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Details of Filing

Document Lodged:	Reply - Form 34 - Rule 16.33
Court of Filing	FEDERAL COURT OF AUSTRALIA (FCA)
Date of Lodgment:	28/04/2023 3:17:58 PM AEST
Date Accepted for Filing:	28/04/2023 3:21:31 PM AEST
File Number:	QUD19/2021
File Title:	STILLWATER PASTORAL COMPANY PTY LTD ACN 101 400 668 v STANWELL CORPORATION LTD ACN 078 848 674 & ANOR
Registry:	QUEENSLAND REGISTRY - FEDERAL COURT OF AUSTRALIA



Sia Lagos

Registrar

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<u>Amended</u> Reply to Stanwell's <u>Amended</u> Defence

No. QUD19 of 2021

Federal Court of Australia District Registry: Queensland Division: General

STILLWATER PASTORAL COMPANY PTY LTD (ACN 101 400 668)

Applicant

STANWELL CORPORATION LTD (ACN 078 848 674) and another

Respondents

This <u>amended</u> reply responds to the <u>Amended</u> Defence of the First Respondent dated <u>17 March</u> <u>2023</u> 31 March 2022 (**Stanwell Defence**). This reply adopts the headings (and the heading numbering) used in the Stanwell Defence.

INTRODUCTION

In reply to the introductory pleading in the Stanwell Defence:

- 1. As to paragraph 1 of the Stanwell Defence, the Applicant admits the allegations therein.
- 2. As to paragraph 2 of the Stanwell Defence, save that the Applicant says:
 - (a) the NEM is not exclusively regulated by the National Electricity Rules; and
 - (b) the required and permitted behaviour of Market Participants operating within the NEM is not exclusively regulated by the National Electricity Rules,

the Applicant admits the allegations therein.

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[Form approved 01/08/2011]

Rule 3.1.4(b) of the National Electricity Rules provides that Chapter 3 of the Rules is not intended to regulate anticompetitive behaviour by market participants which, as in all other markets, is subject to the relevant provisions of the Competition and Consumer Act 2010 (Cth) (**CCA**) and the Competition Codes of participating jurisdictions.

- 3. As to paragraph 3 of the Stanwell Defence, the Applicant:
 - (a) admits that clause 3.1.4(a)(1) is to the effect pleaded in paragraph 3, but
 - (b) says further that clause 3.1.4(a) of the National Electricity Rules sets out several market design principles, including that Chapter 3 of the National Electricity Rules is intended to give effect to the principle of a "maximum level of market transparency in the interests of achieving a very high degree of market efficiency, including by providing accurate, reliable and timely forecast information to Market Participants, in order to allow full responses that reflect underlying conditions of supply and demand".

Particulars

National Electricity Rules, Rule 3.1.4(a)(2), as in force from 1 July 2016.

Prior to that time, during the Conduct Period, Rule 3.1.4(a)(2) stated the Chapter 3 is intended to give effect to the principle of a "maximum level of market transparency in the interests of achieving a very high degree of market efficiency".

- 4. As to paragraph 4 of the Stanwell Defence, save that the Applicant refers to and repeats the matters set out in paragraphs 9 and 10 below, the Applicant admits the allegations therein.
- 5. As to paragraph 5 of the Stanwell Defence, the Applicant admits the allegations therein.
- 6. As to paragraph 6 of the Stanwell Defence:
 - (a) as to subparagraphs 6(a), 6(b) and 6(c) the Applicant admits the allegations therein, save that the Applicant does not know, and therefore cannot admit, what is meant by Stanwell's reference to "technical and performance characteristics" in subparagraph 6(a);

- AEMO supplied information to Generators prior to dispatch in a given Trading Interval;
- the information in (i) was based on aggregation and consideration of the information provided to it by market participants;
- (iii) the information in (i) included the following information supplied at the stated times:
 - (1) as soon as possible after 12:30pm on the day before a trading day, and no later than 4:00pm on the day before the trading day, AEMO relevantly published to market participants, in half hourly resolution, and updated every half hour:
 - (A) a pre dispatch schedule which included the information set out at Rule 3.13.4(f) for each trading interval in the period covered;
 - (B) a forecast of spot prices and ancillary service prices at each regional reference node (Rule 3.13.4(g)); and
 - (C) the expected sensitivity of the forecast spot prices to changes in the forecast load or generating unit availability (Rule 3.13.4(h));
 - (2) confidentially, to each relevant Generator, the following information relating to each generating unit was made available (Rule 3.8.20(j)):
 - (A) the scheduled times of commitment and de-commitment of individual slow-start generating units;
 - (B) scheduled half hourly loading level for each scheduled entity;
 - (C) scheduled provision of ancillary services;
 - (D) scheduled constraints for the provision of ancillary services;

- (F) unconstrained intermittent generation forecasts for each trading interval; and
- (G) for each semi-scheduled generating unit and trading interval, whether or not a condition for setting a semi-dispatch interval applies;
- (iv) as part of the central dispatch process:
 - during the Conduct Period, AEMO supplied data to Generators during and after dispatch in a given Trading Interval;
 - (2) the information in (1) was based on aggregation and consideration of the information provided to it by market participants;
 - (3) the information in (1) included the following information supplied at the stated times:
 - (A) every 5 minutes, dispatch instructions to each relevant Generator for each generating unit, specifying the level of power to be supplied by the generating unit over the specified period (Rules 3.8.21, 4.9.2);
 - (B) every 5 minutes, and as soon as possible after the start of each dispatch interval:
 - dispatch energy prices and ancillary service prices for each regional reference node (Rule 3.13.4(I));
 - a record of the actual generation of each scheduled generating unit, semi-scheduled generating unit and non-scheduled generating unit or non-scheduled generating system, including those units that were not generating, and the actual load for scheduled load (Rule 3.13.4(r));
 - (C) every 30 minutes, and as soon as possible after the start of the last dispatch interval in a trading interval:

- (i) regional reference node prices (Rule 3.13.4(m));
- (ii) regional aggregation of actual non-scheduled generation for each trading interval (Rule 3.13.4(x));
- (D) as soon as possible after the end of the Trading Day, in half hourly resolution:
 - regional reference prices, ancillary service prices, regional and total interconnected system loads and energies, interregional loss factors and network constraints (Rule 3.13.4(n));
 - (ii) inter-regional flows (Rule 3.13.4(n1));
 - (iii) the final dispatch offers, dispatch bids and market ancillary service offers received as well as actual availabilities of all generating units, scheduled network services, scheduled loads and market ancillary services (Rule 3.13.4(p));
 - (iv) the dispatched generation, dispatched network service, dispatched load for each scheduled generating unit, semi-scheduled generating unit, scheduled network service and scheduled load; and the semi-scheduled dispatch cap for each semischeduled generating unit (Rule 3.13.4(q)); and
- (E) as soon as possible after the start of a dispatch interval, the actual generation of every scheduled and semi-scheduled generating unit and those generating units that were not generating (Rule 3.13.4(r));
- (c) as to paragraph 6(f) of the Stanwell Defence, the Applicant admits the allegations therein, but says further that, in relation to the rebidding which formed part of the <u>Short-notice Rebidding strategy</u> Late Rebidding strategy and the Early Spiking strategy:

 the conduct of Stanwell in engaging in the <u>Short-notice Rebidding strategy</u> Late Rebidding strategy and the Early Spiking strategy (or either of them) was materially facilitated by Stanwell's substantial degree of market power;

Particulars

The Applicant refers to and repeats the matters set out in paragraphs 25 and 36 <u>34, 42, 43, and 46 to 51</u> of the <u>Second Further</u> Amended Statement of Claim (<u>**2FASOC**</u>).

- (ii) by reason of:
 - the nature and volume of forecast, real time and outcome information published by AEMO to market participants;
 - (2) the number and size of scheduled generating units controlled by Stanwell relative to generating units controlled by other Generators, and in the context of the limitations on the importation of electricity through interconnectors into the QRNEM; and
 - (3) the predictable nature of trading in the Spot Market,

Stanwell (and CSE) were able to predict with a high degree of accuracy:

- (4) what pre-dispatch information would be for competing Generators;
- (5) the trading outcomes; and
- (6) the outcome of rebidding,

in a way that competing Generators were unable to do;

- (d) as to paragraph 6(h) of the Stanwell Defence, that the Applicant admits the allegations therein;
- (e) as to paragraph 6(i) of the Stanwell Defence, the Applicant denies the allegations and says that whether a competing Generator was instructed to dispatch was dependant on a number of factors, including both the physical and available dispatch capacity of an offering Generator, taking into account its maximum available capacity and its capacity to ramp up, or synchronise and ramp up, in order to meet a dispatch instruction;

- (f) as to paragraph 6(j) of the Stanwell Defence, the Applicant denies the allegations. repeats the matters pleaded at paragraph 46 of the 2FASOC, and says:
 - dispatch instructions were subject to both the physical and available dispatch capacity of an offering Generator, taking into account its maximum available capacity and its capacity to ramp up, or synchronise and ramp up, in order to meet a dispatch instruction; and
 - (ii) any risk that a Generator would not be dispatched at a total volume that was less than it anticipated was mitigated if the Generator was pivotal at the point in time the Generator made the rebid;
 - (iii) the conduct of Stanwell in engaging in the Late Rebidding Short-notice <u>Rebidding</u> strategy and the Early Spiking strategy (or either of them) involved the interaction between volume generated and price received, and the risk of a reduced volume of generation was mitigated by the increase in Spot Price resulting from the Late RebiddingShort-notice Rebidding strategy and Early Spiking strategy (or either of them);
 - (iv) the conduct of Stanwell in engaging in the Late Rebidding <u>Short-notice</u> <u>Rebidding</u> strategy and the Early Spiking strategy (or either of them) was materially facilitated by Stanwell's substantial degree of market power;

The Applicant refers to and repeats the matters set out in paragraphs 25 and 36 <u>34, 42, 43, and 46 to 51</u> of the <u>2F</u>ASOC.

- (v) by reason of:
 - the nature and volume of forecast, real time and outcome information published by AEMO to market participants;
 - the limitations on the importation of electricity through interconnectors into the QRNEM;
 - the number and size of scheduled generating units controlled by Stanwell relative to generating units controlled by other Generators; and
 - (4) the predictable nature of trading in the Spot Market,

Stanwell (and CSE) were able to predict with a high degree of accuracy:

- (5) what pre-dispatch information would be for competing Generators;
- (6) the trading outcomes; and
- (7) the outcome of rebidding,

in a way that competing Generators were unable to do;

- (vi) by reason of the matters set out at subparagraphs (i) to (v) above and the matters pleaded at paragraph 46 of the 2FASOC:
 - the risk that Stanwell asserts, was not material for Stanwell (or CSE), and
 - (2) in fact Stanwell was able to engage in the Early Spiking Short-notice <u>Rebidding</u> strategy and Late Rebidding strategy with a high degree of confidence.
- 7. As to paragraph 7 of the Stanwell Defence, the Applicant admits the allegations therein.
- 8. As to paragraph 8 of the Stanwell Defence, the Applicant admits the allegations therein but says further:
 - (a) as to subparagraph (a):
 - (i) if "design feature" as pleaded is intended to mean "intended outcome" rather than "technical possibility", it was not a design feature of the NEM for "the potential for the Spot Price to be affected by Generators moving capacity to high price bands" to be procured or achieved by generators engaging in <u>Short-notice Rebidding-Late Rebidding or Early Spiking</u>; and
 - the intended outcome of the NEM was for Generators to have the ability to move capacity to high price bands in circumstances where that movement was justified or required by a change in the operating conditions for a Generator;
 - (b) as to subparagraph (b), the National Electricity Rules expressly recognised that the conduct of Generators was subject to the requirements of the CCA;

Rule 3.1.4(b) National Electricity Rules.

(c) as to subparagraph (c), the creation of price signals of the kind referred to at 8(c) of the Stanwell Defence would not occur in circumstances in which Stanwell (and CSE) engaged in the <u>Short-notice Rebidding strategy</u>Late Rebidding and Early <u>Spiking strategies</u>.

Particulars

To the extent price signals of the kind referred to at 8(c) of the Stanwell Defence were created, they are not efficient price signals as any such signals were distorted by Stanwell and CSE's conduct in engaging in the <u>Short-notice Rebidding</u> <u>strategyLate Rebidding strategy or Early Spiking strategy</u>.

- 9. As to paragraph 9 of the Stanwell Defence, the Applicant admits the allegations therein and says further that during the Conduct Period, the AER publicly reported to the effect that:
 - (a) Stanwell (and CSE) had, during the Conduct Period, engaged in trading strategies like the <u>Short-notice Rebidding strategyLate Rebidding and Early Spiking</u> strategies;

Particulars

Refer to the Annexure to this reply.

- (b) the trading <u>strategy</u> strategies referred to in subparagraph (a) above:
 - (i) had a detrimental effect on competition;
 - (ii) precluded or limited the possibility for competitor responses;

Particulars

Refer to the Annexure to this reply.

- the conduct of Stanwell (and CSE) in engaging in conduct like the <u>Short-notice</u> <u>RebiddingLate Rebidding strategy and Early Spiking</u> strategy:
 - (i) was not a design feature of the NEM;

(ii) was contrary to the objectives of the NEM;

Particulars

Refer to the Annexure to this reply.

- (d) in relation to the QRNEM generation market, there were features of the market that may be detrimentally affecting the effectiveness and efficiency of competition in the market, including that:
 - (i) the market is concentrated;
 - (ii) Stanwell (and CSE) had the ability to exercise market power in the market; and
 - (iii) participants in the said market, including Stanwell (and CSE), had taken advantage of the concentrated market to rebid large volumes of capacity from low to very high prices late in the trading interval, causing a spike in prices;

Particulars

Refer to the Annexure to this reply.

(e) Stanwell (and CSE), by taking advantage of their market power to engage in trading strategies like the Short-notice Rebidding strategy Late Rebidding and Early Spiking, had inflated spot prices and hedge contract prices, which inflation flowed through to consumers.

Particulars

Refer to the Annexure to this reply.

- 10. As to paragraph 10 of the Stanwell Defence, the Applicant admits the allegations therein and says further that at least two changes to the National Electricity Rules were prompted by Stanwell (and CSE) engaging in <u>the Short-notice Rebidding strategy</u>one or more of the Late Rebidding and Early Spiking strategies, being:
 - (a) National Electricity Amendment (Bidding in Good Faith) Rule 2015; and
 - (b) National Electricity Amendment (5 Minute Settlement) Rule 2017.

Refer to the Annexure to this reply.

11. As to paragraph 11 of the Stanwell Defence, the Applicant admits the allegations therein.

STANWELL'S DEFENCE TO SPECIFIC PARAGRAPHS OF THE 2FASOC

B. THE RESPONDENTS

- 12. As to paragraph 14 of the Stanwell Defence:
 - (a) as to subparagraphs (a) and (b), the Applicant admits the allegations therein; and
 - (b) as to subparagraph (d)(e) the Applicant admits the NEM is defined in Chapter 10 of the National Electricity Rules and section 2(1) of the National Electricity Law, but otherwise does not reply.

C. THE OPERATION OF THE NATIONAL ELECTRICITY MARKET

Summary

- 13. As to paragraph 16 of <u>the Stanwell's Defence</u>:
 - (a) as to subparagraphs (a) and (b), save that the Applicants will refer to the full terms of Part 3.15 of the National Electricity Rules, the Applicant admits the allegations therein;
 - (b) as to subparagraph (c), the Applicant admits the allegations therein;
 - (c) as to subparagraph (d) the Applicant admits the allegations therein, and says further that at all relevant times:
 - (i) the Dispatch Algorithm also took into account:
 - the limited capacity of the interconnectors to allow electricity to flow from one region to another;
 - (2) generation connection points and the region in which these connection points reside;
 - demand response connection points and the region in which these connection points reside;

- the Dispatch Algorithm was specifically designed to operate on a regional basis, with inter-regional losses and network constraints relied upon in the central dispatch process; and
- (iii) the central dispatch process determined a spot price in each region at a regional reference node.
- 14. As to paragraph 18 of <u>the Stanwell's Defence</u>:
 - (a) as to subparagraph (a), the Applicant admits that the NEM is defined in Chapter 10 of the National Electricity Rules and section 2(1) of the National Electricity Law, but says that paragraph 9 of the <u>2FASOC</u> properly identifies the NEM for the purposes of the proceedings; and
 - (b) as to subparagraphs (b) and (c), the Applicant admits the allegations therein, but says that AEMO at all relevant times simply provided a mechanism through which payment is achieved, such that effectively the sale of electricity is by Generators to QRNEM Retailers and Market Customers.
- 15. As to paragraph 19 of <u>the Stanwell's Defence</u>:
 - (a) as to subparagraphs (a)(i) and (ii), the Applicant admits the allegations therein; and
 - (b) as to subparagraph (a)(iii), the Applicant admits that the "Spot Market" is defined in Chapter 10 and Clause 3.4.1 of the National Electricity Rules but says that the definition of "Spot Market" at paragraph 10 of the <u>2F</u>ASOC properly identifies the "Spot Market" for the purposes of the proceedings.

C.1 The QRNEM

- 16. As to paragraph 20 of Stanwell's Defence:
 - (a) as to subparagraphs (a), (b) and (c), the Applicant admits the allegations therein;
 - (b) as to subparagraph (d), the Applicant denies the allegations therein and says that clause 9.37.7 of the National Electricity Rules does not define the QRNEM; and
 - (c) as to subparagraph (e), the Applicant admits the allegations therein, and refers to and repeats the matters pleaded in subparagraph 13(c) above.

 As to paragraph 21(a)(i) of the Stanwell Defence, the Applicant admits the allegations therein, save that the Applicant refers to and repeats the matters pleaded in subparagraph 13(c) above.

C.2 The Spot Market

- 18. As to paragraph 22 of the Stanwell Defence:
 - (a) as to subparagraph (a), the Applicant admits the allegations therein; and
 - (b) as to subparagraph (b), the Applicant refers to and repeats subparagraph 14(b) above_;
- 19. As to paragraphs 23 to 30 of the Stanwell Defence:
 - (a) as to subparagraph (a)subparagraph 23(a) of the Stanwell Defence, the Applicant refers to and repeats subparagraph 14(b) above;
 - (b) as to subparagraph (c)subparagraphs 24(a) (c) of the Stanwell Defence, the Applicant admits the allegations therein;
 - (c) as to subparagraph (d)subparagraph 24(d) of the Stanwell Defence, the Applicant admits the allegations therein;
 - (d) as to subparagraph (e)subparagraph 25 of the Stanwell Defence, that Applicant admits the allegations therein, save that the Applicant refers to and repeats the matters pleaded in subparagraph 13(c) above;
 - (e) as to subparagraph (f)(i)subparagraph 26(a) of the Stanwell Defence, the Applicant admits the allegations therein;
 - (f) as to subparagraph (f)(ii)subparagraph 26(b) of the Stanwell Defence, the Applicant admits the allegations therein, save that the Applicant refers to and repeats paragraph 6(b) above;
 - (g) as to subparagraph (g)paragraph 27 of the Stanwell Defence, the Applicant admits the allegations therein;
 - (h) as to subparagraph (h)paragraph 28 of the Stanwell Defence, the Applicant admits the allegations therein, save in relation to paragraph 28(b)(i)(C), which it does not admit;

- (i) as to subparagraph (i)(i)subparagraph 29(a) of the Stanwell Defence, the Applicant admits the allegations therein;
- (j) as to subparagraph (i)(ii)subparagraph 29(b) of the Stanwell Defence, the Applicant admits the allegations therein, save that the Applicant refers to and repeats paragraph 6(b) above; and
- (k) as to subparagraph (j)subparagraph 30(a) of the Stanwell Defence, the Applicant admits the allegations <u>therein.in (j)(i)</u>.
- 20. As to paragraph <u>31</u> 24 of the Stanwell Defence:
 - (a) as to subparagraphs (a) and (b), the Applicant admits the allegations therein, save that the Applicant refers to and repeats the matters pleaded in subparagraph 13(c) above; and
 - (b) as to subparagraphs (e) and (f), the Applicant admits the allegations therein, and refers to and repeats paragraph 14(b) above.
- 21. As to paragraph <u>32</u> 25 of the Stanwell Defence:
 - (a) as to subparagraph (a), the Applicant refers to and repeats paragraph 20 above; and
 - (b) as to subparagraph (b), the Applicant admits the allegations therein, save that the Applicant refers to and repeats the matters pleaded in subparagraph 13(c) above.
- 22. As to paragraph <u>33(a)</u> 26(a) of the Stanwell Defence, the Applicant refers to and repeats paragraph 20 above.
- 23. As to paragraph <u>34</u> 27 of the Stanwell Defence, the Applicant admits subparagraph (a).

C.3 Hedging in the electricity market

- 24. As to paragraph <u>35</u> 28 of the Stanwell Defence, the Applicant admits subparagraph (a).
- 25. As to paragraph <u>36</u> 29 of the Stanwell Defence, the Applicant admits subparagraphs (a) and (e).
- 25A. As to paragraph 37 of the Stanwell Defence, the Applicant:
 - (a) does not admit subparagraph 37(a);

(b) admits subparagraphs (b) and (c).

E. SUBSTANTIAL DEGREE OF POWER IN THE MARKET

Summary

- 26. As to paragraph <u>40(a)</u> 33(a) of <u>the</u> Stanwell's Defence, the Applicant admits the allegations therein, but says that the potential for demand to be met by Generators outside of the QRNEM was constrained by the capacity of the Interconnectors, and refers to and repeats paragraph 12 of the <u>2F</u>ASOC.
- 27. As to paragraph <u>41(a)</u> 34(a) of <u>the Stanwell's Defence</u>, the Applicant admits the definitions of "Scheduled Generator" and "Semi-Scheduled Generator" are defined in the National Electricity Rules, but says that those definitions stated in the particulars to paragraph 23 of the <u>2FASOC</u> are accurate for the purposes of the proceedings.
- 28. As to paragraph <u>42(b)</u> 35(b) of <u>the</u> Stanwell's Defence, the Applicant admits the allegations therein, but says further that:
 - (a) the potential for demand within the QRNEM to be met by Generators outside of the QRNEM; and
 - (b) the potential for Stanwell to meet demand in the NEM (outside the QRNEM),

was constrained by the capacity of the Interconnectors, and refers to and repeats paragraph 12 of the <u>2FASOC</u>.

E.1 Barriers to Entry Stanwell's power in the market

- 29. As to paragraph 43 of the Stanwell Defence, the Applicant admits subparagraph 43(a).
- 30. As to paragraph 44 of the Stanwell Defence, the Applicant admits subparagraph 44(b)(i).
- 31. As to paragraph <u>45</u> 41 of the Stanwell Defence:
 - (a) as to subparagraphs (c) and <u>(f)(e)</u>, the Applicant admits the allegations therein;
 - (b) as to subparagraphs (d) and (e), the Applicant admits the allegations therein, but says that all of those units identified in the particulars to subparagraphs (d) (as adding coal-fired generation capacity to the NEM) and (e) (as beginning operation), operated outside of the QRNEM; and

- (c) as to subparagraph (g)(f), the Applicant does not admit the allegations therein.
- 32. As to paragraph 48 of the Stanwell Defence, the Applicant admits the allegations therein.
- 33. As to paragraph 49 of the Stanwell Defence, the Applicant:
 - (a) <u>admits subparagraphs (a) to (e), but says that those factors are not relevant, or of</u> only limited relevance, to Stanwell's marginal costs of production once a generating unit is online and able to ramp up; and
 - (b) says further in relation to subparagraph (b) that:
 - (i) the long start-up times and high start-up costs associated with coal-fired generating units are irrelevant once those generating units have started, and
 - (ii) <u>Stanwell (and CSE's) coal-fired generating units, during the Conduct</u> <u>Period, were generating relatively continuously.</u>
- 34. As to paragraph 50 of the Stanwell Defence:
 - (a) the Applicant admits subparagraph (a);
 - (b) the Applicant does not admit subparagraph (b).
- 35. <u>As to paragraph 53 of the Stanwell Defence, the Applicant does not admit that the Ramp</u> <u>Rate of a Dispatch Unit at any given point in time could vary due to technical limitations</u> <u>and conditions imposed by the engineering team and site operators.</u>
- 36. <u>As to paragraph 58 of the Stanwell Defence, the Applicant denies that Stanwell was "like</u> <u>all other Generators in the NEM" in its ability to rebid so as to trade off volume against</u> <u>price, refers to and repeats the matters pleaded at paragraphs 29 to 32 of the 2FASOC,</u> <u>and otherwise joins issue with paragraph 58.</u>

E.2 Stanwell's power in the Market

29. As to paragraph 37 of Stanwell's Defence:

(a) as to subparagraph (b), the Applicant admits the allegations therein;

37. <u>As to paragraph 63 of the Stanwell Defence, the Applicant admits subparagraphs (b) and (c).</u>

- 38. (b) as to subparagraph (c)<u>As to paragraph 64 of the Stanwell Defence</u>, the Applicant admits the allegations therein, save that the Applicant refers to and repeats subparagraph 13(c) above<u>.</u>;
- 39. (c) as to subparagraphs (d)(i) and (ii)As to subparagraphs 65(a) and (b) of the Stanwell Defence, the Applicant:
 - (a) admits that there was the potential for the Spot Price to be affected by Generators moving capacity to high price bands, but says:
 - (i) if "feature" as pleaded is intended to mean "intended outcome" <u>rather</u> than "technical possibility", it was not a feature of the NEM for "the potential for the Spot Price to be affected by Generators moving capacity to high price bands" to be procured or achieved by generators engaging in <u>Short-notice</u> <u>Rebidding Late Rebidding or Early Spiking;</u>
 - the intended outcome of the NEM was for Generators to have the ability to move capacity to high price bands in circumstances where that movement was justified or required by a change in the operating conditions for a Generator;
 - (b) admits the potential for the Spot Price to be affected by Generators moving capacity to high price bands was permitted by the National Electricity Rules, but says that the National Electricity Rules expressly stated that the conduct of Generators was also subject to the provisions of the CCA, such that <u>the Shortnotice Rebidding strategy</u> <u>Late Rebidding strategy</u> and <u>Early Spiking strategy</u> engaged in by Stanwell (and CSE) was not a feature of the NEM and was not permitted by the National Electricity Rules;
- 40. <u>As to subparagraph 65(c) of the Stanwell Defence, the Applicant denies the allegations</u> therein and says the creation of price signals of the kind referred to at 65(c) of the Stanwell <u>Defence would not occur in circumstances in which Stanwell (and CSE) engaged in the</u> <u>Short-notice Rebidding strategy.</u>

<u>To the extent price signals of the kind referred to at subparagraph 65(c) of the</u> <u>Stanwell Defence were created, they are not efficient price signals as any such</u> <u>signals were distorted by Stanwell and CSE's conduct in engaging in the Short-</u> <u>notice Rebidding strategy.</u>

- 41. (d) as to subparagraph (e)(i)As to subparagraph 66(a) of the Stanwell Defence, the Applicant joins issue and further:
 - (a) says that the increases in the Spot Price caused by the <u>Short-notice Rebidding</u> strategy <u>Late Rebidding or Early Spiking strategies</u>:
 - (i) did not reflect market conditions of supply and demand;
 - (ii) were influenced by trading strategies that had the purpose or a purpose of limiting the opportunity for competitor responses; and
 - (iii) undermined the validity of pre-dispatch forecasts,

inhibiting the ability of potential entrants to make new investment decisions;

- (b) in the premises in (a) (i), denies that the conduct alleged in the <u>2FASOC</u> is conduct that would have incentivised, or did incentivise, new entrants into the market;
- (e) as to subparagraph (g), the Applicant admits the allegations therein but says that Stanwell (and CSE) had the ability to forecast trading outcomes more accurately, and to mitigate risks as described in subparagraph (f) below, more effectively than competing Generators;
- 42. (f) As to subparagraph (h)As to paragraph 68 of the Stanwell Defence, the Applicant:
 - (a) admits there was a price/volume trade off risk when Stanwell or CSE engaged in the <u>Short-notice Rebidding strategy</u> <u>Late Rebidding or Early Spiking strategies</u>, but
 - (b) says the said risk was mitigated for Stanwell in the circumstances described in paragraph 32 of the <u>2FASOC</u>, because Stanwell was a pivotal generator such that, at the relevant times, some or all of its generation capacity was required to meet demand;
- 43. (g) As to subparagraph (j) As to paragraph 70 of the Stanwell Defence, the Applicant:
 - (a) denies that Stanwell's ability to bid its generation capacity was constrained by the National Electricity Rules, including in particular clauses 3.8.22(c)(2) and 3.8.22A (good faith rebidding rules); and

(b) says further that Stanwell's ability to rebid its generation capacity in an unconstrained way caused or contributed to at least two rule changes to the said Rules.

Particulars

The Applicant refers to and repeats the particulars to paragraph 10 above.

- 44. (h) As to subparagraph (k)(i)As to subparagraphs 71(a) and (b) of the Stanwell Defence, the Applicant denies that the ability of Stanwell to affect the Spot Price by Rebids was constrained by the regulatory oversight of the AER or potential changes to the National Electricity Rules, and refers to and repeats paragraphs 9 and 10 above, and paragraphs 25 34, 42, 43, 47, 48, 50 and 51 of the 2FASOC.; and
- 45. (i) as to subparagraph (I)<u>As to paragraph 72 of the Stanwell Defence</u>, the Applicant admits the allegations therein <u>save that it does not admit the allegation in subparagraph</u> 72(b) that certain constraints or disadvantages were not shared by other generating units-, <u>and:</u>
 - (a) refers to and repeats the matters in paragraphs 29 to 31 of the 2FASOC; and
 - (b) says further that:
 - although Ramp Rates may have been slower for an individual coal-fired generating unit (compared to a gas-fired or hydro generating unit), ramping across multiple coal-fired generating units simultaneously allowed for relatively faster Ramp Rates;
 - (ii) <u>Stanwell (and CSE's) coal-fired generating units, during the Conduct</u> <u>Period, were generating relatively continuously.</u>
- 30. As to paragraph 40 of the Stanwell Defence, the Applicant admits subparagraphs (d)(ii) and (iii).
- 46. <u>As to paragraph 75(c) of the Stanwell Defence, the Applicant admits the allegations</u> therein.

F. CONDUCT OF STANWELL AND CSE – 1 JANUARY 2012 TO 6 JUNE 2017

F.1 Short-notice Rebidding

47. As to paragraph <u>79</u> 47 of the Stanwell Defence, the Applicant admits subparagraph (f)(g).

F.1 Late Change to Dispatch Offers (Late Rebidding)

- 48. As to paragraph <u>80</u> 49 of the Stanwell Defence:
 - (a) as to subparagraph (d), the Applicant does not admit the allegations therein; and
 - (b) as to subparagraphs (f)(i) to (iv), the Applicant does not admit admits the allegations therein.
- 34. As to paragraph 50 of the Stanwell Defence, the Applicant admits subparagraph (c)(ii).
- 49. As to paragraph 91:
 - (a) <u>as to subparagraph 91(a), the Applicant denies the subparagraph and refers to and</u> repeats the matters in paragraph 44(b)(ii) and (iii) of the 2FASOC;
 - (b) as to subparagraph 91(b), the Applicant:
 - (i) <u>admits the reasons provided for the Impugned Rebids related to one or</u> <u>more of codes 'P', 'A' or 'F';</u>
 - (ii) <u>denies those reasons accurately explain or provide the basis for the making</u> of the Impugned Rebids;
 - (iii) <u>otherwise joins issue with subparagraph 91(b).</u>
- 35. As to paragraph 51 of the Stanwell Defence:
 - (a) as to subparagraphs (a), (b), (c), (d), (e) and (f), (h), (j) and (l), the Applicant admits the allegations therein; and
 - (b) as to subparagraph (g), the Applicant admits the allegations therein but further says that Stanwell (and CSE) were able to predict with a high degree of certainty what pre-dispatch information would be for competing Generators, and refers to and repeats subparagraph 6(c)(ii) above;

- 36. As to paragraph 52 of the Stanwell Defence, the Applicant admits subparagraphs (c) and (h).
- 50. As to paragraph <u>94</u> 54 of the Stanwell Defence, the Applicant admits subparagraphs <u>(a)</u>, <u>(b) and (d)(a) and (c)</u>.

F.2 Early Spiking

- 38. As to paragraph 59 of the Stanwell Defence, the Applicant does not admit subparagraph (b).
- 39. As to paragraph 61 of the Stanwell Defence:
 - (a) as to subparagraph (b), the Applicant admits the allegations therein, and refers to and repeats subparagraph 6(b) above; and
 - (b) as to subparagraph (c), the Applicant admits the allegations therein, but says further that Stanwell (and CSE) were able to predict with a high degree of certainty what pre-dispatch information would be for competing Generators, and refers to and repeats subparagraph 6(c)(ii) above.
- 40. As to paragraph 62 of the Stanwell Defence, the Applicant admits subparagraph (b).
- 41. As to paragraph 64 of the Stanwell Defence, the Applicant admits subparagraphs (a) and (b).

G. SHORT-NOTICE REBIDDING – TAKING ADVANTAGE AND PURPOSE

G.2 Proscribed purpose

- 51. As to paragraph 104 of the Stanwell Defence, the Applicant admits subparagraph (g).
- H. CAUSATION

Summary

52. As to paragraph <u>105</u> 72 of the Stanwell Defence, the Applicant admits subparagraphs (a) and (b).

H.1 Retail Customers purchasing from <u>QRNEM</u> Retailers

53. As to paragraph <u>106</u> 73 of the Stanwell Defence, the Applicant admits subparagraph (b).

54. As to subparagraph <u>107</u> 74 of the Stanwell Defence, the Applicant admits subparagraphs (b), (c), (d) and (e).

H.2 Notified prices under standard contracts

- 55. As to paragraph <u>109</u> 76 of the Stanwell Defence, the Applicant admits subparagraphs (b) and (c).
- 56. As to paragraph <u>110</u> 77 of the Stanwell Defence, the Applicant admits subparagraphs (b), (c) and (e).

H.6 Purchasers under a power purchase agreement

57. As to paragraph <u>115</u> 82 of the Stanwell Defence, the Applicant admits subparagraphs (a) and (b).

J. DEFINED TERMS IN THE STATEMENT OF CLAIM

- 58. As to paragraph <u>132</u> 98, the Applicant admits the definitions of the terms set out therein.
- 59. Save as abovesaid, and save as to admissions contained in the Stanwell Defence, the Applicant joins issue with Stanwell upon the whole of its Defence.

Date: 21 June 2022 28 April 2023

Lawyer for the Applicant

This pleading was prepared by Greg Whyte, lawyer and settled by L.W.L. Armstrong <u>KCQC</u> and D.M. Bampton of counsel, with amendments prepared and settled by D.M. Bampton and J.R. <u>Green of counsel</u>.

Certificate of lawyer

I Valerie Blacker certify to the Court that, in relation to the reply filed on behalf of the Applicant, the factual and legal material available to me at present provides a proper basis for:

- (a) each allegation in the pleading; and
- (b) each denial in the pleading; and
- (c) each non admission in the pleading.

Date: 21 June 2022 28 April 2023

Lawyer for the Applicant

Annexure (Particulars)

Para	Particulars	
9(a)	(i)	AER, State of the Energy Market report 2014, including:
		While average spot prices in Queensland eased in 2013–14, they were 14 per cent higher than NSW prices, after previously being lower for several years. Queensland spot prices were volatile during summer, repeating a pattern of the previous year. Over the summer, the five minute dispatch price exceeded \$1000 per MWh on 50 occasions
		The rebidding strategies of some Queensland generators caused this volatility. Generators rebid capacity from lower to higher price bands during each affected trading interval. Demand and generation plant availability were within forecasts on each occasion, and pre-dispatch forecasts did not predict the price spikes. (p 8)
		Most rebids occurred late in the 30 minute trading interval and applied for very short periods of time (usually five to 10 minutes), allowing other participants little, if any, time to make a competitive response. CS Energy was by far the most active player rebidding capacity into high price bands (above \$10 000 per MWh) close to dispatch. Towards the end of the summer, other participants similarly rebid capacity from low to high prices, causing prices to spike more frequently. (p 8)
	(ii)	AER, Submission to the AEMC regarding the bidding in good faith rule, 2014, including:
		The AER's analysis shows that rebidding behaviour that diminishes the reliability of the forecasts and potentially compromises competition is increasing in frequency. In particular we have seen an increase in the frequency of rebidding in the latter half of the trading interval that severely compromises the forecasts and competitive behaviours from the preceding hours and may preclude a response from any participants not already operating. (pp 1, 2)
		Our analysis and reports have identified many instances where rebidding activity has reduced the accuracy of the pre-dispatch forecasts either as a result of participants not responding in a timely way to changes in material conditions or delaying their response to the last minute, limiting the extent to which others can respond. In the summer of 2013-14, there was significant price volatility in the Queensland region. We undertook detailed analysis on the drivers of this volatility as part of our Electricity Weekly report for the period ending 1 March. This analysis highlighted behaviour that produced short term price spikes (5 or 10 minutes in duration) from rebids close to the time of dispatch and/or late in a trading interval. (p 4)
		The figure shows that most of the rebids were made within the last three dispatch intervals of the relevant trading interval. Rebids made late in the trading interval potentially reduce the opportunity for, and number of, participants that can effectively and viably react to the high price. The figure shows that over the period [CSE], the largest portfolio in the Queensland region with the greatest capability to move quickly between price bands (based on rate of change) was, by far, the most active in rebidding very close to dispatch. (p 5)
		Figure 4 [not included] shows the 28 day rolling average for the Queensland region and in particular participants [CSE] and Stanwell for the period January 2012 to April 2014. These participants were named in our reports as contributing to high price events during these periods. (p 7)
	(iii)	AER, State of the Energy Market report, 2015, including:
		Wholesale electricity prices fell in 2014–15, except in Queensland, where generator bidding contributed to high summer prices. (p 2)

Para	Particulars		
		Queensland's generation sector is more highly concentrated than other mainland NEM regions, with Stanwell and [CSE] controlling 64 per cent of capacity. From November 2014 generators (including Stanwell, [CSE] and Callide (which is controlled by [CSE])) used rebidding strategies to shift large volumes of capacity from low to very high prices late in a trading interval. In tight market conditions, an unexpected shift in supply can cause prices to spike. By rebidding late, other participants lack sufficient time to respond, preserving a high 30 minute average spot price. (p 9)	
	(iv)	AER, State of the Energy Market report, 2017, including:	
		Opportunistic bidding by large generators has caused periods of spot market volatility in Queensland for several years, typically during summer. In summer 2014–15, for example, generators periodically rebid large volumes of capacity from low to very high prices late in a trading interval, typically on days of high energy demand and when import capability on transmission interconnectors was constrained. (p 56)	
		Similar patterns occurred in the Queensland market in summer 2015–16. Generators rebid capacity into high price bands on days when hot weather drove very high demand, typically when import capacity across the interconnectors to NSW was constrained. (p 56)	
	(v)	AER, Wholesale Energy Market Performance Report, 2018, including:	
		In Queensland, participants have previously taken advantage of the concentrated market and rebid large volumes of capacity from low to very high prices late in the trading interval, spiking prices. The strategy was typically used on days of high temperatures and high demand, and occurred most often during summer between 2013 and 2016. Rebidding late in a trading interval gives other participants little time to provide a competitive response, resulting in a high price. This can undermine the effectiveness of competition in the market. Since the Queensland Government direction to Stanwell in July 2017, price volatility due to generator rebidding has declined and there have been very few high prices despite record demand. (p 46)	
		The Applicant will refer to the full terms of the said Reports at the trial.	
9(b)(ii)	(1)	AER, State of the Energy Market report 2014, including:	
		Most rebids occurred late in the 30 minute trading interval and applied for very short periods of time (usually five to 10 minutes), allowing other participants little, if any, time to make a competitive response. (p 8)	
		The behaviour compromised the efficiency of dispatch, causing prices to spike independently of underlying supply-demand conditions. (p 8)	
		The AER in 2014 drew on its analysis of rebidding activity in Queensland to support a proposal by the South Australian Minister for Mineral Resources and Energy to strengthen and clarify the 'rebidding in good faith' provisions of the National Electricity Rules. The AER argued a recent rise in the incidence of late rebidding was making forecast information in the NEM less dependable, which affects market efficiency. (p 8)	
		The effects of late rebidding on price and market efficiency would be mitigated if the output of competing generators could adjust more quickly(p 8)	
	(2)	AER, Submission to the AEMC regarding the bidding in good faith rule, 2014, including:	
		All electricity market designs proscribe, in some way, certain behaviours by participants that are considered detrimental to efficient market operation. While the NEM is more laissez-faire than most	

Para	Particulars	
	other market models, relying instead on competition and quality information to deliver efficience outcomes, rebidding without a change in material conditions is prohibited. Moreover, rebidding way that prevents others from responding in a timely way is detrimental to achieving efficient competitive market outcomes. The Federal Court's interpretation of the Good Faith rebide provision has highlighted that the current rule does not provide the desired controls on behave anticipated when it was introduced nor does it meet the high level policy objectives agreed to NEM Ministers in 2002 and on which the current rebidding civil penalty is based. Ministers agrees that as a matter of policy, they: Oppose generator bidding and rebidding strategies that inconsistent with an efficient, competitive and reliable market, such as those not made in good for the blatant economic withdrawal of generation and the gaming of technical constraints. (p 1)	cient in a and ding riour o by reed are aith,
	As a security constrained, energy only, self-commitment market that allows rebidding up to the of dispatch, the NEM relies heavily on the principles of competition. To establish an opti equilibrium in such a market, participants need reliable forecasts against which to gauge the position and, time to respond. The AER's analysis shows that rebidding behaviour that diminist the reliability of the forecasts and potentially compromises competition is increasing in frequency particular we have seen an increase in the frequency of rebidding in the latter half of the trade interval that severely compromises the forecasts and competitive behaviours from the precent hours and may preclude a response from any participants not already operating. In a competer market it is critical that market participants are able to alter their position without a clear object reason or in order to effectively prohibit others from responding, competition and the objective the market are compromised. (pp1, 2)	time imal their shes y. In ding ding itive onse ctive es of
	Our analysis and reports have identified many instances where rebidding activity has reduced accuracy of the pre-dispatch forecasts either as a result of participants not responding in a tir way to changes in material conditions or delaying their response to the last minute, limiting the ext to which others can respond. (p 4)	the nely ttent
	Effective competition relies on market participants having dependable forecasts against which the forward exposure can be assessed and sufficient time to respond to changes. The process achieve equilibrium occurs over time and involves participants effectively settling on an acceptate position after which no further rebidding is needed. Late rebidding changes the forecast manual outcomes against which participants had judged their position at the end point just prior to dispate This diminishes the perceived reliability of market forecasts, and effectively reduces the opportunity or can preclude, a response from other participants. (p 4)	their s to able irket atch. nity,
	Rebids made late in the trading interval potentially reduce the opportunity for, and numbe participants that can effectively and viably react to the high price. (p 5)	r of,
	3) AER, State of the Energy Market report, 2015, including:	
	In tight market conditions, an unexpected shift in supply can cause prices to spike. By rebide late, other participants lack sufficient time to respond, preserving a high 30 minute average s price. (p 9)	ding spot
	4) AER, State of the Energy Market report, 2017, including:	
	Opportunistic bidding by large generators has caused periods of spot market volatility in Queensl for several years, typically during summer. In summer 2014–15, for example, generators periodic rebid large volumes of capacity from low to very high prices late in a trading interval, typically days of high energy demand and when import capability on transmission interconnectors	land cally y on was

Para	Particulars
	constrained. By rebidding late in a trading interval, other generators lacked time to respond by ramping up their output. (p 56)
	The Applicant will refer to the full terms of the said Reports at the trial.
9(c)(ii)	AER, Submission to the AEMC regarding the bidding in good faith rule, 2014, including:
	All electricity market designs proscribe, in some way, certain behaviours by participants that are considered detrimental to efficient market operation. While the NEM is more laissez-faire than most other market models, relying instead on competition and quality information to deliver efficient outcomes, rebidding without a change in material conditions is prohibited. Moreover, rebidding in a way that prevents others from responding in a timely way is detrimental to achieving efficient and competitive market outcomes. The Federal Court's interpretation of the Good Faith rebidding provision has highlighted that the current rule does not provide the desired controls on behaviour anticipated when it was introduced nor does it meet the high level policy objectives agreed to by NEM Ministers in 2002 and on which the current rebidding strategies that are inconsistent with an efficient, competitive and reliable market, such as those not made in good faith, the blatant economic withdrawal of generation and the gaming of technical constraints. (p 1)
	As a security constrained, energy only, self-commitment market that allows rebidding up to the time of dispatch, the NEM relies heavily on the principles of competition. To establish an optimal equilibrium in such a market, participants need reliable forecasts against which to gauge their position and, time to respond. The AER's analysis shows that rebidding behaviour that diminishes the reliability of the forecasts and potentially compromises competition is increasing in frequency. In particular we have seen an increase in the frequency of rebidding in the latter half of the trading interval that severely compromises the forecasts and competitive behaviours from the preceding hours and may preclude a response from any participants not already operating. In a competitive market it is critical that market participants are able to alter their position in the market in response to changing conditions. However, when participants change their position without a clear objective reason or in order to effectively prohibit others from responding, competition and the objectives of the market are compromised. (pp1, 2)
	The Applicant will refer to the full terms of the said Reports at the trial.
9(d)(iii)	(1) AER, State of the Energy Market report, 2015, including:
	Queensland's generation sector is more highly concentrated than other mainland NEM regions, with Stanwell and [CSE] controlling 64 per cent of capacity. From November 2014 generators (including Stanwell, [CSE]and Callide (which is controlled by [CSE])) used rebidding strategies to shift large volumes of capacity from low to very high prices late in a trading interval. (p 9)
	(2) AER, Wholesale Electricity Market Performance Report, 2018, including:
	We cannot rule out that a lack of competitive constraint contributed to higher offers—in particular for Queensland black coal generators which did not face higher fuel costs (section 4.1.2) (p 13)
	In most regions, the output of a few large participants is necessary to meet demand for a significant proportion of the time, even accounting for the availability of imports. At these times, the large participants are considered 'pivotal' to meeting demand and may have an increased ability to exercise market power. (p 29)
	In Queensland, the largest participant (either Stanwell or [CSE]) is needed to meet demand around 20 per cent of the time. When both state owned generators, Stanwell and [CSE], are considered together), some of their generation is needed to meet demand 100 per cent of the time. This implies the Queensland market may be susceptible to uncompetitive outcomes. (p 29)

Para	Part	iculars
		In Queensland, the two government owned participants (Stanwell and [CSE]) can exercise market power, due to their dominant market position but recent directions from the Queensland Government have limited their price spiking behaviour. Over the past five years rebidding resulted in price spikes and volatility. But this behaviour was reduced by an AEMC rule change and effectively stopped in mid-2017 when the Queensland Government instructed Stanwell to put downward pressure on spot prices. The ACCC recommended changes to address this problem, including that the Queensland Government should divide its generation assets into three generation portfolios to reduce market concentration. (p 32)
		A range of conduct is typically associated with the exercise of market power in energy markets. Participants can use strategies within a trading day to spike prices or engage in longer term strategies, including: (p 37)
		 rebidding capacity from low to high prices close to dispatch. This type of behaviour can limit the ability of other participants to respond to price signals competitively. (p 37)
		In Queensland, participants have previously taken advantage of the concentrated market and rebid large volumes of capacity from low to very high prices late in the trading interval, spiking prices. (p 46)
		The Applicant will refer to the full terms of the said Reports at the trial.
9(e)	(i)	AER, State of the Energy Market report, 2014, including:
		While average spot prices in Queensland eased in 2013–14, they were 14 per cent higher than NSW prices, after previously being lower for several years. Queensland spot prices were volatile during summer, repeating a pattern of the previous year. Over the summer, the five minute dispatch price exceeded \$1000 per MWh on 50 occasions. (p 8)
		The rebidding strategies of some Queensland generators caused this volatility. Generators rebid capacity from lower to higher price bands during each affected trading interval. Demand and generation plant availability were within forecasts on each occasion, and pre-dispatch forecasts did not predict the price spikes. (p 8)
		The behaviour compromised the efficiency of dispatch, causing prices to spike independently of underlying supply-demand conditions. The average Queensland price for summer 2013–14 was \$68.77 per MWh. Had the short term price spikes not occurred, the average price would have been 18 per cent lower at \$56.10 per MWh. The increase represents a wealth transfer of almost \$200 million based on energy traded. More generally, spot price volatility puts upward pressure on forward contract prices, which ultimately flows through to consumers' energy bills. (p 8)
	(ii)	AER, Submission to the AEMC regarding the bidding in good faith rule, 2014, including:
		In the summer of 2013-14, there was significant price volatility in the Queensland region. We undertook detailed analysis on the drivers of this volatility as part of our Electricity Weekly report for the period ending 1 March. This analysis highlighted behaviour that produced short term price spikes (5 or 10 minutes in duration) from rebids close to the time of dispatch and/or late in a trading interval. (p 4)
		Rebidding late in a trading interval may be profitable for some participants, but it may also impose costs on others and on consumers through inefficient dispatch. It may also drive a greater need for risk management instruments that will also result in higher prices to consumers. (p 4)
		The average price in Queensland for the summer period was \$68.77/MWh. However, had the 50 short-term price spikes not occurred (in other words, excluding them from our data set), the average

Para	Particulars		
	price would have been \$56.10/MWh, a reduction of \$14.60/MWh. This repres of almost \$200m based on energy traded. In a region where the supply/den that some units have been mothballed, this volatility is significant and will hav contract prices, ultimately flowing through to consumers' bills. (p 5)	ents a wealth transfer nand balance is such ve influenced forward	
	(iii) AER, State of the Energy Market report, 2015 including:		
	Wholesale electricity prices fell in 2014–15, except in Queensland, whe contributed to high summer prices. (p 6)	re generator bidding	
	Queensland was the only region in 2014–15 to record an increase in prices. highest wholesale electricity prices (averaging \$61 per MWh) for the first time (p 8)	It also had the NEM's e in over a decade	
	Queensland's spot market volatility also raised contract prices in forward ma estimated the late rebidding added around \$8 per MWh to Queensland price of quarter 2014, and around \$7 per MWh in the March quarter 2015. Across the represented a cost of around \$170 million. (p 9)	rkets. Ernst & Young caps in the December market, this increase	
	The Applicant will refer to the full terms of the said Reports at the trial.		
10(b)	The fact the rule change was prompted by the conduct of Stanwell (and CSE) can b	be inferred from:	
	(i) the conduct of Stanwell (and CSE) as reported by the AER, as particularised in	ı paragraph 9 above;	
	 the terms of the AEMC Final Rule Determination, National Electricity Amendm Faith) Rule 2015, dated 10 December 2015, including: 	ient (Bidding in Good	
	(T)here is evidence on the face of it that in some cases, what appears to rebidding has led to additional price volatility, leading to the economic harms d of Summary)	o be deliberately late escribed above. (p iii	
	In order to assess the materiality of the issues raised, the Commission I qualitative and quantitative analysis In late 2015, the Commission engag undertake a statistical analysis of the relationship between price volatility, late r market prices and traded volumes for each NEM region over the period from quarters of 2015	nas undertaken both ed Ernst & Young to ebidding and contract 2007 to the first two	
	The work undertaken by Ernst & Young indicates that deliberately late rebiddin a significant consequential effect on the prices of financial hedge contra participants are paying a premium on contract market products in order to many that arises from deliberately late rebidding these results in conjunction w evidence provided by stakeholders strongly indicate that deliberately late rebidd effect on the NEM (pp iv, v of Summary)	ng behaviour has had icts. In effect, some age the price volatility vith the circumstantial ing has had a material	
	The Commission considers that the current rules do not set adequate bound some participants to influence price outcomes to the detriment of others. This efficient market. (p v of Summary)	aries on the ability of is not reflective of an	
	Consequently, the Commission's final rule seeks to recast generators' offers a their willingness to provide supply at the prices specified in them. The making deemed to represent to other market participants that the offer or rebid will no the generator becomes aware of a change in the material conditions and circuit the offer or rebid is based (p vi of Summary)	as a representation of of an offer or rebid is ot be changed unless mstances upon which	

Para	Particulars
	The final rule will also introduce new information recording requirements for rebids made close to dispatch These late rebidding records will provide an additional source of contemporaneous information to the AER regarding rule compliance at times when rebidding has a higher probability of resulting in inefficient market outcomes (p vi of Summary)
	(iii) the terms of the AEMC – Five Minute Settlement Working Group Working Paper No 1 (October 2016), including:
	One of the concerns about the mismatch between settlement and dispatch is that the settlement arrangements create differing incentives over the course of a trading interval. A key question is whether this distortion of incentives has affected market outcomes and, if so, whether the effect is material. To investigate this question, we have examined average unders and overs for each of the six dispatch intervals (i.e. DI 1 to DI 6) in Queensland from 2004 to 2016 YTD. In Figure 6 these are expressed as annual averages for each dispatch interval. (p 18)
	Between 2013 and 2015 overs were considerably greater in DI 6, and to a lesser extent in DI 1. This
	 there was some structural reason why dispatch prices tended to be higher in DI 1 and DI 6 (e.g. the daily peak may have consistently occurred between 4:55 and 5pm); or (p 18) the arrangements for 30-minute settlement create incentives that lead to dispatch prices being higher in DI 1 or DI 6. (p 19)
	To determine which of the two is the case, Figure 7 sets out a comparison of average 5- minute and 30-minute prices in Queensland for the years 2013 to 2015 by time of day. (p 19)
	The difference between the trading and dispatch prices is unambiguous, and is consistent with the variation results for Queensland in Figure 6. (p 19)
	The sharp, volatile nature of the dispatch prices is surprising, particularly when we recognise that this chart is not for a single day, but for 3 years' worth of observations (i.e. each point on the light blue line is the average of 1095 data points). It is therefore unlikely that the volatility in dispatch prices is a result of 'random noise' – something structural in either supply or demand is influencing the outcome. (p 19)
	Figure 8 compares 5-minute prices with demand (in the form of the median, 5th and 95th percentiles of demand) over the same period. There does not appear to be any structural variation in demand to account for the variability in average dispatch prices(p 19)
	We therefore turn to whether the volatility is related to the period in the dispatch interval. Figure 9 overlays a set of labels onto Figure 7 indicating the price spikes that occur in DI 6. The vast majority of spikes in the average spot price occur in DI 6. (p 20)
	This result appears to support the concerns of Sun Metals, and others in the market, that the skewing of incentives caused by 30-minute settlement has a material effect on price outcomes. (p 21)
	 (iv) the terms of the AEMC Rule Determination, National Electricity Amendment (Five Minute Settlement) Rule 2017 including:
	The Commission is satisfied that the more preferable final rule will, or is likely, to better contribute to the NEO [National Electricity Objectives] for the following reasons:
	 <u>Improved bidding incentives</u>. Five minute settlement removes the potential for the 30 minute trading interval to play a coordination role in generators' bidding strategies. Evidence suggests that, at times, generators' bidding behaviours lead to high price events. That is, there is artificially increased price volatility that cannot be explained by the underlying physical condition of the market. These price events invite generation and consumption patterns where market participants 'pile in' to take advantage of the high prices. Given that

Para	Particulars
	these price events and subsequent generation and consumption decisions are independent of the power system's need, they are inefficient. Five minute settlement will better align generator's bidding strategies with the efficient outcome of the market. Reduced incentives to induce high prices and volatility is likely to lead to reduced hedging costs for retailers and will lead to reduced costs for consumers. (p 14)
	Perverse bidding behaviour
	Without strategic bidding, we would expect to see price spikes uniformly distributed within the trading intervals as they would be driven by supply and demand conditions which are, except for some notable exceptions, independent of the trading intervals. The Commission considers that the fact that price spikes are more likely to occur in the first and the last dispatch intervals cannot easily be explained without consideration of strategic bidding behaviour. (p 29)
	generators face mixed incentives. They want to achieve high sales and high prices. Two ways in which these incentives play out under 30 minute settlement are:
	 Late price spike: A generator that has achieved high sales volume by being dispatched early in a 30 minute trading interval could then shift its capacity to high price bands in an attempt to spike the price in dispatch interval five or six, and thereby achieve a high average price for the half hour.
	2. Early price spike: Once a price spike has occurred, generators have an incentive to shift capacity to low prices to maximise their sales volume for the half hour, which will be compensated at the high average price. As generators will seek to achieve high sales volumes and high prices the first and the last dispatch intervals are increasingly likely to fulfil the role of a common strategic reference point in generators' bidding strategies. (p 29)
	This behaviour is directly attributable to the mismatch between five minute dispatch and 30 minute settlement. It is important to note, that explicit collusion or communication is not required, as generators' common understanding of the preferred strategic outcome can be enough to achieve a desired price outcome (pp 29, 30)
	Analysis by the Commission suggests that since the Bidding in Good Faith rule was made, this specific behaviour, while still present, is less dominant. However, other types of behaviour appear to have emerged. The following sections summarise these outcomes. (p 30)
	Persistent late and early price spikes Early price spikes within a trading interval increase the certainty of a settlement price that is above the operating cost of the plant. Under these conditions, selling more volume in the subsequent dispatch intervals within the trading interval becomes the strategic priority by rebidding to shift more MW quantities into the lower price bands (p 30)
	The analysis presented by Seed Advisory and attached to the submission by Origin Energy also found that late price spikes continued to persist after the implementation of the rule change. Seed Advisory also found no easily observable relationships between underlying demand or supply changes and high price in the last dispatch interval (p 34)
	Artificial volatility and price risk The Commission considers that the existing framework is incentivising behaviour that may also be contributing to a degree of artificial volatility in the market. This volatility is not a function of underlying uncertainty, market risk or system need. Rather, it is driven by the price bidding behaviour of participants. This increased price risk affects generators as well as those loads that are spot exposed. To the extent that there is an increase in risk, this would also increase the cost of supply and retail prices for consumers. (p 34)

Para	Particulars
	The Commission considers that the provisions introduced as a result of the Bidding in Good Faith rule will result in less instances of price spikes caused by generators rebidding capacity to higher price bands very close to dispatch (p 35)
	The Applicant will refer to the full terms of the said Reports at the trial.