
Boral fly ash offtake agreement at Tarong Power Station

Supplementary submission by Boral
Cement Limited and Stanwell Corporation
Limited in support of their application for
Authorisation

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1 Executive Summary

1.1 Overview

This submission is made by Boral Cement Limited (**Boral**) and Stanwell Corporation Limited (**Stanwell**) (together, the Parties), and relates to the Application for Authorisation (AA1000517-1) made by Boral in relation to the offtake, operation and maintenance agreement (**OOMA**) to which Boral and Stanwell are parties. The OOMA is conditional upon the construction of a fly ash offtake facility at Tarong Power Station (**Tarong PS**) under a Design and Construct Contract (**DCC**). Together, the OOMA and DCC comprise the agreement between Boral Cement and Stanwell (the **Agreement**).

The purpose of this joint submission is to address questions that have been raised in Boral's preliminary discussions with the ACCC and in third-party submissions in response to the Application.

The Parties consider that the Agreement represents the best available option to efficiently bring Tarong PS fly ash to market in a way that maximises both the return on investment for Stanwell and sales to third parties on competitive terms.

Further, the Agreement will have the effect of increasing the supply of fly ash into the market in circumstances where Boral is **Restriction of publication claimed** commercially incentivised to supply to third parties. As Boral does not currently have direct access to fly ash from any other power station, there will be no material consolidation in the market for the supply of fly ash, but rather increased access and choice for end users. It is Boral's intention to build a fly ash business which meets current fly ash demand and stimulates further growth in this market, promoting the increased use of fly ash with significant cost and environmental benefits for users of cementitious materials. The outcome of bringing this ash to market under the Agreement can only be pro-competitive.

1.2 The Agreement is the most efficient and competitive option for off take at Tarong PS

The current Application must be considered against the history of fly ash removal and commercialisation at Tarong PS.

This history includes an arrangement with Cement Australia, which was the subject of prosecution by the ACCC. Following the expiry of the subsequent amended and ACCC-authorized arrangements (including in relation to Tarong PS offtake), Cement Australia removed its offtake infrastructure from Tarong PS. Following a tender process for a third party to collect and market fly ash from Tarong PS, a contract was entered into with Coal Reuse in 2014 and those offtake arrangements were notified to the ACCC. Ultimately, Coal Reuse's operations failed when it went into liquidation before constructing an offtake facility. While Cement Australia was experienced in the market but did not supply to third parties, Coal Reuse apparently lacked the established supply chains and relationships to successfully offtake and market fly ash.

The Agreement with Boral addresses both these limitations.

Following the 2018 expression of interest process, Stanwell selected Boral based on its assessment of the expression of interest responses and the subsequent term sheet

negotiations. Stanwell has assessed that the Agreement most closely aligns with its strategy as set out in Stanwell's response to the ACCC dated 14 July 2020 (the **Stanwell Response**), as the Agreement maximises offtake and ensures that Boral has the incentive to supply to the market in a competitive way. At the same time, Stanwell has ensured it will receive an adequate return on its investment in the offtake facility and will retain ownership of that facility.

The Agreement between the Parties seeks to achieve a more competitive outcome than has existed at Tarong PS in recent times or is likely to exist in the counterfactual.

The Agreement will result in the construction of a fly ash collection and sorting facility that is built to Stanwell's specification and will remain in its ownership. Under the Agreement, Boral has a right to collect and take fly ash for 5 years. The Agreement is renewable at the option of either party for a further 5 years (subject to conditions), and further extensions thereafter are by agreement.

1.3 The OOMA addresses barriers to offtake and supply of Tarong PS fly ash

The OOMA includes minimum take or pay obligations which require Boral to acquire a minimum volume of fly ash per annum. These obligations ensure that the facility will operate efficiently and are necessary for Stanwell to recover its investment in constructing the facility, enabling it to make sufficient revenue to recover its construction costs within ten years of the life of the facility. The minimum take or pay obligations incentivise Boral to supply fly ash into the contestable market, adding capacity into the fly ash market and increasing supply sources for downstream users of fly ash, including independent concrete producers. Boral will not be able to stockpile excess fly ash **[Restriction of publication claimed]** it will, supply to third parties on competitive terms. **[Restriction of publication claimed]**. It is also consistent with Boral's own commercial plans to develop an ash business and grow demand for ash products.

[Restriction of publication claimed] The Agreement is very different to the Cement Australia or Coal Reuse arrangements (both of which were ultimately approved by the ACCC in some form). The Agreement will result in an increase in supply volumes, competition for that supply, and significant public benefits in the form of efficiency and environmental benefits.

The Agreement should be authorised on the basis that it incentivises Boral to supply fly ash to third parties and the outcome will be pro-competitive and efficient .

1.4 Issues addressed in submission

This submission addresses the following issues:

- 1 How the Agreement is different from those previously in place with Cement Australia and Coal Reuse.
- 2 Why the proposed offtake model is different to the models employed at other power stations.
- 3 How Boral is incentivised **[Restriction of publication claimed]** to supply fly ash to third parties, improving access to fly ash for independent users, including non-vertically integrated concrete producers.

- 4 The availability of alternatives which will continue to be available to end users of fly ash, including independent concrete producers.
- 5 Why the Agreement provides a more competitive market and better security of supply than the likely counterfactual.

In addition to the pro-competitive effects, the significant public benefits associated with the Agreement outweigh any possible reduction in future potential competition as a result of the OOMA, including environmental, economic, and commercial benefits.

2 The Agreement is the result of a competitive EOI process and informed by Stanwell’s previous experiences

2.1 Background to the offtake and sale of fly ash at Tarong PS

Stanwell and its predecessor at law in respect of ownership of Tarong PS, Tarong Energy Corporation Limited (**Tarong Energy**), have a long history of selling fly ash and other Coal Combustion Products (**CCPs**) from Tarong PS.

Historically, the Queensland Electricity Commission (**QEC**), which was responsible for electricity generation and supply in Queensland until 1995, had contracts with Pozzolanic Enterprises Pty Ltd (**Pozzolanic**) for the exclusive supply and removal of fly ash from all power stations owned by the Queensland Government including Tarong PS.

In 1995, QEC was dissolved and ownership of the State's power stations was transferred to the Queensland Generation Corporation trading as AUSTA Electric. The contracts between QEC and Pozzolanic were transferred to AUSTA Electric at that time.

Following corporatisation of Tarong Energy, the term of the Tarong PS contract with Pozzolanic (which was transferred to Tarong Energy) was amended to provide that the contract was in effect from August 1999 until 1 September 2001. The contractual arrangements in place at Tarong PS since September 2001, and the commercial negotiations that occurred for these arrangements, are set out below.

Table 1 History of contractual arrangements at Tarong PS

Date	Event
December 2000	Tarong Energy entered into a one-year contract with Pozzolanic to commence on 1 September 2001.
<i>2001 EOI Process / 2003 Pozzolanic Agreement</i>	
August 2001	Tarong Energy issued a public expression of interest for the sale and removal of fly ash at Tarong PS (2001 EOI Process), for contracts for the period 2002 – 2005. Any contract entered into following the 2001 EOI Process was to commence when the one-year contract with Pozzolanic dated December 2000 expired on 31 August 2002.

February 2003	Following a detailed review of tender proposals received in response to the 2001 EOI Process, Tarong Energy entered into a further agreement with Pozzolanica for the sale and removal of fly ash from Tarong PS and Tarong North Power Stations (Tarong North PS) for five years (2003 Pozzolanica Agreement).
2005	In response to third party interest expressed subsequent to 2003, and with a view to maximising the likelihood of alternative viable propositions for fly ash off take during future public tender processes, Tarong Energy entered into a number of agreements for the taking of test quantities of ash from Tarong North PS.
<i>2006 EOI and Tender Process / 2010 Proposed Pozzolanica Agreement</i>	
May 2006	<p>Tarong Energy again publicly advertised for expressions of interest for the sale and removal of fly ash and bulk materials at Tarong PS and Tarong North PS (2006 EOI Process), for contracts for the periods 2007 – 2008, 2008 – 2010 and 2010 – 2013. Following the 2006 EOI Process, Tarong Energy issued Invitations to Tender (2006 Tender Process) to facilitate the negotiation of arrangements to replace the 2003 Pozzolanica Agreement (which was due to expire in February 2008).</p> <p>The negotiation of commercial terms during the 2006 Tender Process was protracted. To enable the continued sale and removal of fly ash from Tarong PS and Tarong North PS pending conclusion of negotiations flowing from the tender process, the 2003 Pozzolanica Agreement was extended periodically until commencement of commercial arrangements following the 2006 Tender Process.</p>
Late 2009 and early-mid 2010	<p>As a result of the 2006 Tender Process, Tarong Energy and Tarong North Pty Ltd (Tarong North) entered into a number of arrangements, including the following arrangements with Pozzolanica:</p> <ul style="list-style-type: none"> (a) an Interim Fly Ash Supply Agreement to allow Pozzolanica to seek the ACCC's authorisation for a new long-term fly ash supply arrangement; and, (b) a long-term agreement for the supply of fly ash from Tarong and Tarong North Power Stations (2010 Proposed Pozzolanica Agreement).
<i>2010 EOI Process / 2010 Authorised Pozzolanica Agreement</i>	
June 2010	Tarong Energy issued a further request for expressions of interest (2010 EOI Process). The 2010 EOI Process publicly requested expressions of interest for the removal and/or utilisation of CCPs from Tarong PS and Tarong North PS. Any sale of CCPs following the 2010 EOI Process was intended to be in addition to Tarong

	Energy's then existing contracts for the removal and sale of quantities of CCPs from both Tarong and Tarong North PS (including the 2010 Proposed Pozzolanic Agreement).
December 2010	Pozzolanic lodged an application for authorisation on its own behalf and on behalf of Cement Australia Pty Ltd and Cement Australia Holdings Pty Ltd in relation to the 2010 Proposed Pozzolanic Agreement.
Around July 2011	ACCC granted conditional authorisation to Pozzolanic to make and give effect to an amended version of the 2010 Proposed Pozzolanic Agreement until 1 March 2014 (2010 Authorised Pozzolanic Agreement).
<i>2013 EOI Process / Arrangement with Coal Reuse</i>	
2013	<p>As set out in the Stanwell Response, in preparation for the expiration of the 2010 Authorised Pozzolanic Agreement in 2013, Stanwell conducted an expression of interest process (2013 EOI Process) for the removal and/or utilisation of CCPs from Tarong PS, Tarong North PS and the Stanwell Power Station (Stanwell PS), in which Coal Reuse was selected as the preferred participant.</p> <p>After being unsuccessful in the 2013 EOI Process, Cement Australia removed its facility from Tarong PS.</p>
Around July 2014	Coal Reuse lodged a notification with the ACCC in respect of its proposal to acquire CCPs from Stanwell on condition that Stanwell will not, except to a limited extent under existing contracts, supply CCPs to other parties. The ACCC did not object to that notification.
2016	<p>The arrangement with Coal Reuse was based on infrastructure construction and ownership by Coal Reuse. Coal Reuse did not have any demand for CCPs itself, and its intention was to act solely as a reseller of the CCPs it acquired from Stanwell. This model was unsuccessful and, as set out in the Stanwell Response, Coal Reuse did not construct the proposed offtake facility at Tarong PS. In 2016 Coal Reuse was placed in liquidation and its contract with Stanwell was terminated.</p> <p>In 2016, after the contract with Coal Reuse was terminated, Stanwell conducted a further EOI process to gauge interest in the offtake of CCPs from Stanwell's coal-fired generation sites located at Tarong PS, Tarong North PS, Stanwell PS and the Meandu Mine. The market demand identified at that time was insufficient to support a business case for Stanwell to make an investment in an offtake facility at Tarong PS. Further detail is included in the Stanwell Response.</p>

2.2 2018 EOI Process and the Parties' Agreement

The Agreement between the Parties is the result of the competitive EOI process run by Stanwell in 2018 (**2018 EOI Process**). Stanwell conducted the 2018 EOI Process for the reasons set out in the Stanwell Response. Stanwell expected that a competitive EOI process would most effectively identify all interested parties and enable Stanwell to identify its preferred counterparty.

Stanwell's strategy as set out in the Stanwell Response, and the 2018 EOI Process, has been strongly informed by Stanwell's previous experiences in relation to the sale of fly ash from the Tarong PS. For example:

- (a) a key requirement is that Stanwell must own the to-be-constructed offtake facility. This is to ensure the facility cannot be removed if the off-taker is subsequently replaced, as occurred when Cement Australia removed its facility from the Tarong PS in 2014.
- (b) Stanwell's strategy now involves entering into an arrangement with a counterparty that can take fly ash for its own demand requirements as well on-supply to third parties. This follows Stanwell's experience with Coal Reuse and the apparent ineffectiveness of the model used by Coal Reuse (to solely on-supply fly ash to third parties).

Stanwell's experiences have also informed its strategy to enter into a take or pay arrangement that will provide Stanwell with a return on its investment in the offtake facility infrastructure, maximise offtake and incentivise the sale of fly ash to third parties. The minimum take or pay commitment in the OOMA represents the negotiated balance between this requirement of Stanwell's and Boral's assessment of its internal needs and market demand.

Further details of Stanwell's strategy and the 2018 EOI Process are set out in the Stanwell Response.

3 The Agreement does not raise the same issues as the previous Cement Australia arrangements

The Agreement between Stanwell and Boral does not raise the same issues as the previous arrangement with Pozzolanica for four key reasons as set out below.

3.1 The OOMA relates to Tarong PS only

The 2010 Authorised Pozzolanica Agreement included the offtake of fly ash from both Tarong PS and Tarong North PS. In contrast, the OOMA entered into between Stanwell and Boral does not include offtake of fly ash from Tarong North PS. Stanwell remains willing to engage with third parties directly in relation to the offtake of fly ash from Tarong North PS.

The effect of this is to provide potential off-takers, and customers for fly ash, with more choice of fly ash sources and suppliers, avoiding any potential concentration of fly ash supply rights within the market. The Parties note that, while the initial 2018 EOI Process

invited interested parties to tender for both Tarong PS and Tarong North, Boral elected to only submit an expression of interest response in relation to offtake from the Tarong PS.

3.2 Boral will supply fly ash to third parties

The terms of the Agreement with Boral impose obligations on Boral to supply fly ash to third parties. Specifically, subject to Boral's own offtake requirements (and those of its related bodies corporate), the availability of fly ash supplied by Stanwell, and capacity constraints, the OOMA requires Boral to:

- (a) make fly ash available for sale to third parties on a non-exclusive basis and on reasonable commercial terms, using its best endeavours to maximise the sales of fly ash;
- (b) not unreasonably refuse to supply fly ash to third parties or discourage reasonable offers from third parties to acquire fly ash; and
- (c) not have regard to its, or its related bodies corporate's, participation in any downstream market in which fly ash is supplied or used, in making or managing fly ash sales to third parties.

These obligations mean that Boral cannot withhold supply of fly ash from third parties.

[Restriction of publication claimed]

Similar obligations and incentives were not part of the 2010 Authorised Pozzolanic Agreement.

3.3 Boral is effectively a new entrant into the market for the supply of fly ash

Boral's current position is different to Pozzolanic's position during the previous arrangements. For instance, Boral does not currently have direct access to another source of fly ash (unlike Pozzolanic, which had offtake agreements with multiple power stations) and Boral will not be the owner of the facility it builds at Tarong PS.

Again, the effect of this is to avoid concentration of fly ash offtake rights and consolidation in the market for the supply of fly ash in South East Queensland (**SEQ**) and beyond.

3.4 The geographic limits of the relevant markets have become wider

Stanwell and Boral understand that the geographic limit of the relevant markets has changed since the Court considered the fly ash market in the Cement Australia case.¹ In that case, the Court found that the relevant markets were the market for concrete grade fly ash in SEQ and areas of north-east New South Wales adjacent to the Queensland border (**SEQ Region**) and the market for unprocessed fly ash in the SEQ Region. By reason of the geographic distances and transport costs involved, fly ash produced or supplied in places outside the SEQ Region was not, in the period of the conduct in question, economically substitutable for fly ash produced or supplied in the SEQ Region.

¹ *ACCC v Cement Australia and Ors* [2013] FCA 909. The Court's finding as to the relevant markets were not the subject of appeal.

In contrast, Stanwell and Boral now understand that the markets are likely to encompass a wider geographic area than just the SEQ Region. For example, and as set out in the Stanwell Response, Stanwell understands that fly ash produced in Queensland is used and sold interstate and is aware that Cement Australia has shipped fly ash to the southern states.

In particular, Stanwell understands that the lack of fly ash source in Victoria and the inconsistent availability of fly ash from sources in New South Wales mean that, demand for cement grade fly ash in New South Wales and Victoria is greater than the supply of fly ash in those States, resulting in the export of fly ash from Queensland to those States. For example, Boral understands that in 2019 Cement Australia shipped via the Port of Gladstone around 300kt of fly ash from the Gladstone and Callide power stations to locations in New South Wales, Victoria and South Australia.

In addition, Stanwell understands that, due to a combination of factors including low shipping costs, a surplus of fly ash overseas and the high demand for fly ash in Australia, fly ash is being imported into Australia.

Stanwell and Boral also note that the ACCC, in its assessment of Coal Reuse's notification, considered the geographic scope of the markets for the supply and acquisition of unprocessed fly ash and concrete grade fly ash may be broader than SEQ.²

The broadening of the geographic markets as suppliers and users import and export fly ash between Australia's regions means that, for customers of fly ash within SEQ, there is a greater breadth of alternative supply sources than existed when previous arrangements were considered by the ACCC.

4 Stanwell has assessed the Agreement as the best available option

For the reasons set out in the Stanwell Response, Boral was selected as the preferred participant following the 2018 EOI Process. That process was an open, competitive tender designed to test the market.

Stanwell selected Boral based on its assessment of the expression of interest responses and the subsequent term sheet negotiations. Accordingly, Stanwell considers that the Agreement with Boral most closely aligns with its strategy as set out in the Stanwell Response, including by maximising offtake, ensuring Stanwell receives a return on its investment in the offtake facility, incentivising sales by Boral to third parties and reducing offtake risk for Stanwell.

5 Increased access to Tarong Power Station fly ash for third parties including independent concrete producers

5.1 The Agreement increases access to fly ash from Tarong PS

As explained in Boral's submission in support of the Application dated 3 June 2020 (**Initial Boral Submission**) and the Stanwell Response, there is currently no facility for the offtake of fly ash at Tarong PS and Stanwell does not currently sell fly ash produced

² <https://www.accc.gov.au/system/files/public-registers/documents/D15%2B178243.pdf> at [5.7].

at Tarong PS. That fly ash is currently deposited in the Meandu Mine voids or in the Tarong Ash Dam.

The Agreement will result in Tarong PS fly ash being made available to the market for the first time in approximately four years. As noted in section 2 above, the minimum take-or-pay obligations in the Agreement provide Stanwell with the certainty and return necessary to enable it to recover its investment in the fly ash collection and grading equipment being constructed by Boral as part of the Agreement. Stanwell would not be investing in the facility absent an adequate return on investment.

It is the case that Boral has the right to take, and is obliged to use reasonable endeavours to do so, a minimum volume of fly ash from the facility for a minimum of 5 years. However, it is important to note that this right and obligation will not preclude access by third parties to Tarong PS fly ash. To the contrary:

- Boral has a positive obligation to on-supply fly ash to third parties;
- Boral is strongly incentivised to supply to third parties as the volume of fly ash it takes will be greater than its internal consumption needs;
- As the ACCC is aware from previous confidential submissions, Boral plans to supply to independent users of fly ash and has assessed that independent concrete producers are likely to acquire fly ash from it;³
- Boral's rights to take and market fly ash from Tarong PS do not extend to surplus CCPs or 'reject ash' (as described in section 6.1 below). There is nothing to preclude Stanwell making these products available to other customers; and
- Although the 2018 EOI Process invited expressions of interest to take fly ash at both Tarong PS and Tarong North PS, Boral elected to only submit an expression of interest response in relation to offtake from the Tarong PS. Fly ash produced at Tarong North PS is therefore directly available for other third parties to take, should they wish to bypass Boral.

5.2 Availability of fly ash for third parties including independent concrete producers

The minimum take-or-pay obligations under the Agreement do not diminish the availability of, or limit access to, fly ash for third parties, including independent concrete producers. Contrary to the submission of Nucrush Group,⁴ the Agreement will not limit access to fly ash; it will open further access to fly ash that was otherwise not being supplied to market.

It is important to note that, when selecting its preferred counterparty under the 2018 EOI Process, Stanwell had regard to the party's ability to successfully and sustainably enter the fly ash market. As described in section 2 above, Stanwell's experience with Coal Reuse after the 2013 EOI Process demonstrated the need for a potential counterparty to have experience and knowledge in fly ash. Of the parties that participated in the 2018 EOI Process, Stanwell assessed Boral as the best option to facilitate the supply of Tarong PS fly ash to the market.

³ See: Confidential Attachments B and D to Boral's response to ACCC information requested, dated 8 July 2020.

⁴ Submission of Nucrush Group to the ACCC, dated 6 July 2020.

Although Nucrush was initially shortlisted in the 2018 EOI Process, it was ultimately excluded. The Stanwell Response sets out further information on this decision-making process.

The Agreement facilitates the supply of fly ash to third parties, including independent concrete producers. As outlined in section 5.1 above, the minimum off-take requirement exceeds Boral's internal demand making it necessary for Boral to supply fly ash to third parties **[Restriction of publication claimed]**. Through Boral, third parties, including independent concrete producers will be able to acquire fly ash from Tarong PS which they currently are unable to access. As the ACCC is aware, Boral's own internal modelling shows that it considers independent third parties to be key potential customers for fly ash.

It is possible that an offtake partner with a greater level of vertical integration within the market (for instance, significant interests in downstream cement and concrete industries), but which did not have the same incentives as Boral, would be less likely to supply fly ash to third parties, including independent concrete producers. It is also possible that an offtake partner that already has offtake rights at other power stations, such as Pozzolanic or IFB, would result in a less competitive market, with fly ash supply concentrated among fewer players.

The Agreement therefore creates more choice of fly ash sources and increased availability of fly ash volume, compared to what is available absent the Agreement or in any likely counterfactual.

[Restriction of publication claimed] to make fly ash available for sale to third parties, Boral has a clear economic incentive to do so as well. This is supported by Boral's modelling, detailed in its response of 8 July 2020 to question 1 of the ACCC's Request for Information (the **Boral Response**) and further in section 7.4 below.

If independent concrete producers or other third parties are concerned about fly ash availability in the market, Tarong North PS presents a similar opportunity to Tarong PS with respect to location, the nature of the potential facility / off-take arrangement and the potential quality of fly ash. This is discussed further in section 6 below.

6 Availability of alternative sources of fly ash

Alternatives to Tarong PS fly ash will continue to exist within the market, including fly ash from Tarong North, Millmerran Power Station, north Queensland power stations, Bayswater Power Station and overseas imports.

6.1 Models for the removal of fly ash from power stations and the proposed arrangement at Tarong PS

Power stations employ different models for the collection and sale of fly ash which results in variations in the availability of fly ash from any particular power station.

One model used for the removal of fly ash involves the power station entering into an arrangement with a counterparty who constructs, owns and operates a fly ash offtake facility at the power station. Boral understands that this is the method used at Millmerran Power Station and the power stations in New South Wales. Under this model, the counterparty often has a first right to take fly ash from the power station and pays for the

fly ash it acquires. In some cases, in order to protect the power station's commercial interests, the agreement also involves a minimum off-take commitment.

The model proposed by the Parties at Tarong PS is different to this model. Although Boral is currently constructing the offtake facility (pursuant to the DCC), the facility will be owned by Stanwell. The effect of this is to keep ownership and control of the fly ash offtake facility with the power station rather than a third party off-taker.

Under the OOMA, while Boral has an exclusive right to remove fly ash from the precipitator hoppers at all four units at Tarong PS and to use or sell that fly ash, that exclusive right is subject to the terms of the OOMA, including the following:

- (a) Any fly ash which is not taken by Boral in accordance with clause 4.1, including any fly ash that is conveyed into the Wet Ash Disposal System directly from the precipitator hoppers in accordance with the OOMA, or into the Ash Disposal Area in accordance with clause 10.6(b) of the OOMA (**Reject Ash**) will remain the property of Stanwell.
- (b) Any CCPs not taken by Boral at the Transfer Point in accordance with the OOMA will remain the property of Stanwell (called '**Surplus Coal Combustion Products**' in the OOMA).
- (c) Boral has no rights in respect of Reject Ash or Surplus Coal Combustion Products.
- (d) Stanwell reserves the right to clear the precipitator hoppers at all four units at Tarong PS and any other part of the system in the Ash Disposal Area or the equipment which is to be constructed under the DCC for the purpose of transporting fly ash from the precipitator hoppers to the product silos should they reach their maximum operational storage limits or at any other time that Stanwell considers that it is appropriate to do so.
- (e) Without limiting Stanwell's rights, Stanwell may, in its absolute discretion:
 - (i) use or supply or sell to any other person any Reject Ash or Surplus Coal Combustion Products for any use or application;
 - (ii) use or permit any other person to use Reject Ash or Surplus Coal Combustion Products in the manufacture, distribution and sale of products (including cement, masonry and building products); or
 - (iii) store or dispose of any Reject Ash or Surplus Coal Combustion Products in any way.

As set out in section 3 above, the OOMA also obliges Boral to make fly ash available for sale to third parties on a non-exclusive basis and on reasonable commercial terms, using its best endeavours to maximise the sales of fly ash, and not unreasonably refuse to supply fly ash to third parties or discourage reasonable offers from third parties to acquire fly ash.

Under this model, Stanwell owns the fly ash offtake facility at Tarong PS, and is incentivised to maximise sales of fly ash and to make a return on its investment in the facility. If Boral does not meet its contractual obligations during the initial 5 year term, Stanwell can decide not to renew the Agreement. This means that in the long-term

Stanwell will have some control over the terms on which fly ash may be acquired from Tarong PS.

6.2 Tarong North Power Station

Tarong North PS represents the most immediate alternative source of fly ash for potential customers in SEQ.

In addition to being located adjacent to Tarong PS, the fly ash produced by Tarong North PS is produced by burning coal from a similar source to that used at Tarong PS. At Tarong North PS, ungraded / unclassified or 'run of station' fly ash is collected by baghouse filter hoppers and then pumped to an ash silo from which it can be taken by third parties for further processing (for example, by grinding and / or classifying to refine the fly ash particle size). The ash silo is owned and operated by Stanwell.

Stanwell's 2018 EOI Process included the offtake of fly ash from Tarong North PS. However, there was insufficient interest in the responses to the EOI process in relation to Tarong North PS, including from Boral, which only elected to submit an expression of interest response in relation to offtake from Tarong PS.

Stanwell remains willing to engage with parties directly in relation to the offtake of fly ash from Tarong North PS. For example, **[Restriction of publication claimed]**. The Stanwell Response provides further details of the fly ash sold from Tarong North PS to third party off-takers in 2019.

While there is currently no classifier and associated equipment at Tarong North PS (the previous classifier was owned by Cement Australia and removed around 2014) and Stanwell does not presently intend to construct such equipment for classified Tarong North PS fly ash, Stanwell is open to a classifier being built pursuant to an arrangement that aligns with Stanwell's current overall strategy for the sale of CCPs and subject to acceptable commercial terms.

Fly ash which is not sold to third party off-takers is currently managed as set out in the Stanwell Response.

6.3 Power stations in Queensland

Stanwell Power Station

At Stanwell Power Station, electrostatic precipitators are used for each of the four units to remove fly ash from the flue gas. The fly ash from the precipitator hoppers is collectively fed to four silos, from which ash can be taken. Further details are provided in the Stanwell Response.

Third party off-takers can purchase the fly ash stored in the silos. The Stanwell Response provides details of the fly ash sold from the Stanwell PS to third party off-takers in 2019. As set out in the Stanwell Response, the current load out facility at Stanwell PS is sufficient for the current demand, although additional infrastructure would be required to significantly increase offtake.

Fly ash which is not sold to third party off-takers is managed as set out in the Stanwell Response.

Millmerran Power Station

As described in the Initial Boral Submission, Independent Flyash Brokers (**IFB**) entered into arrangements in 2007 for the purchase and removal of fly ash from Millmerran Power Station. The arrangements were entered into following a tender process in 2006. Under the tender proposal, IFB was expected to off-take 100,000 tonnes per annum with a further potential for 50,000 tonnes.

In 2008, IFB invested in and installed the necessary facilities at Millmerran Power Station, including a classifier, ash pumps, underground pipelines, a fine ash storage silo and associated infrastructure. Since this time, IFB has owned and operated the fly ash extraction facilities at Millmerran Power Station, from which it supplies cement grade fly ash, run of station fly ash and furnace fly ash to its customers.

Although fly ash is collected at the Millmerran Power Station under the model described in section 6 above, Boral understands that IFB does not have complete exclusivity over the fly ash but rather it has 'first rights' and access to the entire stream of fly ash.

[Restriction of publication claimed] As the equipment is owned by IFB, Boral understands that it may remove the equipment if it ceases to acquire fly ash, as Cement Australia did at Tarong PS.

Currently, Boral understands that fly ash customers are able to acquire fly ash from Millmerran Power Station directly to the extent that the fly ash is not acquired by IFB under its first rights.

Gladstone and Callide Power Stations

Although based in north Queensland, Boral considers that the very high quality of fly ash produced by Gladstone and Callide Power Stations make it a viable alternative to fly ash obtained from power stations in SEQ.

6.4 Power stations in New South Wales

Bayswater Power Station

Boral understands that, in 2002, Hyrock entered into a contract for the purchase and removal of fly ash from Bayswater Power Station and that Hyrock installed a classifier at the power station by the mid-2000s. Since that time, Hyrock has owned the facility and operates it as a "multi-user" facility.

This means that multiple parties can purchase fly ash directly from the power station (through Hyrock's facility). For example, Boral understands that Nucrush has acquired fly ash from Bayswater Power Station in this way.

Fly Ash Australia (**FAA**) also has access to fly ash at the Bayswater Power Station, drawing from the same ash stream as Hyrock and using its own classifier.

Mount Piper and Eraring Power Stations

FAA is a joint venture owned equally by Boral Limited and Cement Australia Pty Ltd. In 1984, FAA won the rights to market fly ash from Eraring Power Station⁵ and in 1994, FAA

⁵ https://www.adaa.asn.au/uploads/default/files/adaa-coal_ash_matters_nov_07.pdf

entered into a contract to remove and market fly ash from the Mount Piper Power Station. FAA then installed processing equipment, a classifier and other associated infrastructure, which it owns and operates, at each of Mount Piper and Eraring power stations.

FAA currently has first rights to purchase and remove the fly ash across the eight passes from four units. What is not taken by FAA is made available to third parties. Boral understands that BFG Daracon takes fly ash from Eraring downstream from the FAA offtake point and on-sells ash to third parties.

At Mount Piper, FAA receive fly ash from the run of station silo into which Mount Piper delivers the ash. Boral understands that there has been an agreement in place for a number of years under which Nu-Rock could take ash from Mount Piper. Nu-Rock has established a footprint on site. Further, the ash disposal process is managed at Mount Piper by a third-party contractor. Boral understands that this contractor is also able to sell ash to third parties.

6.5 Importation of fly ash

As noted in section 3.1 above, demand for fly ash can also be met by importing fly ash into Australia. The importing of fly ash from overseas has previously been submitted by Cement Australia to the ACCC as an alternative to locally sourced fly ash,⁶ particularly where parties are already importing other cementitious materials and have made the investment in processes to enable that to occur.

7 Boral is incentivised to and will supply to third parties including independent concrete producers

There are several reasons why Boral is incentivised to and will supply fly ash to third parties, including independent concrete producers. These reasons are discussed below.

7.1 Boral's fly ash growth strategy

Boral's strategy is to grow the market for fly ash and develop a thriving ash business supplying to a range of market participants. As explained in the Boral Response, Boral anticipates a growth in demand for fly ash as a consequence of an increase in demand for concrete and an increase in the use of fly ash in concrete production (particularly as it offers a more sustainable and lower cost input into concrete).⁷

Boral's strategic rationale for its investment includes capturing external sales of fly ash from SEQ premix / precast / masonry customers, wholesale trade, NSW / NQ exports, road bases / stabilisation and grouts. Boral recognises that a an "upside exists as majority of business costs are fixed and variable costs are minimal".⁸

Boral has a strong innovation culture. **[Restriction of publication claimed]**

⁶ ACCC, Statement of Reasons in respect of an exclusive dealing notification lodged by Coal Reuse Pty Ltd (26 November 2015) at 5.6 (page 7).

⁷ Letter to ACCC re Request for Information, 8 July 2020, p 8.

⁸ Business Case, Tarong Fly Ash Investment Paper p 2.

As noted in the Boral Response, Boral is seeking to stimulate demand for fly ash. By delivering innovations in fly ash, it intends to drive higher usage of fly ash and therefore increase the attractiveness of fly ash as an input into concrete-based products.

7.2 Boral's fly ash requirements

As Boral does not have a direct cement position in SEQ, the volume of fly ash produced (and the classification capacity at the facility) are likely to exceed its expected consumption of fly ash.

[Restriction of publication claimed]

7.3 Contractual obligations

Regardless of the incentive to sell fly ash to third parties arising from the off-take quantity exceeding Boral's internal requirements, **[Restriction of publication claimed]**. The EOI stipulated that:

- (a) Stanwell's objective is to maximise the offtake quantities and value of fly ash from Tarong PS and to maximise Stanwell's revenue from the sale of fly ash.
- (b) Stanwell would require the strategic partner to agree to enforceable arrangements to allow third parties to acquire fly ash from the strategy partner on market terms.⁹

[Restriction of publication claimed]

7.4 Modelling for third party supply

As outlined in the Boral Response, Boral has identified the following categories of customers that it intends to target for the supply of fly ash:

- By segment:
 - Pre-mix fly ash;
 - Precast fly ash;
 - BP / masonry fly ash;
- Wholesale trade;
- Exports of fly ash from SEQ; and
- SEQ non-concrete uses (e.g. road bases, stabilization and grouts).
- Exports of fly ash from SEQ; and
- SEQ non-concrete uses (e.g. road bases, stabilisation and grouts).

Further information on this modelling was provided to the ACCC in the confidential attachments to the Boral Response.

⁹ Stanwell – Expression of Interest for Fly Ash Strategic Partnership dated 18 May 2018, p 13 [1.7].

8 The Agreement is more competitive than the likely counterfactual

In the absence of an arrangement with Boral for the offtake of fly ash, Stanwell would likely continue to seek to maximise the sale of fly ash produced at Tarong PS in accordance with its long-term rationale and the strategy set out in the Stanwell Response. Once construction of the offtake facility has been completed, this may involve re-engaging with the market to identify an appropriate counterparty to operate and maintain the offtake facility on terms which are acceptable to Stanwell commercially and in the context of the operations at the power station.

However, as a result of the competitive 2018 EOI Process, Stanwell made the assessment that the Agreement with Boral was the best option for the offtake of fly ash at Tarong PS. In particular, Stanwell considers that the Agreement with Boral most closely aligns with its strategy as set out in the Stanwell Response, including by maximising offtake, ensuring Stanwell receives a return on its investment in the offtake facility, incentivising sales by Boral to third parties and reducing offtake risk for Stanwell.

At the same time, the Agreement will not result in any consolidation in markets for the supply of fly ash, as Boral does not currently have direct access to any offtake agreements and would increase capacity within the market.

In the absence of acceptable arrangements to sell fly ash produced at Tarong PS via the new offtake facility (when constructed), Stanwell would continue to manage unsold fly ash by depositing it in the mine voids at the adjacent Meandu Mine and in the Tarong Ash Dam, along with other CCPs.

9 Significant public benefits

The Parties submit that the Agreement cannot have the effect or likely effect of substantially lessening competition. To the contrary, for the reasons set out above, it will have pro-competitive effects, increasing capacity, facilitating fly ash supply and stimulating market growth.

Even if this were not the case, the significant public benefits associated with the Agreement far outweigh any possible potential for a lessening of future competition as a result of the OOMA. The numerous and substantial public benefits include economic pro-competitive benefits from increased capacity, environmental benefits, and efficiency benefits, which will flow through to the public at large.¹⁰

9.1 Pro-competitive: increased capacity

(a) Availability of supply

As set out in section 9.2 of the Initial Boral Submission, Boral is incentivised **[Restriction of publication claimed]** to utilise the framework in the OOMA to supply third parties with fly ash without discrimination.

¹⁰ Initial Boral Submission, section 7.3

The Agreement's minimum offtake requirements and Boral's existing position in and around SEQ strongly incentivises Boral to maximise the use of fly ash as a replacement for cement (or slag) and sell it to all industry participants **[Restriction of publication claimed]**

(b) Security of supply

The increased availability of fly ash will improve security of fly ash supply to third parties given the variability in quality of fly ash that can occur between and within power stations over time. Further, Boral has access to deep product testing infrastructure to ensure that the fly ash and its other products meet the technical needs of itself and its customers and the Australian Standards.¹¹

If the OOMA is terminated or expires, the Agreement gives Stanwell the ability to engage with a different counterparty or sell concrete-grade fly ash directly to customers on a competitive and demand-driven basis, and ultimately secure the long-term efficient supply of fly ash to industry for reuse.¹²

The Agreement is therefore likely to increase choice, availability and security of high-quality fly ash to third parties in SEQ (and potentially beyond), and increase competition, which will be a significant public benefit for all downstream industries.¹³

9.2 Environmental

As set out at section 9.3 of the Initial Boral Submission, fly ash is a regulated waste product. At present, fly ash from Tarong PS is pumped to the Meandu Mine void and an on-site ash dam for storage rather than use.¹⁴

Boral considers that the re-introduction to the market of fly ash from Tarong PS will enable both Boral and third-party users to access more sustainable products through ash management and recycling, lowering the carbon footprint associated with the production of concrete and reusing a waste product from Tarong PS.¹⁵

(a) Reducing fly ash going into storage

The Agreement between Boral and Stanwell will likely result in a significant proportion of the fly ash that would otherwise be deposited in the Meandu Mine voids or the Tarong Ash Dam being reused in the construction industry (and thereby creating environment benefits through the beneficial reuse of what is otherwise a waste product).

The ACCC has previously accepted that using fly ash in the production of concrete results in substantial environmental benefits, arising from a reduced need to dispose of waste fly ash.¹⁶ The environmental benefits facilitated by the Agreement will ultimately extend, either directly or indirectly, to the broader Queensland community, through

¹¹ Initial Boral Submission, section 9.2.

¹² Initial Boral Submission, Executive Summary

¹³ Initial Boral Submission, Executive Summary

¹⁴ Initial Boral Submission, section 9.3(a)

¹⁵ Initial Boral Letter to ACCC re Request for Information, 8 July 2020, q 4.

¹⁶ ACCC, Final Determination – Application for Authorisation lodged by Pozzolanac Enterprises, 14 July 2011 [4.115].

reduction in the volume of regulated waste that is deposited in the Meandu Mine voids or the Tarong Ash Dam.¹⁷

In addition, the removal of fly ash relieves coal fired power stations from the cost and burden of arranging the removal of this regulated waste product. It also supplies power stations with an additional source of supplementary income.¹⁸

(b) Using fly ash in place of cement

The likelihood that the Agreement will have the effect of increasing the availability and consumption of fly ash, together with Boral's investment in supplementary cementitious materials technology and industry innovation, may in Boral's view also promote further use of fly ash in place of cement in the manufacture of concrete,¹⁹ which Boral considers reduces environmental costs related to the production of concrete and promotes cost efficiencies.²⁰

Boral considers that the availability and security of fly ash may encourage more suppliers to use fly ash (or existing suppliers to use more fly ash), given it can be cheaper than cement and/or slag while providing performance benefits. Certain applications also favour the use of fly ash over other supplementary cementitious materials (e.g., concrete mixes used in road surfacing), and the availability and security of fly ash may encourage suppliers to expand to or focus more on those applications.²¹

Boral considers that its strong investment in supplementary cementitious materials technology may drive further applications with higher fly ash proportions, and in turn drive demand for fly ash use (in concrete or otherwise).²² Boral intends its investment will provide a strategic path towards a future 'ash management' and 'recycling' business.²³

As set out in section 9.4 of the Initial Boral Submission, the environmental benefits of increasing the use of fly ash in place of cement are considerable, and include reducing carbon emissions, achieving energy efficiency and electricity savings, and reducing and conserving the use of finite resources which are inputs into cement production such as limestone.

9.3 Cost efficiencies

In Boral's view, the Agreement encourages investment and greater offtake and use of fly ash more broadly, facilitating the realisation of cost efficiencies.²⁴

To the extent Boral already re-supplies limited volumes of fly ash in SEQ, Boral considers that the Agreement would lower Boral's costs of procurement and increase the efficiency

¹⁷ Initial Boral Submission, section 9.3(a)

¹⁸ Initial Boral Submission, section 9.3(a)

¹⁹ Initial Boral Submission, section 9.4

²⁰ Initial Boral Submission, section 9.4

²¹ Initial Boral Submission, section 9.4

²² Initial Boral Submission, section 9.4

²³ Letter to ACCC re Request for Information, 8 July 2020, q 1(b).

²⁴ Initial Boral Submission, Executive Summary.

and reliability of supply, as well as increase the quality of fly ash it is able to supply, to those third parties.²⁵

Boral considers that, to the extent the Agreement will increase the use of fly ash as a partial substitute for cement, it will also reduce the costs associated with the manufacture of concrete. In Boral's view, using fly ash as a partial substitute for cement will decrease the overall cost of production, enabling concrete mix suppliers to compete more vigorously, which may lead to further price reductions downstream.²⁶

The ACCC has also previously noted increased security of access to fly ash may underpin investment in the assets required to process fly ash for use in concrete, and thereby promote greater realisation of such cost efficiencies and which is likely to result in public benefits.²⁷

The above public benefits provide significant benefit for the electricity generation, fly ash, concrete and construction industries as well as the public at large.

10 Conclusion

The OOMA ought to be authorised on the basis that:

- (a) it is not likely to result in a substantial lessening of competition; and
- (b) any possible detriment is outweighed by significant public benefits.

If the ACCC has any questions or concerns about the OOMA or following this submission, the Parties would like the opportunity to address these prior to the issue of a Draft Determination.

²⁵ Initial Boral Submission, section 8.2

²⁶ Initial Boral Submission, section 9.4

²⁷ ACCC, Final Determination – Application for Authorisation lodged by Pozzolanac Enterprises, 14 July 2011, [4.127].