## THE WESTERN AUSTRALIAN ELECTRICITY REVIEW BOARD

## BETWEEN:

ECONOMIC REGULATION AUTHORITY

and

ELECTRICITY GENERATION AND RETAIL CORPORATION

No. 1 of 2019

Applicant

Respondent

# APPLICANT'S FURTHER AMENDED STATEMENT OF FACTS, ISSUES AND PRINCIPAL CONTENTIONS

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Prepared by:		
MinterEllison	Telephone:	+61 8 6189 7800
Allendale Square	Facsimile:	+61 8 6189 7999
77 St Georges Terrace PERTH WA 6000	Reference:	1254030

## PRELIMINARY

In this document, capitalised terms, unless otherwise indicated, have the same meanings as those terms in Chapter 11 of the Wholesale Electricity Market Rules (**Market Rules**).

## A. FACTS

## (1) Parties

- 1. The Applicant, the Economic Regulation Authority (the **ERA**), is a statutory body corporate established under section 4 of the *Economic Regulation Authority Act 2003* (WA).
- 2. The Respondent, the Electricity Generation and Retail Corporation, trading as Synergy (Synergy):
  - (a) is a statutory corporation established under section 4(1)(a) of the *Electricity Corporations Act 2005* (WA) and renamed under section 4(2A) of that Act;
  - (b) is a Market Participant under the Market Rules;
  - (c) is registered under the Market Rules as a Market Generator;

(d) operates a portfolio of generation assets comprising 30 generators of different fuel types, being the Balancing Portfolio.

## (2) The Wholesale Electricity Market (WEM)

- 3. The Wholesale Electricity Market (**WEM**) operates as the energy and capacity market for the South-West Interconnected System (**SWIS**), and provides several means by which electricity generators and wholesale purchasers of electricity, including retailers, can purchase and sell electricity and generation capacity on a wholesale basis.
- 4. Pursuant to section 123 of the *Electricity Industry Act 2004* (WA), the WEM is governed by the Market Rules, as made and amended from time to time pursuant to the *Electricity Industry* (Wholesale Electricity Market) Regulations 2004 (WEM Regulations).
- 5. Clause 1.2.1 of the Market Rules prescribes the following market objectives for the WEM:
  - to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the SWIS;
  - (b) to encourage competition among Market Generators and retailers in the SWIS, including by facilitating efficient entry of new competitors;
  - (c) to avoid discrimination in the WEM against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
  - (d) to minimise the long-term cost of electricity supplied to customers from the SWIS;
  - (e) to encourage the taking of measures to manage the amount of electricity used and when it is used (**Wholesale Market Objectives**).
- 6. In order to meet the Wholesale Market Objectives, the Market Rules provide for a number of different mechanisms by which Market Participants are able to trade with each other, in relation to their electricity requirements in the SWIS, including:
  - (a) the Reserve Capacity Mechanism;
  - (b) Bilateral Contracts;
  - (c) the Short Term Electricity Market (**STEM**);
  - (d) the Balancing Market;
  - (e) the Load Following Ancillary Services (LFAS) Market;
  - (f) Ancillary Services.
- 7. The Reserve Capacity Mechanism:

- entitles Market Generators to payments for having installed capacity available (even if it is not called upon to generate);
- (b) is intended to encourage an efficient quantity of generation capacity available each year to meet peak electricity demand within the SWIS, including an appropriate amount of excess capacity (or reserve margin), as well as an efficient configuration of generation capacity between base load, mid-merit and peaking plant;
- (c) derives the payments for capacity by reference to the capital and fixed operating and maintenance costs of peaking facilities.
- 8. The Balancing Market is a compulsory price-based dispatch and settlement process that provides for settlement of differences as between the contracted position of Market Generators and the actual electricity generated and dispatched by each Market Generator in respect of each Trading Interval. A Trading Interval is a period of 30 minutes commencing on the hour or half-hour during a Trading Day. A Trading Day is a period of 24 hours commencing at 8:00 am.
- 9. As part of the Balancing Market, a Market Generator is obliged to submit a Balancing Submission to the Australian Energy Market Operator (AEMO) by 6:00 pm on a Scheduling Day in respect of each Trading Interval on the next Trading Day. Synergy can update its Balancing Submissions four times in a 24 hour period.
- 10. A Balancing Submission consists of a series of offers of prices and quantities (Balancing Price-Quantity Pairs) of electricity for which a Market Generator is willing to be dispatched.
- 11. Under the Market Rules, unless a Market Generator is part of Synergy's Balancing Portfolio, a Market Generator is required, by section 7A.2 of the Market Rules, to make a Balancing Submission for each Balancing Facility in the Balancing Market to supply electricity for each Trading Interval. Balancing Submissions must be submitted in accordance with section 7A.2 of the Market Rules.
- 12. The Market Rules allow Synergy to operate the Balancing Portfolio as a single Balancing Facility in the Balancing Market.
- 13. Synergy submits a single series of Balancing Price-Quantity Pairs for the Balancing Portfolio for each Trading Interval by aggregating costs across the Balancing Portfolio.
- 14. Synergy submits its offers for each Trading Interval in a series of up to 35 price-quantity tranches that are greater than or equal to the price of its previous offer in the tranche.
- 15. Market Generators are selected to dispatch electricity in the Balancing Market based on the price competitiveness of their Balancing Submissions. This is referred to as the Balancing Merit Order (BMO). The price at which demand meets supply is the Balancing Price. The Balancing Price (that is, the price paid for the last unit of electricity dispatched to meet demand in a particular Trading Interval) is paid to all generators dispatched in the BMO in the particular Trading Interval in the Balancing Market, regardless of the price offered by each generator in its Balancing Submissions.

#### (3) The ERA's investigation

- 16. Clause 2.16.9 of the Market Rules provides that the ERA is responsible for monitoring the effectiveness of the WEM in meeting the Wholesale Market Objectives, and must investigate any market behaviour if it considers that the behaviour has resulted in the market not functioning effectively. That function includes, by clause 2.16.9(b) of the Market Rules, monitoring certain prices offered by a Market Generator.
- 17. Clause 7A.2.17 of the Market Rules prohibits Market Participants, for any Trading Interval, from offering prices in their Balancing Submissions in excess of their reasonable expectation of the short run marginal cost (**SRMC**) of generating the relevant electricity by the Balancing Facility, when such behaviour relates to market power.
- 18. Clause 2.16.9B(aA) of the Market Rules states that, where the ERA concludes that prices offered by a Market Generator in its Balancing Submission may exceed the Market Generator's reasonable expectation of the SRMC of generating the relevant electricity, and the ERA considers that the behaviour relates to market power, the ERA must as soon as practicable request an explanation from the relevant Market Participant and investigate the identified behaviour.
- 19. If, following an investigation under clause 2.13.10 of the Market Rules, the ERA reasonably believes that a Market Participant has breached clause 7A.2.17 of the Market Rules, the ERA may bring proceedings against it before the Electricity Review Board pursuant to clause 2.13.18 of the Market Rules.
- 20. On 26 July 2017, pursuant to clause 2.16.9B(aA) of the Market Rules, the ERA requested an explanation from Synergy in respect of prices offered by Synergy in its Balancing Submissions made during the period 31 March 2016 to 10 July 2017 for the Trading Intervals starting at 6:00 am and ending at 11:30 pm each Trading Day (**Investigation Period**) where the prices offered by Synergy exceeded \$40/MWh and informed Synergy that it was investigating those offers.
- 21. On 28 July 2017, Synergy provided an explanation to the ERA, which was published on the ERA's website pursuant to clause 2.16.9C of the Market Rules.
- 22. The ERA examined the prices offered by Synergy in Balancing Submissions for Trading Intervals commencing at 6:00 am and ending at the Trading Interval commencing at 11:30 pm each day during the Investigation Period where the Balancing Price exceeded \$40/MWh. The total number of such Trading Intervals is 11,334 (**Investigation Trading Intervals**). (The Final Investigation Report dated 6 February 2019 marked draft (**Final Investigation Report**) stated that there were 14,812 relevant Trading Intervals. However, this number included Trading Intervals where the Balancing Price did not exceed \$40/MWh and spreadsheets extracting the Trading Intervals incorrectly summed the total number of relevant Trading Intervals. The number of Trading Intervals based on the correct application of the criteria referred to in the first sentence of this paragraph is 11,334).

- 23. On 8 June 2018, the ERA provided its draft investigation report and model to Synergy for review and comment. Synergy provided its response to the draft investigation report together with a report from its consultant, Frontier Economics, on 3 September 2018. The ERA considered the response provided by Synergy in forming its conclusion as to whether Synergy breached clause 7A.2.17 of the Market Rules.
- 24. Following Synergy's comments, a further and final draft investigation report was produced (the Final Investigation Report) by the ERA, which was provided to Synergy on 7 February 2019 for comment.
- 25. The ERA reasonably believes that the prices offered by Synergy in its Balancing Submissions for 11,012 of the 11,334 Investigation Trading Intervals exceeded Synergy's reasonable expectation of the SRMC of generating the relevant electricity and that the behaviour was related to market power. This would involve a breach of clause 7A.2.17 of the Market Rules which is a Category C Market Rule. The difference between the number of 11,334 Investigation Trading Intervals and the 11,012 Trading Intervals in respect of which the ERA reasonably believes that a breach of clause 7A.2.17 of the Market Rules that a breach of clause 7A.2.17 of the Market Rules that a breach of clause 7A.2.17 of the Market Rules has occurred is because the Investigation Period commenced on 31 March 2016 and the conduct of concern in Period 1 (the application of updated start-up costs) related to Synergy's Balancing Submissions from 16 April 2016: see paragraph 69.
- 26. Pursuant to clause 2.13.18 of the Market Rules, on 31 May 2019, the ERA applied pursuant to regulation 32(1) of the WEM Regulations to the Electricity Review Board for:
  - (a) an order that Synergy has contravened clause 7A.2.17 of the Market Rules in respect of the prices offered in its Balancing Submissions for 12,908 Trading Intervals during the Investigation Period;
  - (b) an order that Synergy pay a civil penalty;
  - (c) an order that Synergy pay the ERA's costs;
  - (d) an order that Synergy takes such action as the Electricity Review Board requires to prevent a reoccurrence of the contravention of clause 7A.2.17 of the Market Rules;
  - (e) any other orders that the Electricity Review Board thinks fit.
- 26A. The number referred to in paragraph 26(a) above should be amended to 11,012 Trading Intervals.
- 27. Clause 2.16.14 of the Market Rules does not permit information collected under an investigation to be used for the purposes of bringing proceedings. To enable the ERA to use any information collected during its investigation in any subsequent proceedings, on or about 27 November 2017, the ERA commenced parallel investigations under clauses 2.16.9B(aA) and 2.13.10(b) of the Market Rules. Synergy consented to the ERA adopting this course.

## (4) Market circumstances relevant to the investigation and proceedings

- 28. In the 2016/17 Capacity Year, Synergy held approximately 48.6 per cent of total accredited generation capacity in the WEM.
- 29. In the 2016 calendar year, Synergy generated approximately 47.7 per cent (loss factor adjusted) of the total dispatched energy in the Balancing Market.
- 30. Synergy participates in gas markets in Western Australia. In contrast to its electricity activities, which are restricted to the SWIS, Synergy's gas trading is not legislatively restricted to a particular geographical area. Synergy sources gas to cover a range of gas demands, including for electricity generation, trade and storage.
- 31. The average daily spot price for gas during the Investigation Period was \$4.29/GJ (undelivered).
- 32. Synergy uses the Mondarra storage facility to store and extract gas to manage its daily quantity requirements and manage supply and demand fluctuations. Synergy's share of the available storage at the Mondarra storage facility was
- 33. The Department of Mines, Industry Regulation and Safety (**DMIRS**) publishes Western Australian average domestic gas prices annually.
- 34. The DMIRS data indicates that gas prices:
  - trended upwards after 2010, but thereafter remained relatively flat until the middle of the 2016 calendar year; and
  - (b) began falling from the middle of the 2016 calendar year, at or about the time that Synergy revised and increased its gas input price used to calculate its SRMC.
- 35. The AEMO publishes the Western Australian Gas Statement of Opportunities (GSOO) annually which contains forecasts of gas supply and demand and identifies any emerging issues affecting the gas industry.
- 36. The GSOO published in November 2015, forecast gas supply for the period 2016 to 2025 remaining significantly higher than forecast demand.
- 37. The GSOO published in December 2016 stated that the WA domestic gas market was expected to be well supplied, with potential gas supply expected to remain higher than forecast gas demand over the outlook period.
- 38. From 31 March 2016 to 10 July 2017, Synergy entered into 11 new industrial gas sale agreements to supply gas to industrial customers. The gas price in the new industrial gas sale agreements, for all except one of the new gas sales, was between and and and the higher-cost agreement was a long-term contract with

, starting with a price of **Example** for supply from 1 January 2017.

- 39. The weighted average gas price received by Synergy for industrial gas sale agreements executed during the Investigation Period was **executed**, excluding the gas price in the **executed** contract.
- 40. At the start of the Investigation Period, Synergy had:
  - (a) a pre-existing gas supply agreement under which it was supplied gas from the North West Shelf Gas Project (**NWS Contract**) which expired on 29 November 2016;
- 41. At the start of the Investigation Period, Synergy applied a gas input price for gas supplied under the NWS Contract of **Example**.
- 42. The Gorgon project was scheduled to deliver gas to Synergy from 31 December 2015, but did not begin to do so until 6 December 2016.
- 43. The Gorgon Contracts included a high take-or-pay portion (**Contract** of the contract for **Contract** for **Contract** of the contract of the contract for **Contract** of the contract of the con
- 44. In December 2016, during the transition period between the NWS Contract and the Gorgon Contracts, Synergy had access to the take-or-pay and discretionary tranches of gas available under both the NWS Contract and Gorgon Contracts, totalling
- 45. On 16 June 2016, Synergy entered into a gas swap arrangement with **Generation (Gas Swap Arrangement**) consisting of two periods:
  - (a) a substitution period (originally 21 June 2016 to 1 January 2017) where Synergy agreed to supply up to sup to supply up to supply up to supply up to supply u
  - (b) a supply period (originally between 1 January 2017 and 1 May 2020) where supplied up to supplied up to back to Synergy for supplied up to supplied back to Synergy for supplied up to supplied back to Synergy for supplied up to supplied back to Synergy for suppl
- 46. The substitution period in the Gas Swap Agreement was subsequently amended a number of times. Supply from Synergy to commenced on 14 November 2016 and the substitution period was extended until 1 January 2018. Data and information provided to the ERA by Synergy pursuant to a section 51 notice dated 21 December 2017 identified supply from Synergy to from 1 December 2016.
- 47. On 20 July 2016, Synergy entered into a new gas supply contract to purchase an average from from at the second difference (undelivered) for the period 21 July 2016 to 31 October 2016.

48. In January 2017, Synergy had gas supply agreements with suppliers to purchase up to **Example** in a price range of **Example** to **Example** (delivered) with **Example** of this at **Example** or less (delivered), as recorded in data and information provided to the ERA by Synergy to a section 51 notice dated 21 December 2017.

### (5) Synergy's change to input costs

- 49. On 11 May 2016, in response to the ERA's routine market monitoring functions, Synergy notified the ERA that it had revised its start-up costs used to calculate its SRMC for electricity generation.
- 50. On 8 August 2016, Synergy notified the ERA that it had revised its gas fuel cost and updated its gas input price used to calculate its SRMC for electricity generation.
- 50A. Synergy did not otherwise revise in any material way the methodology or approach for calculating its SRMC for electricity generation in respect of the Investigation Period.
- 51. Start-up costs and gas fuel costs are the two major input costs used to determine Synergy's SRMC for the Balancing Portfolio during the Trading Intervals investigated by the ERA.
- 52. There is a direct relationship between the input costs Synergy used to calculate its SRMC, such as the gas input price and start-up costs, and the prices offered in Balancing Submissions by Synergy in the Trading Intervals investigated by the ERA.
- 52A. Synergy's revisions to its estimates of start-up costs and gas fuel costs referred to in paragraphs49 and 50 above led, in most cases, to an increase in prices offered by Synergy in its BalancingSubmissions.
- 52B. If Synergy's revisions to either or both of its start-up costs or its gas fuel costs, referred to in paragraphs 49 and 50 above, were above Synergy's reasonable expectation of those costs, then prices offered by Synergy in its Balancing Submissions based on those revisions in the Investigation Trading Intervals were in excess of Synergy's reasonable expectation of the SRMC of generating the relevant electricity. That is, in 11,012 Trading Intervals of the Investigation Trading Intervals. see paragraph 25.
- 53. The changes to Synergy's input costs were:
  - (a) the recalculation of the gas input price used to calculate Synergy's SRMC and determine the prices offered in its Balancing Submissions, from (undelivered) to (delivered);
  - (b) the recalculation of Synergy's start-up costs used to calculate Synergy's SRMC and determine the prices offered in its Balancing Submissions. The revised start-up costs used by Synergy were significantly higher than Synergy's start-up costs using its previous method of calculation and exceeded Synergy's actual start-up costs by at least 20% to 172%, depending on the generator.

## (a) Change in calculation of gas input price

- 54. SRMC input costs include fuel costs, such as gas fuel costs. Gas fuel costs are a significant component of Synergy's SRMC of generating electricity when Synergy's gas fired generators are being dispatched as part of the Balancing Portfolio.
- 55. The gas input prices used by Synergy to calculate its SRMC during the Investigation Period were:
  - (a) undelivered (delivered) from 1 April 2016 to 13 July 2016 (Period 1);
  - (b) from 14 July 2016 to 30 November 2016 (**Period 2**);
  - (c) between and and an undelivered (between and and and delivered) from 1 December 2016 to 10 July 2017 (Period 3).
- 56. As Synergy advised the ERA, throughout Period 2 and Period 3 Synergy calculated gas input prices on an opportunity cost basis, (i.e., by calculating the next most valuable use of the gas).

### Period 1

- 57. In Period 1, Synergy applied a gas input price of **Example** (undelivered) using a market based opportunity cost method to calculate its SRMC of generating electricity.
- 58. [Blank]

#### Period 2

- 59. In Period 2, Synergy applied a gas input price of **Exercise** (delivered) to calculate its SRMC of generating electricity.
- 60. Synergy changed the way it calculated its opportunity cost of gas in Period 2. It performed a revised estimate by allocating an opportunity cost of gas to each of its different sources of gas on an increasing cost basis. This included take or pay gas (with an opportunity cost of \$0), the amount Synergy could have obtained selling the gas on the spot market, the amount that Synergy could have obtained storing the gas for sale in a future period or entering a swap for a future period or withdrawing gas from storage, to the highest opportunity cost which was curtailment of gas supply commitments.
- 61. When Synergy allocated gas based on its estimated demand, it allocated the lowest cost gas to existing and forecast gas sales demand and amounts of gas that Synergy could add to storage. Once this was allocated, Synergy allocated the gas, which had a higher opportunity cost, to demand for electricity generation. This included gas which it would otherwise store or could withdraw from storage. The opportunity cost of that gas was determined based on the existence of the "opportunity" to extract gas at a later date, and Synergy's estimate of the price of that gas at that date. The price used assumed gas prices would rise in the future, making it more profitable to store or swap gas rather than sell it on the open market.

- 62. In calculating the opportunity cost of gas in Period 2, Synergy:
  - (a) assumed a storage rate injection of and that it could extract up to at the Mondarra storage facility for and to account (undelivered);
  - (b) increased its estimate of industrial gas market sales from **Example 1** to **Example 2**;
  - (c) treated all industrial gas market sales (existing and forecast) as having a contract-break cost of **market**, and therefore unavoidable;
  - (d) on the basis of (a) to (c), allocated all the gas it had contracted to buy through the take-orpay portion of the Gorgon Contracts, which had zero opportunity cost, to industrial gas sales and storage;
  - (e) for the purposes of estimating the future price of gas stored or swapped applied the price of the variable gas tranche in the Gorgon Contracts, that is, (delivered).

#### Period 3

- 63. The gas input price applied by Synergy to calculate its SRMC of generating electricity varied between **Example** (delivered) to **Example** (delivered) during Period 3.
- 64. In Period 3, Synergy continued to calculate its opportunity cost of gas on the same basis as in Period 2 although Synergy adjusted the opportunity cost a number of times during Period 3 (unlike Period 2).
- 65. In calculating the opportunity cost of gas in Period 3, Synergy:
  - (a) continued to assume a storage rate injection of **Control**, other than in December 2016 where it assumed a storage rate injection of **Control**, notwithstanding the fact that by the beginning of Period 3 the Mondarra storage facility was almost full;
  - (b) increased its estimate of industrial gas sales in Period 3 by to a total of to a total of to reflect the start of its supply obligations under the Gas Swap Agreement;
  - (c) continued to treat all industrial gas market sales (existing and forecast) as having a contractbreak cost of **annual sector**, and therefore unavoidable;

  - (e) on the basis of (a) to (d), allocated all the gas it had contracted to buy through the take-orpay portion of the Gorgon Contracts, which had zero opportunity cost, to industrial gas sales and storage;
  - (f) for the purposes of estimating the future price of gas stored or swapped applied the price of the variable gas tranche in the Gorgon Contracts, which was between and (undelivered).

## (b) Updated Generator Start-up Costs

- 66. On 11 May 2016, Synergy wrote to the ERA to inform it that it had updated its start-up costs used to calculate its SRMC of generating electricity and determine the prices offered in its Balancing Submissions from 16 April 2016 onwards.
- 67. The update resulted from a review by Synergy of the costs used to determine its start-up costs and a change in the maintenance arrangement of its Open Cycle Gas Turbine generators from an "operating regime" to a "starts regime".
- 68. Synergy's proposal for the recovery of its start-up costs over the life of its facilities was not aligned to Synergy's plant inspections, nor did it vary to take into account the expected end of life of each relevant generator in the Balancing Portfolio.
- 69. Synergy's updated start-up costs applied from 16 April 2016 until the end of Period 1, during the entirety of Period 2 and the entirety of Period 3.

### (6) Costs included in Synergy's start-up costs

- 70. Synergy's start-up costs are made up of fuel and non-fuel costs. Fuel costs are the cost of the fuel consumed as part of the start-up of the generator. Non-fuel costs are made up of variable operating and maintenance costs, including the cost of replacing capital parts of a generator. Variable operating and maintenance costs account for approximately 93% of the total start-up costs for Synergy's gas fired generators.
- 71. When a generator is started, it wears the capital parts of the generator. Across the lifetime of the generator, capital parts may be required to be replaced. This replacement cost is generally spread across the life of the capital part. To determine the cost, assumptions are made in respect of two matters:
  - (a) the number of starts;
  - (b) the life of the generator.
- 72. Replacement cost can be contrasted with the recovery of the initial capital costs, which is provided for through the reserve capacity mechanism and via any surplus a Market Generator is able to earn from the Balancing Market when higher-cost generation is required to be dispatched to meet demand.
- 73. Synergy calculated the cost per start of the capital parts of its facilities by dividing the total cost of the part by the manufacturer-rated number of lifetime starts for that part to create a "cost per start".
- 74. Synergy annualised this cost by multiplying the cost per start for each start expected in the year.
- 75. Synergy estimated the number of expected starts in the year on a Facility basis. Where a Facility was made up of a number of generating units (e.g., Pinjar 9, Pinjar 10 and Pinjar 11) Synergy estimated the starts required for each generating unit and then applied the highest estimate to each

unit in the Facility. This annual cost was allocated to the cost of generating the electricity across that year.

- 76. Synergy did not limit this calculation to the number of expected replacement parts required over the life of the generator, but rather applied this annual cost each year, regardless of whether the parts were in fact expected to be replaced before the end of the relevant generator's life.
- 77. Synergy did not adjust the cost based on the time value of money (or net present value) for maintenance expenditure which it expected to occur in the future.

## (7) Fixed operating and maintenance costs

78. Synergy included annual routine maintenance or fixed operating and maintenance costs in its estimate of variable and operating costs used to calculate its start-up costs.

# B. ISSUES

- 79. The following issues arise:
  - (a) Issue 1: Did Synergy offer prices in its Balancing Submissions in excess of its reasonable expectation of the SRMC of generating the relevant electricity?
  - (b) Issue 2: Did Synergy have market power?
  - (c) Issue 3: Was Synergy's pricing behaviour related to market power?

# C. CONTENTIONS

# ISSUE 1: SYNERGY OFFERED PRICES IN ITS BALANCING SUBMISSIONS IN EXCESS OF ITS REASONABLE EXPECTATION OF THE SRMC OF GENERATING THE RELEVANT ELECTRICITY

- 80. Synergy's reasonable expectation of SRMC, for the purposes of clause 7A.2.17 of the Market Rules, is to be tested by what a reasonable Market Generator would have expected having regard to the circumstances known, and information available, to Synergy at the time of the Balancing Submission.
- 81. Synergy's SRMC is the cost for it to change production by very small amounts, or the first derivative of its total cost function, holding fixed the essential characteristics of the generation plant in question. In practical terms, it may be necessary to consider discrete jumps in production, and it may be necessary, including as a result of the application of other clauses of the Market Rules, to recover changes in SRMC over more than one trading interval, and a reasonable expectation of SRMC may accommodate those matters.
- 82. The input cost components that form part of Synergy's reasonable expectation of SRMC include fuel costs and start-up costs.
- 83. When generating units are bid in a portfolio, as was the case for Synergy, start-up costs are not a constant. Such costs change as the level of generation by the portfolio changes. Such costs may

be classified as variable costs as they change with the level of generation. In the context of Synergy's Balancing Portfolio, start-up costs are appropriately included in Synergy's SRMC.

83A. Further or alternatively, to the extent to which a reasonable estimate of the SRMC of generating the relevant electricity by the Balancing Portfolio in a particular trading interval does not include the whole or any part of a start-up cost incurred in a different trading interval, then the recovery of a reasonable estimate of start-up costs across more than one trading interval (rather than in one trading interval only) does not, of itself, relate to market power because a reasonable firm without market power would also engage in that conduct.

# (1) Synergy offered prices in its Balancing Submissions during Period 1 that were in excess of its reasonable expectation of its SRMC

84. During Period 1, Synergy offered prices in its Balancing Submissions that exceeded its reasonable expectation of its SRMC of generating the relevant electricity in 2,542 out of the 2,864 Investigation Trading Intervals in Period 1.

### Particulars

Even if there were certain prices offered in certain Balancing Submissions that did not exceed Synergy's reasonable expectation of its SRMC of generating the relevant electricity (which is not admitted), other prices in the same Balancing Submissions exceeded Synergy's reasonable expectation of its SRMC of generating the relevant electricity.

- 85. Synergy's calculation of its SRMC during Period 1 (from 16 April 2016) exceeded Synergy's reasonable expectation of its SRMC due to the revised start-up costs not being consistent with Synergy's reasonable expectation of those costs.
- 86. Synergy's assumptions in relation to its start-up costs were unreasonable in the following circumstances:
  - (a) Synergy's estimate of its annual start-up cost based on its estimate of expected starts was not reconciled with the actual replacement of capital parts which would be required, resulting in an overestimation of Synergy's costs;
  - (b) [not used];
  - (c) Synergy's method allowed for the recovery for the cost of capital parts that would never be replaced, or were unlikely to be replaced given the remaining life of the Facility and so would not be a cost incurred by generator starts;
  - (d) Synergy included fixed operating and maintenance costs as part of its variable operating and maintenance costs including annual routine maintenance and inspection costs which are independent of the actual electricity generated and not appropriately included in a calculation of start-up costs;

- (e) Synergy did not align capital parts replacement with plant inspections;
- (f) Synergy did not adjust the costs to account for the time value of money when calculating costs over the life of a Facility;
- (g) Synergy's estimate of maintenance costs for hot gas path and major inspections was based on inspection periods from the original equipment manufacturers but Synergy's actual inspections were less frequent which overstated actual maintenance costs for hot gas path and major inspections;
- (h) In calculating its start up costs, Synergy made the errors identified in paragraph 41A of the Further Revised Amended Witness Statement of Mr Yanqui Lou dated 6 May 2021.

# (2) Synergy offered prices in its Balancing Submissions during Period 2 that were in excess of its reasonable expectation of the SRMC

87. During Period 2, Synergy offered prices in its Balancing Submissions that exceeded its reasonable expectation of its SRMC of generating the relevant electricity in each of the Investigation Trading Intervals in Period 2.

# Particulars

The applicant repeats the particulars to paragraph 84 above.

- 88. Synergy's calculation of its SRMC during Period 2 exceeded Synergy's reasonable expectation of its SRMC due to one or both of the revised start-up costs and gas input prices not being consistent with Synergy's reasonable expectation of those costs.
- 89. The increased start-up costs from Period 1 continued to be used by Synergy in Period 2 and increased the price offered in all of the relevant Balancing Submissions made by Synergy to a level above Synergy's reasonable expectation of its SRMC of generating the relevant electricity for the reasons identified in paragraphs 85 to 86 above.
- 90. During Period 2, Synergy's assumptions about its gas input price were unreasonable in the following circumstances:
  - (a) Synergy assumed that the future price of gas would rise, and continued to calculate the opportunity cost of gas based on the cost to store or swap gas rather than sell it on the spot market. That was unjustified, unsupported by forecasts and contrary to the information available to Synergy at the time (including the matters alleged at paragraphs 28 to 47);
  - (b) Synergy's use of the variable gas tranche price in the Gorgon Contracts as the relevant future market price for Synergy's stored gas was unjustified, unsupported by forecasts and contrary to the information available to Synergy at the time (including the matters alleged at paragraphs 28 to 47);

- (c) there were alternative, cheaper sources of gas available than the variable gas tranche price in the Gorgon Contracts, and it was or should have been apparent to Synergy in advance that those sources would be cheaper;
- (d) Synergy entered into new contracts to sell gas at prices significantly below the variable gas tranche price in the Gorgon Contracts throughout the Investigation Period, which was inconsistent with the justification offered by Synergy for changing the way in which it calculated the opportunity cost of gas, namely that gas prices would rise in the future, making it more profitable to store or swap gas, rather than sell it;
- (e) Synergy entered into new contracts to buy gas at prices significantly below the variable gas tranche price in the Gorgon Contracts, which indicated that there were significant quantities of gas available for Synergy to purchase and that major gas sellers did not consider that the price of gas would rise significantly as this gas was available to purchase at lower prices.
- 91. Further, or in the alternative, during Period 2, the gas input price used by Synergy was unreasonable because it was based in part on unreasonable assumptions in relation to its industrial gas sales, and the price associated with those increased sales, as alleged in paragraphs 62(a) to (c).
- 92. Synergy's assumptions about its industrial gas sales were unreasonable in the following circumstances:
  - there was no evidence and no appropriate forecast supporting increased gas sales or additional gas sale agreements that justified the increase;
  - (b) Synergy's actual sales at the time did not justify an increase and averaged during Period 2;
  - (c) Synergy knew, or ought to have known, at the start of Period 2:
    - (i) that substantial gas supply contracts were about to expire;
    - (ii) what its contractual obligations were, and therefore what its unavoidable gas commitments were;
  - (d) any new industrial gas sales to meet increased demand for gas supply were discretionary, not unavoidable and therefore did not attract an opportunity cost of selected being Synergy's claimed contract-break price;
  - Synergy entered into new industrial gas sales contracts averaging only during during Period 2;
  - (f) overall Synergy's total industrial gas sales fell during Period 2.
- (3) Synergy offered prices in its Balancing Submissions during Period 3 that were in excess of its reasonable expectation of the SRMC

93. During Period 3, Synergy offered prices in its Balancing Submissions that exceeded its reasonable expectation of its SRMC of generating the relevant electricity in each of the Investigation Trading Intervals in Period 3.

### Particulars

The applicant repeats the particulars to paragraph 84 above.

- 94. Synergy's calculation of its SRMC during Period 3 exceeded Synergy's reasonable expectation of its SRMC due to one or both of the revised start-up costs and gas input prices not being consistent with Synergy's reasonable expectation of those costs.
- 95. The increased start-up costs from Period 1 and Period 2 continued to be used by Synergy in Period 3 and increased prices offered in all of the relevant Balancing Submissions made by Synergy to a level above Synergy's reasonable expectation of its SRMC of generating the relevant electricity for the reasons set out in paragraphs 85 to 86 above.
- 96. During Period 3, Synergy continued to base its gas input price on the opportunity cost of gas by reference to the value of the variable gas tranche price in the Gorgon Contracts. This was unreasonable for the reasons identified in paragraph 90 and the existence of the gas supply agreements as described in paragraph 48.
- 97. Further, or in the alternative, during Period 3, Synergy's gas input price was unreasonable because it was based in part on unreasonable assumptions in relation to its industrial gas sales, and the price associated with those increased sales, as alleged in paragraphs 65(a) to (c).
- 98. Synergy's assumptions in relation to its industrial gas sales were unreasonable in the following circumstances:
  - (a) there was no evidence or appropriate forecast supporting the assumptions;
  - (b) Synergy's actual sales at the time averaged during Period 3;
  - (c) Synergy knew, or ought to have known, at the start of Period 3 what its contractual obligations were, and therefore what its unavoidable gas commitments were;
  - (d) any sales to meet increased demand for gas supply were discretionary, not unavoidable and therefore did not attract an opportunity cost of \_\_\_\_\_, being Synergy's claimed contract-break price;
  - (e) Synergy entered into new industrial gas sales contracts averaging only during Period 3;
  - (f) overall Synergy's total industrial gas sales fell during Period 3.
- 99. During Period 3, Synergy's gas input price was further inflated by unreasonable storage assumptions of **Exercise**, and **Exercise** in December 2016, being its expectation of injection at

the Mondarra storage facility. The storage assumptions relied on by Synergy were unreasonable because at the start of Period 3, the Mondarra storage facility was nearly at full capacity with only of storage capacity available and Synergy's storage assumption of was unachievable.

#### **ISSUE 2: SYNERGY HAD MARKET POWER DURING THE INVESTIGATION PERIOD**

- 100. Synergy operated in the Balancing Market in the SWIS.
- 101. Synergy had market power during the Investigation Period. This market power is manifested by the following matters:
  - (a) Synergy was able to, and did, increase prices offered in its Balancing Submissions as a consequence of its upwards recalculation of its SRMC;
  - (b) Synergy was able to take the steps referred to in (a) without losing any significant volume of generation output to rival generators;
  - (c) Synergy was able to take the steps referred to in (a) without being concerned about a competitive response from other generators, or about a loss of revenue or market share;
  - (d) Synergy was able to, and did, offer prices in its Balancing Submissions above a reasonable estimate of the SRMC of generating the relevant electricity;
  - (e) Synergy was able to take the steps in (d) without losing any significant volume of generation output to rival generators, and without being concerned about a competitive response from other generators or a loss or revenue or market share;
  - (f) Synergy was able to, and did, set the Balancing Price or materially influence the Balancing Price in the Balancing Market;
  - (g) the Balancing Market is concentrated and Synergy has significant market share;
  - (h) during Period 2 and Period 3, Synergy engaged in price discrimination between the industrial gas market and the Balancing Market;
  - the matters referred to by Mr Balchin in paragraphs [193] [216] of his report of 14 December 2020.

# (1) Further details of paragraph 101(f): Synergy was able to, and did, set the Balancing Price or materially influence the Balancing Price in the Balancing Market

102. During the Investigation Period, Synergy set the Balancing Price for approximately 83% of the Investigation Trading Intervals. Where Synergy did not set the Balancing Price in a Trading Interval, its Balancing Submissions materially influenced the Balancing Price as a consequence of the Balancing Portfolio accounting for a substantial share of the electricity cleared for dispatch in each Trading Interval.

- 103. A Market Participant without market power would not be able to overstate its SRMC and still be regularly dispatched. In a competitive market, if a Market Participant overstated its SRMC, it would increase the price offered in its Balancing Submissions and lower cost generators would be dispatched in preference.
- 104. Synergy set the Balancing Price for:
  - (a) approximately 81.5% of Investigation Trading Intervals in Period 1;
  - (b) approximately 83.1% of Investigation Trading Intervals in Period 2;
  - (c) approximately 85.8% of Investigation Trading Intervals in Period 3.

# (2) Further details of paragraph 101(g): The Balancing Market is concentrated and Synergy has significant market share

- 105. The Balancing Market is a highly concentrated market. There are five Market Participants that generate approximately 94% of the electricity offered in the Balancing Market.
- 106. Synergy's market share is significant within the Balancing Market. In the 2016/17 Capacity Year, the Balancing Portfolio accounted for approximately 48.6% of total accredited generation capacity in the WEM. Synergy generated approximately 47.7% of the total dispatched energy in the WEM during the 2016 calendar year. While Synergy's market share can vary from day to day depending on outages and demand, Synergy's generation typically accounted for between 26% and 70% of the total dispatched energy on any given day during the Investigation Period.

# (3) Further details of paragraph 101(h): Synergy engaged in price discrimination during Period 2 and Period 3

- 107. Market discrimination is a profitable and possible strategy when the discriminating entity faces different price elasticities in different markets. This allows it to earn higher profits in markets where it can increase prices without losing commensurate demand and earning lower profits in markets where demand is more sensitive to price. To make price discrimination profitable, the discriminating entity must have market power in at least one of the relevant markets, as without market power it would be a price taker in each market and would not be able to discriminate.
- 108. Synergy engaged in price discrimination in Period 2 and Period 3 by applying a gas input price to determine the prices it offered in Balancing Submissions which was significantly above the price Synergy was selling gas for in the industrial gas market.
- 109. If Synergy did not have market power in the Balancing Market, the prices allocated as its gas input price would have been equivalent to the price it was selling gas in the industrial gas market.

# ISSUE 3: SYNERGY'S PRICING BEHAVIOUR DURING THE INVESTIGATION PERIOD RELATED TO ITS MARKET POWER

- 110. Synergy's pricing behaviour (in offering prices in its Balancing Submissions during the Investigation Period that were in in excess of its reasonable expectation of its SRMC of generating the relevant electricity) was related to Synergy's market power in the Balancing Market.
- 110A. If Synergy did not have market power in the Balancing Market, it would not:
  - (a) have been in the position referred to in paragraph 101(b), (c) and (e) above;
  - (b) have been able to do what is described in paragraph 101(f) above; and/or
  - (c) have been able, in a practical or commercial sense, to have engaged in the conduct referred to in paragraph 101(h) above.

## Synergy's contravened clause 7A.2.17 of the Market Rules

111. In the premises, Synergy contravened clause 7A.2.17 of the Market Rules in respect of the prices offered in its Balancing Submissions in 11,012 of the 11,334 Investigation Trading Intervals.

DATED the 31th day of May 2021

Mate En

Solicitors for the Applicant