of being caught, the legislation and regulations may not be sufficient.

87. If the proposed transaction occurs, it is reasonable to assume incentives to favour affiliate generators and retail entities will exist because of the financial benefits that would flow to the integrated entities shareholders where favouritism is possible.

88. I also believe that the complexity of the processes and information asymmetry in favour of the networks result in some means of favouring affiliates not being easily discoverable.[26] Concerning connecting to transmission and distribution networks, networks regularly participate in connection processes, while generators and retailers, as individual entities, participate occasionally. The knowledge and experience advantage of networks about a process that has great complexity adds to the information asymmetry problems.

89. For example, an electricity or gas distribution network might inform a retail affiliate ahead of market, that network tariffs would fall in the next regulatory cycle. The retail affiliate could use this information to undercut competitors, continuing to price retail offerings on higher network tariffs. While the retail affiliates' actions would be transparent, they could be explained away as a marketing push to capture market share.

[25] For example, Houston, clauses 279 and 404

[26] For example, use of information about competitor plans to plan and develop networks such that they provide less favourable outcomes to the competitors and discrimination against competitor plant in relation to the timing and nature of planned network outages.

2.6 Question 6 and response

2.6.1 Question 6

90. Do you consider that the generators that will be seeking to access the transmission network in the foreseeable future are likely to be 'large and sophisticated'?

2.6.2 Response

91. The Houston Kemp Report[27] relies in part that generators seeking to access the transmission network in the foreseeable future are likely to be 'large and sophisticated'.

92. Many generators seeking access to the transmission network would be considered large and sophisticated[28]. However, most future investments will likely be in renewable energy or energy storage. Some forms of renewable energy and storage have very limited (if any) economies of scale, and the knowledge barriers in acquiring and deploying the technologies are not high.

93. In my experience, some potential developers have modest financial resources and limited knowledge of the NEM arrangements when they commence work on developing a NEM project. Therefore, not all generators seeking access to the transmission network would be considered large and sophisticated.

2.7 Question 7 and response

2.7.1 Question 7

94. What, if any, practical steps do you consider could be taken to mitigate the risks of any of the conduct you have identified in question 1 from arising?

2.7.2 Response

95. Two additional steps could be taken to mitigate risk:

    a) While the combination of the NER, ring-fencing guidelines and Brookfield's undertaking, provide full separation of management and operations, there remains the possibility that employees of both AusNet and Origin could participate in short and long-term incentive schemes based on the performance of the upstream entity, which would depend in part on the performance of both AusNet and Origin.[29] The Undertaking could include a provision that precluded any employee, manager or Director of either AusNet or Origin from benefiting from any upstream performance scheme.

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[27] For example, Houston, clauses 172, 197, 211, 218 and 241

[28] I have considered three factors when classifying a generator as large and sophisticated:

1. Large – sufficient financial resources to partipate on equal terms with the integrated entity where disagreements or disputes arise.
2. Financially sophisticated
3. Knowledgeable about the NEM connection and operation, or have the resources to engage third parties that can provide the required knowledge.

[29] This could include a bonus scheme based on groupwide performance or employee share schemes or option grants in a listed parent entity. Brookfield Asset Management is listed on both the Toronto and new York Stock Exchanges.

b) The second is to impose additional transparency obligations on Origin in any dealings with affiliated networks in relation to connection of generators. This provision aims to mitigate against Origin using confidential competitor information to engage in discrimination against them. This obligation would require Origin to publish information each time it applied to connect generation to affiliated electricity networks or updated a connection application. The requirements to publish would include:

   i) Location on the network

   ii) Type (technology) and the size of facility to be connected

   iii) Date of planned connection

   iv) Where relevant, the pricing terms offered.

2.8 Question 8 and response

2.8.1 Question 8

96. Please provide any other information in relation to the Houston Report that you consider is important for the ACCC to consider in its assessment of the Proposed Acquisition, including identifying any particular opinions or conclusions expressed in the Houston Kemp Report with which you disagree.

2.8.2 Response

97. In clause 357 of his report, Houston gives the opinion in relation to the market definition for retail:

that the relevant retail electricity market for assessing the risk of foreclosure in this case is:

a. the retail of electricity to small customers (comprising residential and small business customers in the NEM); and

b. the retail of electricity to large customers in the NEM.

98. In clause 369, Houston states:

I take a conservative approach and define the geographic dimension of the electricity retail markets to be each of the regions of the NEM. This is a conservative approach because it considers separately the states in which Origin has its highest market share, rather than taking the average across states.

99. While most retailers operate in more than one NEM region, variations in spot prices and the need for hedging contracts referenced to each region in which a retailer operates, in my opinion limits the market definition to:

   a) the retail of electricity to small customers (comprising residential and small business customers in a NEM region)

   b) the retail of electricity to large customers in a NEM region.

100. As AusNet only has transmission and distribution assets in Victoria, the relevant market definition for retail of electricity would be limited to the two market segments in the Victorian region, not other NEM regions.

A Questions

This appendix sets out the questions I was asked to respond to by the ACCC under section 90 (6) (d) of the ACT.

1. In what ways do you consider that entities that are vertically integrated in each of the following ways could engage in discrimination or other conduct that is adverse to competitors?
   a) An electricity 'gentailer' (including embedded generation) integrated into each of:
      i) transmission, distribution, and/or
      ii) smart meter supply and installation services.
      iii) A gas distributor integrated into retail.
2. In what ways does the ability of an upstream entity to control or influence a downstream entity (or vice versa), or the flow of information between them affect your views on potential discrimination expressed in question 1?
3. In respect of each potential form of vertical integration and type of discrimination outlined in response to question 1, what do you consider are the incentives for an integrated firm to engage in such discrimination and why do they arise?
4. What are some of the factors relating to the process for connecting to the Victorian transmission network that currently delay or deter new generation connections? Do you consider that the proposed transaction is likely to exacerbate any of these factors?
5. Do you agree with the opinions expressed in the Houston Kemp Report in relation to the effectiveness of the legislation and regulations (including ringfencing) that apply to electricity or gas markets in Australia, and the operation of those markets? Specifically:
   b) Are there forms of conduct available to a transmission or distribution network that would not be captured, or effectively controlled by, the existing regulations and that would allow the network operator to confer an advantage to a related generation or retail entity?
   c) Generators might be able to rely on 'dispute resolution procedures', but will the possibility/likelihood that they will need to be relied on act as a deterrent to new generators?
6. Do you consider that the generators that will be seeking to access the transmission network in the foreseeable future are likely to be 'large and sophisticated'?
7. What, if any, practical steps do you consider could be taken to mitigate the risks of any of the conduct you have identified in question 1 from arising?
8. Please provide any other information in relation to the Houston Report that you consider is important for the ACCC to consider in its assessment of the Proposed Acquisition, including identifying any particular opinions or conclusions expressed in the Houston Kemp Report with which you disagree.

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