

# Submission in support of the Application for Authorisation

Supply agreement between Pozzolanic Enterprises Pty Ltd, Tarong Energy Corporation Limited and Tarong North Pty Ltd

26 July 2010

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#### 1 Introduction

This submission is made by Pozzolanic Enterprises Pty Ltd (ACN 010 367 898) (**Pozzolanic**) on its behalf and on behalf of:

- Cement Australia Pty Ltd (ACN 104 053 474);
- Cement Australia Holdings Pty Ltd (ACN 001 085 651);
- Cement Australia (Queensland) Pty Ltd (ACN 009 658 520);
   (together, Cement Australia, and together with Pozzolanic, the Applicants); and
- Tarong Energy Corporation Limited (ABN 52 078 848 736) (TEC)
- Tarong North Pty Limited (ABN 91 102 191 793) (Tarong North)
   (together, the Other Parties)

in support of an application for authorisation made in accordance with section 88(1) of the *Trade Practices Act 1974* (**TPA**) to give effect to an agreement between the Applicants and the Other Parties (the **Application**).

The relevant agreement is the Fly Ash Supply Agreement between Pozzolanic and the Other Parties entered into on 15 July 2010, providing for the sale of fly ash from Tarong Power Station and Tarong North Power Station to Pozzolanic (the **Agreement**).

The Application is made in the context of Federal Court proceedings commenced by the Australian Competition and Consumer Commission (the **Commission**) on 12 September 2008 against the Applicants alleging certain breaches of the TPA (the **Proceedings**). These Proceedings are being actively defended by the Applicants. As at the date of this Application, the Proceedings have not yet been heard but have been set down for hearing in late September 2010. The Proceedings raise various issues in relation to the fly ash industry in Queensland, including those relating to market definition. As such, the Applicants have not sought to enter into a discussion on market definition issues in this Submission, but have, for the purposes of the Application, set out relevant industry information in order to provide sufficient context to the Commission in assessing the Application.

## 2 Executive summary

The Agreement governs the supply of fly ash from Tarong and Tarong North Power Stations to Pozzolanic. Tarong and Tarong North Power Stations are coal fired power stations located approximately 180 km north-west of Brisbane. Both power stations are owned by TEC and generate fly ash as a by-product of coal fired electricity generation.

Fly ash is a regulated waste product under Queensland law; however, fly ash which is of suitable quality can be used as a partial substitute for cement in the production of concrete. The use of fly ash in this manner exempts it from the stringent disposal requirements associated with a regulated waste product.

Pozzolanic is a wholly owned subsidiary of Cement Australia and is engaged in the business of collecting and processing fly ash for sale to concrete manufacturers.

The Agreement replaces an existing contract between Pozzolanic and TEC signed in 2003 that allowed Pozzolanic to purchase and remove fly ash from Tarong and Tarong North Power Stations. Pozzolanic has a range of supply agreements in place with other power stations in Queensland.

The Agreement grants Pozzolanic a right to remove fly ash from certain access points at Tarong and Tarong North Power Stations. The Agreement provides Pozzolanic with access rights to approximately 70% of the fly ash available at Tarong Power Station and a sizable proportion of the fly ash available at Tarong North Power Station. Importantly, the Agreement provides various avenues for third parties to access fly ash from Tarong and Tarong North Power Stations.

The Agreement will not come into force until Authorisation has been granted and upon approval being granted, will continue in force until 1 March 2014.

The Agreement not only provides significant public benefits but has also been structured to minimise any possible detriments. The Agreement provides public benefits in the form of:

- (i) environmental benefits;
- (ii) cost efficiency benefits;
- (iii) concrete performance benefits;
- (iv) efficient utilisation of existing assets; and
- (v) security of supply benefits.

Accordingly, the Applicants submit the Commission should grant authorisation in accordance with the Application.

## 3 The Applicants

#### 3.1 Overview of Cement Australia

Cement Australia is a joint venture production company formed on 31 May 2003 through the merger of two longstanding cement companies; Australian Cement Holdings Pty Ltd (ACH) and Queensland Cement Limited (QCL). 1

Prior to the 2003 merger, ACH was owned in equal 50% shares by Hanson PLC of the United Kingdom (Hanson) (known at the time in Australia as Pioneer) and Rinker Group Limited (Rinker) (known at the time in Australia as Readymix).<sup>2</sup> Hanson and Rinker are large suppliers of concrete in Australia. QCL was wholly owned by Holcim Limited of Switzerland (Holcim), one of the world's leading suppliers of cement, aggregates and concrete.

<sup>&</sup>lt;sup>1</sup> The Commission provided informal merger clearance in relation to the formation of Cement Australia in February 2003: http://www.accc.gov.au/content/index.phtml/itemId/476643/fromItemId/751043

Note that prior to March 2003, the 50% of ACH owned by Rinker was owned by CSR Limited. Rinker was established following the demerger of the heavy building materials businesses of CSR Limited in March 2003.

The corporate and operating structure of Cement Australia is complex and comprises the following three main entities:

- (i) Cement Australia Partnership the sales, marketing, distribution and packaging arm of Cement Australia;
- (ii) Cement Australia Holdings Pty Limited which owns the operating companies that manufacture cement and source other cementitious products, including fly ash which is sourced by Pozzolanic; and
- (iii) Cement Australia Pty Ltd a company appointed by:
  - (A) Cement Australia Holdings Pty Ltd and each of its subsidiaries to provide management services; and
  - (B) the Cement Australia Partnership as its agent for the purposes of carrying out its sales, marketing, distribution and packaging operations.

Following the 2003 merger, the Cement Australia Partnership, Cement Australia Holdings and Cement Australia were all ultimately owned by the following companies in the following proportions:

- 50% Holcim;
- 25% Hanson;
- 25% Rinker.<sup>3</sup>

As the Commission is aware, in 2009 Holcim increased its share in Cement Australia to 75% through the acquisition of Cemex Australia, formerly Rinker, while Hanson retained a 25% share in Cement Australia.<sup>4</sup>

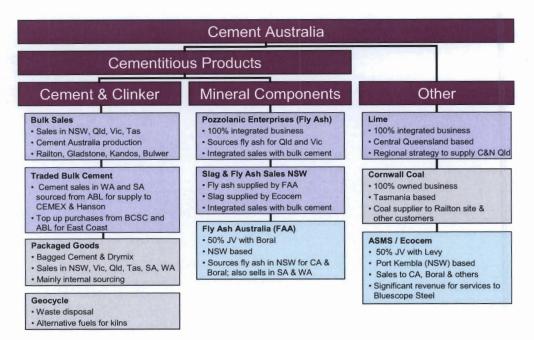
Cement Australia, building upon its long history, manufactures, distributes and markets cement and cementitious products including bagged cement, bulk cement, fly ash, lime, and ground granulated blast furnace slag.

<sup>&</sup>lt;sup>3</sup> Following the merger, Rinker was purchased by Cemex, a Mexican based company.

<sup>&</sup>lt;sup>4</sup> The Commission provided informal clearance in relation to this acquisition by Holcim in August 2009: http://www.accc.gov.au/content/index.phtml/itemId/889928/fromItemId/751043

Figure 1 below shows the products manufactured, sold and distributed by Cement Australia, including those products manufactured through its subsidiaries and joint ventures.

Figure 1 – Cement Australia's operations and products



Cement Australia sells its products throughout eastern Australia. Cement Australia has supply agreements, including in respect of fly ash, in place with its shareholder customers. Under these agreements, Cement Australia's shareholder customers agree to purchase 100% of their supply requirements from Cement Australia.

#### 3.2 Overview of Pozzolanic

Pozzolanic, which began operations in 1966, is a wholly owned subsidiary of Cement Australia and before that, QCL. Pozzolanic's operations are predominately carried on in Queensland and northern New South Wales.

Pozzolanic carries on the business of collecting and processing fly ash for use as a partial substitute for cement in the production of premixed concrete and concrete products. Further details on the collection and processing of fly ash and its use as a partial cementitious substitute are set out in section 5.1 of this submission.

Pozzolanic currently sources fly ash from five coal-fired power stations in Queensland, subject to various supply arrangements. The relevant power stations are:

- Tarong Power Station;
- Tarong North Power Station;
- Swanbank B Power Station;
- Gladstone Power Station; and
- Callide Power Station.

Further details of these power stations are set out below in section 7.1 of this submission.

In 2009, Pozzolanic supplied the following quantities of fly ash from the above power stations for use in the manufacture of concrete.

Power Station	2009 (tonnes per annum)	
Tarong Power Station	268,777 <sup>5</sup>	
Swanbank B Power Station	[CONFIDENTIAL]	
Callide Power Station	[CONFIDENTIAL]	
Gladstone Power Station	[CONFIDENTIAL]	



Pozzolanic also invests significant resources and capital in developing alternative uses for fly ash whilst providing a wide range of services to power stations including ash handling, plant maintenance, down time reduction and improvements to ash handling and disposal systems.

#### 4 The Other Parties

#### 4.1 Overview of Tarong Energy Corporation Limited

Tarong Energy Corporation Limited (**TEC**) is a Queensland government owned corporation trading as Tarong Energy. TEC supplies about one quarter of Queensland's electricity supply through hydro and coal-fired generators. <sup>6</sup>

TEC has interests in a number of generation assets including the two coal-fired power stations. Tarong Power Station and Tarong North Power Station. A detailed description of these power stations, including their fly ash collection facilities, is set out below in sections 5.2 and 5.3.

#### 4.2 Overview of Tarong North Pty Ltd

Tarong North Pty Ltd manages and operates Tarong North Power Station.

Tarong North Pty Ltd was initially owned and operated as a joint venture between TN Power Pty Ltd (a wholly owned subsidiary of TEC) and TM Energy (Australia) Pty Ltd. In November 2009, TN Power Pty Ltd purchased TM Energy's interest in the joint venture, resulting in TEC gaining 100% ownership of Tarong North Pty Ltd and accordingly, Tarong North Power Station. Tarong North Pty Ltd continues to manage Tarong North Power Station on behalf of TEC.

## 5 Relevant background to the Agreement

#### 5.1 What is fly ash?

Fly ash is a waste product generated from the mineral matter contained within coal, when the coal is burned in a pulverised-fuel-fired furnace (generally for the purpose of generating steam used to drive a turbine-generator set in a power station).

Fly ash is a "regulated waste" under the Environmental Protection Regulation 2008 (Qld) and "trackable waste" under the Environmental Protection (Waste Management) Regulation 2000

<sup>&</sup>lt;sup>5</sup> This is the combined total of tonnes supplied by Pozzolanic from both Tarong and Tarong North Power Stations.

<sup>&</sup>lt;sup>6</sup> http://www.tarongenergy.com.au/Whatwedo/Generating/TarongPowerStation/tabid/102/Default.aspx

(Qld). Regulated and trackable wastes are subject to stringent handling and disposal requirements. However, the waste tracking provisions do not apply if power station fly ash is being transported to a place for use:

- · as a raw material in the production of cement, concrete or plastic;
- · in the construction of a road; or
- in the treatment of waste in a way that involves combining the waste with the ash.

#### (a) Fly ash for use in concrete

Fly ash which is of suitable quality can be used as a supplementary cementitious material including, amongst other things, as a partial replacement for Portland cement in the manufacture of concrete.

The Australian Standard, AS3582.1 – Supplementary cementitious materials for use with Portland and blended cement – Part 1: Fly ash, defines four grades of fly ash being Coarse, Medium, Fine and Special. The grades are differentiated in part by the increasing fineness of the fly ash. The differences in grades are set out in the table below, with LOI ("loss on ignition") representing a measure of residual unburned carbon in the fly ash;

Table 1 - AS 3582.1 Grades of fly ash

Grade	Fineness (% minimum)	LOI (% maximum)
Coarse	55	6.0
Medium	65	5.0
Fine	75	4.0
Special	75	4.0

Use of fly ash as a supplementary cementitious material in concrete usually requires some form of beneficiation (through which the absolute quality and consistency of a material is increased by physical processing), which includes classification and milling. Fly ash which has not been subject to any beneficiation is referred to as 'run of station' fly ash, that is, fly ash taken directly from the power station with no processing.

Classification is a process through which the average fineness of fly ash is increased to produce a higher average fineness fly ash. In this process, finer fly ash particles are separated from coarser fly ash particles using centrifugal force. Milling or grinding of fly ash occurs when run of station fly ash is transferred into a mill, typically a ball mill which is otherwise used to manufacture cement, and ground into a finer product. Classification produces "reject ash" whilst milling uses 100% of the fly ash and has no wastage.

<sup>&</sup>lt;sup>7</sup> Section 17 of the Environmental Protection (Waste Management) Regulation 2000 (Qld).

Concrete-grade fly ash can be used as a replacement for Portland cement at levels of between 20% and 30% of the total cementitious material (cement plus fly ash). The precise percentage of fly ash substituted for cement can depend on a number of factors, including:

- the quality of the fly ash, including fineness, LOI and other chemical characteristics;
- the quality of the cement;
- the application for which the concrete is intended to be put.

Fly ash has properties which can improve the handling of the concrete mix, in terms of both pumpability and workability, as well as the overall performance of the mix.

Fly ash offers benefits at both the plastic concrete (fresh) stage (increased workability, decreased bleeding), as well as the finished concrete stage (increased sulphate and chloride resistance, lower shrinkage and creep, improved tensile and compressive strengths after 28 days, and reduced potential for alkali / aggregate (silicate) reaction).

The quantity and quality of fly ash varies from power station to power station, as well as within a power station over time. In particular, over time the volume and quality of fly ash available at a power station can be affected by a number of factors, including:

- (i) changes to the coal source at a power station;
- changes in the power station load profile which can result in an ongoing change in fly ash quality;
- (iii) scheduled and unscheduled outages for the purposes of conducting maintenance at a power station; and
- (iv) changes in operating technology used by a power station.

These factors can potentially impact upon the volume or quality of fly ash that is available to an off-taker at any given time.

Further details of fly ash are set out in **Attachment A**, being a pamphlet drafted by Cement Australia entitled 'Fly Ash'.

#### (b) Alternative fly ash applications

Fly ash can also be used for a number of alternate uses, including:

- Asphalt filler: Filler is a finely divided mineral powder. It is used to increase the stability
  of bituminous binder and to reduce the voids in a mix. Fillers in small concentrations
  have the effect of increasing the viscosity (thickness) of the binder.
- Roller compacted concrete (RCC): RCC is a relatively dry concrete that is produced in a
  pugmill, placed with a paver and then rolled. It has some substantial benefits over
  conventional materials for the construction of major engineered structures such as dams
  and roads.

Despite these alternative uses, the primary use of fly ash in Australia is the use of fly ash as a partial substitute for cement in the manufacture of concrete.

#### 5.2 Tarong Power Station

The Agreement relates to fly ash produced at Tarong Power Station. Tarong Power Station is a 1,400 MW capacity coal-fired plant consisting of 4 generating units located approximately 180 km north-west of Brisbane. The first of Tarong Power Station's four generating units became operational in May 1984 and the station was completed in 1986. The Power Station is a base load power station, which means that it is used to meet significant levels of energy demand throughout the region at a constant rate. In order to fully understand the Agreement, it is necessary to have an understanding of the fly ash collection facilities at Tarong Power Station.

There are four units (or boilers) at Tarong Power Station that generate electricity. Connected to each of these four units are "passes". Fly ash is collected as it travels from each unit through the passes. There are 4 primary passes connected to each unit. Each primary pass contains two sides, numbered A and B. The passes can therefore be identified as 1A, 1B, then 2A, 2B, 3A, 3B, 4A and 4B.

Inside each pass, electrostatic precipitators are used to collect fly ash. Electrostatic precipitators consist of electrically charged metal plates. Fly ash, which is blown out of the boilers through the passes, is attracted to these electrical charges and effectively 'sticks' to the plates. From time to time, the plates are mechanically rapped and the fly ash falls into hoppers located below the precipitators. It is from these hoppers that the collected fly ash can be removed. The hoppers connected to each pass are configured into rows with each row called a "zone". There are 6 rows, or "zones", of hoppers across each of the passes.

Large fly ash particles tend to fall predominately into the first row of hoppers (being zone 1), while progressively finer fly ash particles tends to fall into the rear hoppers (zones 2 to 6). As such, the fly ash collection method at Tarong Power Station naturally segregates fly ash by particle size. In addition, the majority of fly ash at Tarong Power Station is collected in zone 1 (approximately 60%) and progressively less is collected in zone 2 (approximately 24%), zone 3 (approximately 10%) and zone 4 (approximately 4%), and so on.

In the past, Pozzolanic has tended to collect all of the fly ash from the hoppers at zones 2 and 3 (which is relatively fine and does not require classification) and obtain additional fly ash it may need from the hoppers at zone 1 (which is a relatively coarser fly ash and which requires classification). Fly ash which is not removed from each of the hoppers is either:

- processed at the Dense Phase Ash Thickening Plant (ATP) at Tarong Power Station and then pumped to disused mine voids at Meandu Mine (which is located adjacent to Tarong Power Station); or
- pumped to the Tarong Power Station ash dam (however, this is a redundancy system which is only used in circumstances where the ATP is not operational).

Set out in **Annexure A** is a photograph of the hoppers along zones 1 to 6 of passes 1A and 1B at unit 1 of Tarong Power Station.

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http://www.tarongenergy.com.au/Whatwedo/Generating/TarongPowerStation/tabid/102/Default.aspx

<sup>&</sup>lt;sup>9</sup> These figures are based on Pozzolanic's internal estimates of the fly ash at Tarong Power Station which is available at any given time.

#### 5.3 Tarong North Power Station

The Agreement also relates to fly ash produced at Tarong North Power Station. Tarong North Power Station is a newer, coal fired power station, commissioned in August 2003, with a 443 MW capacity consisting of one generating unit. It is located adjacent to Tarong Power Station and is also a base load power station.

Tarong North Power Station employs fabric filters for the collection of fly ash rather than electrostatic precipitators.

Fabric filters function by way of passing fly ash-laden flue gas (gas exiting from the boiler) through thousands of filter bags inside the vessel. Fly ash particles are collected on the surface of the filter bags and then, due to gravity, fall into the hoppers below.

Fabric filters are more efficient fly ash collection devices than electrostatic precipitators as they capture the majority of the fine fly ash particles and prevent the finer particles from being emitted into the atmosphere. However, fabric filters do not provide the same natural particle size separation as electrostatic precipitators.

Originally, Pozzolanic collected fly ash from the Tarong North silo, but more recently it has collected fly ash for classification by its on site classifier from collection points below the hoppers; that is, before the fly ash is deposited in the silo.

Fly ash which is not collected by Pozzolanic via its classifier is pumped to the Tarong North silo. Fly ash which is not removed from the Tarong North fabric filters is also pumped to the fly ash silo.

Fly ash sent to the fly ash silo can be:

- collected and purchased by third parties;
- pumped to the Tarong Power Station mine void pump station (which is located adjacent to the ATP) and then pumped to disused mine voids at Meandu Mine; or
- pumped to the Tarong Power Station ash dam (though as noted above, this is a redundancy system which is only used in circumstances where the mine void system is not operational).

#### 5.4 The history of Pozzolanic at Tarong

Pozzolanic and TEC have a longstanding relationship, with the parties first entering into an agreement for the purchase and removal of fly ash from Tarong Power Station in about 1984. Since that time, Pozzolanic has invested large amounts of capital and infrastructure, including classifiers, pumps, a weighbridge and storage silos, to optimise and manage its off-take from both Tarong Power Station, and more recently, Tarong North Power Station.

Relevantly, the primary agreement between Pozzolanic and TEC which precedes the Agreement was signed in 2003 (the **2003 Contract**). We note, as mentioned earlier in this submission, that the 2003 Contract is currently the subject of the Proceedings between the Commission and the Applicants.

The 2003 Contract was awarded to Pozzolanic as the result of a tender process carried out by TEC in 2001-2002. Under the 2003 Contract, TEC agreed to sell and Pozzolanic agreed to buy all concrete grade fly ash extracted by Pozzolanic from "Ash Transfer Points" (being the points at which Pozzolanic's plant is connected to the precipitator ash hoppers on units 1 to 4 at

Tarong Power Station). Any fly ash not extracted by Pozzolanic from these Ash Transfer Points remained the property of TEC and was available for sale to third parties.

Further, under the 2003 Contract, Pozzolanic was also provided with access to fly ash from Tarong North Power Station which was commissioned in 2003. In early 2007, Pozzolanic finalised the installation of a classifier at Tarong North. Prior to this, Pozzolanic would collect fly ash from the Tarong North silo and truck this fly ash to Tarong Power Station for classification.

Pozzolanic understands that from at least early 2005, TEC has also offered fly ash from Tarong North Power Station for sale to third parties. Whilst Pozzolanic is not aware of the details of any agreements entered into by TEC and third parties, it is aware that Sunstate Cement Ltd (**Sunstate**) has and continues to collect and purchase fly ash from the silo at Tarong North Power Station. Further details in respect of Sunstate are set out below at section 7.2.

On 15 July 2010the 2003 Contract was replaced with an Interim Agreement until the commencement of the Agreement. Further details on the commencement of the Agreement and the Interim Agreement are set out below in sections 6.1 and 6.2.

### 6 The Agreement

As set out above, the Agreement is a fly ash supply agreement between TEC, Pozzolanic (as **Contractor**) and Tarong North (as **Manager**).

#### 6.1 Commencement of the Agreement

Clause 2.1 of the Agreement provides that the Agreement does not come into force and effect unless and until the Contractor obtains Authorisation on terms and conditions satisfactory to TEC or, TEC notifies Pozzolanic that it is satisfied, in its absolute discretion, that the Authorisation is not required.

Clause 1.1 defines "Authorisation" as "an authorisation of this Agreement and transactions contemplated by it under Division 1 of Part VII of the Trade Practices Act 1974 (Cth) granted by the Australian Competition and Consumer Commission (or by the Australian Competition Tribunal on a review of a determination by the Australian Competition and Consumer Commission) in relation to the Contractor's rights under this Agreement".

Clause 2.2 of the Agreement sets out that TEC or the Contractor may terminate this Agreement by written notice to the other and to the Manager if:

- (a) the Contractor has not obtained Authorisation by 31 December 2010; or
- (b) the Contract has not obtained Authorisation on terms and conditions satisfactory to TEC by 31 December 2010 and TEC has not provided a notice that it is satisfied, in its absolute discretion, that the "Authorisation" is not required.

As such, although the Agreement was entered into by Pozzolanic, TEC and the Manager on 15 July 2010 it does not come into force until Pozzolanic has obtained Authorisation from the Commission and may be terminated in writing by either TEC or Pozzolanic if Authorisation is not obtained, or if Authorisation is not obtained on terms and conditions satisfactory to TEC by 31 December 2010.

For the period between the expiry of the 2003 Contract and the commencement of the Agreement, the sale of fly ash to Pozzolanic is governed by an interim agreement which was entered into on 15 July 2010.

#### 6.2 The Interim agreement

On 15 July 2010 Pozzolanic, TEC and Tarong North Pty Ltd entered into an interim agreement which will expire either on the date the Agreement commences or on 30 June 2011 (Interim Agreement). The Interim Agreement is in substantially the same terms as the Agreement and has been entered into on a short term basis in order to replace the 2003 Contract and to allow sufficient time for the authorisation process in respect of the Agreement to be undertaken.

The Interim Agreement differs from the Agreement in that it does not require authorisation as a condition precedent.

Set out as Attachment B to this submission is the Interim Agreement.

#### 6.3 Terms of the Agreement

The Agreement governs the supply of fly ash produced at Tarong and Tarong North Power Stations to Pozzolanic. It provides for the sale of fly ash by TEC to Pozzolanic accessed from specified off take points which are set out in the Agreement. In particular, under the Agreement:

- (i) TEC agrees to sell to Pozzolanic and Pozzolanic agrees to buy any and all fly ash that Pozzolanic obtains from the "Ash Transfer Points" (being "Standard Ash Transfer Points" during the Term, and "Temporary Ash Transfer Points") and to remove it from the Site; 10
- (ii) TEC retains the rights to all fly ash not taken by Pozzolanic from the Ash Transfer Points<sup>11</sup> (defined under the Agreement as "Surplus Ash") and can sell this fly ash to third parties; 12
- (iii) TEC retains a right to vary the Ash Transfer Points at Tarong Power Station upon three months notice; 13
- (iv) Pozzolanic agrees to pay TEC a Base Price of \$700,000 adjusted for CPI each quarter, based on a minimum off take amount of 300,000 tonnes per annum. 14

The Agreement provides various avenues through which third parties can potentially purchase fly ash from TEC. In particular, under clause 4.2(c) of the Agreement, TEC may vary the "Temporary Ash Transfer Points" (including removing the Contractor's right to take fly ash from any or all of the "Temporary Ash Transfer Points") on 30 days written notice to the Contractor. This provides TEC with the flexibility to provide direct third party access to the fly ash available from the "Temporary Ash Transfer Points" at short notice. Further details of the avenues for third party access to fly ash under the Agreement are set out below at section 6.6.

Pozzolanic understands that TEC has or intends to enter into arrangements with other parties for the purchase and removal of fly ash from the "Temporary Ash Transfer Points" at Tarong Power Station. Pozzolanic does not have any knowledge of the details of these arrangements

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<sup>&</sup>lt;sup>10</sup> Clause 4.1 of the Agreement.

<sup>&</sup>lt;sup>11</sup> Clause 5(a) and clause 9.1(a) of the Agreement.

<sup>&</sup>lt;sup>12</sup> See for instance clauses 4.2 (c), 7(b) and 9.2 of the Agreement.

<sup>&</sup>lt;sup>13</sup> Clause 4.3 of the Agreement.

<sup>&</sup>lt;sup>14</sup> See clause 6 of the Agreement, although, under clause 6.3 of the Agreement, this payment amount will be reduced if Pozzolanic takes more than 500,000 tonnes of Fly Ash in any one Contract Year, and under clause 6.4 the base price is subject to renegotiation in the event of a Change Event under clause 19.2, including a material reduction in the availability of fly ash from the Ash Transfer Points.

as they are likely to be commercial in confidence between TEC and the third parties. As such, the Commission would need to approach TEC for details of any third party arrangements.

Once commenced, the Agreement will continue until 1 March 2014 unless terminated earlier. <sup>15</sup> The Agreement provides no guarantee of the quality or quantity of fly ash available to Pozzolanic. <sup>16</sup>

A description of the fly ash collections points under the Agreement is set out below at section 6.4. Pozzolanic's practical entitlement to fly ash under the Agreement is below at section 6.5. The process through which TEC can sell ash to third parties is also discussed below at section 6.6.

#### 6.4 Fly ash collection points under the Agreement

Under the Agreement, Pozzolanic is entitled to take fly ash from Ash Transfer Points. 17

As set out above, "Ash Transfer Points" are defined under the Agreement to mean "Standard Ash Transfer Points" during the Term 18 and "Temporary Ash Transfer Points". 19

Under the Agreement, "Standard Ash Transfer Points" means: 20

- (i) at Tarong Power Station:
  - the connection points in respect of units 1, 2, 3 and 4, passes 1A and 1B, 2A and 2B and 3A and 3B at zones 1, 2 and 3 at the Tarong Power Station hoppers; and
  - (B) any other points approved in writing by TEC;
- (ii) at Tarong North Power Station:
  - (A) the connection points of the Tarong North Power Station baghouse filter hoppers;
  - (B) any other points approved in writing by Tarong North Pty Ltd.

The practical operation of these collection points is discussed below at section 6.5.

The "Temporary Ash Transfer Points" cover, in respect of units 1, 2, 3 and 4:

- (i) pass 4A at zones 1, 2, 3 and 4;
- (ii) passes 1A and 1B, 2A and 2B, 3A and 3B and 4B at zone 4.21

<sup>&</sup>lt;sup>15</sup> Clause 3 of the Agreement.

<sup>&</sup>lt;sup>16</sup> Clause 11.1 of the Agreement.

<sup>&</sup>lt;sup>17</sup> Clause 4.1 of the Agreement.

<sup>18</sup> Term is defined in Clause 3 of the Agreement as 'Subject to clause 2, this Agreement commences on the Commencement Date and continues until 1 March 2014 unless terminated earlier under this Agreement..

<sup>&</sup>lt;sup>19</sup> Clause 4.2 of the Agreement.

<sup>&</sup>lt;sup>20</sup> Clause 4.2(a) of the Agreement.

<sup>&</sup>lt;sup>21</sup> Clause 4.2(b) of the Agreement.

Schedule 6 of the Agreement provides a diagrammatic depiction of the collection facilities at Tarong Power Station including an illustration of what access points are "Standard Ash Transfer Points" and which are "Temporary Ash Transfer Points". For ease of reference, the Applicants have included a copy of Schedule 6 at **Annexure B**.

As set out above, TEC retains the right to vary the Ash Transfer Points at Tarong Power Station upon three months notice. <sup>22</sup>

#### 6.5 Pozzolanic's practical fly ash entitlement under the Agreement

Pragmatically, under the Agreement Pozzolanic is entitled to collect all fly ash from the "Standard Ash Transfer Points" which cover zones 1 to 3, across 3 of the 4 passes, in respect of units 1 to 4 at Tarong Power Station. That is, under the Agreement, Pozzolanic is entitled to collect fly ash from 18 of the 24 access points which attach to zones 1 to 3 in respect of each unit at Tarong Power Station. This equates to Pozzolanic having access to 75% of the access points for zones 1 to 3, at units 1 to 4 at Tarong Power Station.

As set out above, the vast majority of the fly ash produced at Tarong Power Station is collected in zones 1 to 3. As such, under the Agreement, Pozzolanic has effectively been allocated approximately 70% of the available fly ash from Tarong Power Station at any given time.<sup>23</sup>

The remaining 30% of fly ash is available for Tarong Power Station to sell to third parties. These avenues are set out below at section 6.6.

Under the Agreement Pozzolanic is also entitled to take fly ash from all of the access points at Tarong North Power Station. Fly ash not taken by Pozzolanic is pumped into the Tarong North silo and is made available for third party purchasers.

#### 6.6 Fly ash sales to third parties under the Agreement

The Agreement provides four avenues through which third parties (referred to in the Agreement as "Other Purchasers") may access fly ash from Tarong Power Station. These are:

#### 1 Purchase of Contestable Ash

Although Pozzolanic will initially have access to fly ash collected from the Temporary Ash Transfer Points, TEC may vary the "Temporary Ash Transfer Points" (including removing the Contractor's right to take fly ash from any or all of the "Temporary Ash Transfer Points") on 30 days written notice to the Contractor.<sup>24</sup>

The Temporary Ash Transfer Points roughly constitute about 12.5% of total access points available across zones 1 to 3 at Tarong Power Station and 100% of the access

<sup>&</sup>lt;sup>22</sup> Clause 4.3 of the Agreement.

<sup>&</sup>lt;sup>23</sup> The figure of 70% has been calculated on the following basis: Pozzolanic has access to 75% of the fly ash available from zones 1 to 3 across units 1 to 3. Applying this figure of 75% to the proportion of fly ash available from each of these zones, Pozzolanic in effect has access to the following proportion of total fly ash from each zone – from zone 1 (45%), from zone 2 (18%) and from zone 3 (7.5%). As such, under the Agreement, Pozzolanic has access to approximately 70% of total fly ash produced at Tarong Power Station.

<sup>&</sup>lt;sup>24</sup> Clause 4.2(c) of the Agreement.

to zone 4. This equates to access to approximately 16% of the total fly ash available from Tarong Power Station. <sup>25</sup> For the purposes of this submission, this fly ash is referred to as "Contestable Ash".

As such, under the Agreement TEC is able to provide third party access to the "Temporary Ash Transfer Points" at very short notice. A third party that gains access to this Contestable Ash will need to install its own off take equipment and have the capacity to transport the fly ash. <sup>26</sup> It could however potentially outsource the collection and transport operations to another party on its behalf.

#### 2 Purchase of Surplus Ash

A third party may purchase any Surplus Ash, which is fly ash not taken by Pozzolanic in accordance with clause 4.1 of the Agreement. TEC retains the rights to any Surplus Ash and can at its own discretion make this fly ash available to Other Purchasers. 27

#### 3 Purchase of Unused Ash

If during a period of 3 or more consecutive months Pozzolanic collects less than 50% of the total amount of fly ash available from the Ash Transfer Points for reasons other than:

- (A) a Force Majeure Event;
- (B) unavailability of the fly ash other than because of Pozzolanic's conduct; or
- (C) a Change Event,

and it is not able to satisfy TEC that it has the capacity and intention to use at least 50% of the total amount of fly ash available for the following 3 months, then upon TEC's request Pozzolanic must use reasonable endeavours to permit third parties to access the Ash Transfer Points to remove the Surplus Ash.<sup>28</sup>

For the purposes of this submission, this fly ash is referred to as "Unused Ash".

#### 4 Potential sale of Reserved Ash

Although not provided for expressly in the Agreement, TEC also has available to it the remaining 12.5% of access points for zones 1 to 3, across units 1 to 4, being pass 4B,

<sup>&</sup>lt;sup>25</sup> The figure of 16% has been calculated on the following basis: as Temporary Ash Transfer Points represent access to 12.5% of the fly ash available from zones 1 to 3 across units 1 to 3. Applying the figure of 12.5% to the proportion of fly ash available from each of these zones, a user in effect has access to the following proportion of total fly ash from each zone – from zone 1 (7.5%), from zone 2 (3%) and from zone 3 (1.25%). In respect of zone 4, the Temporary Ash Transfer Points represent access to 100% of the fly ash available from zone 4 across all units, which is approximately 4% of the total ash available. Accordingly, combining these two figures, a total of 15.75% is reached. This has been rounded up to the nearest whole figure, being 16%.

<sup>&</sup>lt;sup>26</sup> See clause 9.2(a) of the Agreement.

<sup>&</sup>lt;sup>27</sup> Clause 5(a) and Clause 9.1 of the Agreement.

<sup>&</sup>lt;sup>28</sup> Clause 7 of the Agreement.

as well as 100% of all access points for zones 5 and 6 across units 1 to 4. This equates to TEC reserving access to approximately 14% of the total fly ash available from Tarong Power Station.

For the purposes of this submission, this fly ash is referred to as "Reserved Ash".

As such, under the Agreement it may be possible for a third party that successfully tenders for Contestable Ash to also approach TEC and attempt to negotiate for access to Reserved Ash, in which case a third party may potentially access up to 30% of all fly ash produced at Tarong Power Station.

Whilst it does not provide expressly for the purchase of fly ash by third parties at Tarong North Power Station, under the Agreement, Surplus Ash and Unused Ash is available for purchase by third parties from Tarong North Power Station.

## 7 Industry overview

#### 7.1 Other sources of fly ash

In Australia, fly ash can be sourced from a number black coal burning power stations, including:

#### (a) Swanbank B Power Station

Swanbank B Power Station, located in Queensland, was commissioned in 1971 and comprises four 120MW generating units. It is located 9 km from the centre of Ipswich, 40 km to the west of Brisbane. Swanbank B is a peak load power station. On 26 March 2010, CS Energy Limited, the owner of Swanbank B Power Station announced its decision to progressively close Swanbank B Power Station by 2012.

Pozzolanic currently supplies fly ash from Swanbank B Power Station for use in south-eastern

Queensland and northern New South Wales. [Confidential Information] EXCLUDED FROM

#### (b) Millmerran Power Station

Millmerran Power Station is near the town of Millmerran in south west Queensland, approximately 215km west of Brisbane. Millmerran Power Station was commissioned in or around February 2003. It comprises two 425 MW generating units. It was designed and operates as a base load power station.<sup>31</sup>

Pozzolanic understands that Independent Flyash Brokers Pty Ltd (**IFB**) currently supplies fly ash from Millmerran for use in south-eastern Queensland. Further information on IFB is set out below at section 7.2.

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<sup>&</sup>lt;sup>29</sup> http://www.csenergy.com.au/content-(76)-swanbank-b-power-station.htm and CS Energy, Swanbank Power Station fact sheet, October 2009.

<sup>&</sup>lt;sup>30</sup> http://www.csenergy.com.au/userfiles/file/100326%20Swanbank%20B%20decision%20announcement.pdf

<sup>31</sup> http://www.intergen.com/global/millmerran.php

#### (c) Callide Power Station

Callide Power Station comprises Callide A, Callide B and the Callide Power Plant (Callide C).

Callide B was commissioned in around 1988. Callide B Power Station is located around 100 km west of Gladstone and 18 km east of Biloela in central Queensland. It comprises two 350MW generating units and was designed and operates as a base load power station. <sup>32</sup>

Callide C was commissioned in around 2001. The Callide C Power Station is located around 100 km west of Gladstone. It comprises two 450MW generating units and was designed and operates as a base load power station. <sup>33</sup>

Pozzolanic currently supplies fly ash from Callide Power Station for use in central and northern Queensland and for export to Victoria.

#### (d) Gladstone Power Station

Gladstone Power Station comprises six 280MW generating units commissioned between 1976 and 1982. It was designed and has operated as a base load power station but since late 2004 it has operated mainly during maximum demand rather than as a base load station. Gladstone Power Station is located around 4km from the Gladstone city and is around 550km north of Brisbane.<sup>34</sup>

Pozzolanic currently supplies fly ash from Gladstone Power Station for use in central and northern Queensland and for export to Victoria and to a lesser extent, Vietnam. Gladstone Power Station fly ash has also been transported for use in south-eastern Queensland, most notably during the period of the drought in 2007 when Tarong Power Station was operating on a limited basis due to government imposed water restrictions.

#### (e) Bayswater Power Station

Bayswater Power Station is located in the Upper Hunter Valley, New South Wales around 16 km from Muswellbrook and 28 km from Singleton and approximately 240km from metropolitan Sydney. 35

Pozzolanic understands that fly ash from Bayswater Power Station is primarily distributed throughout New South Wales. However, Pozzolanic understands that in the past Bayswater fly ash has been transported north for use in northern New South Wales and south-eastern Queensland, as well as having been transported south for use in Victoria at times.

#### (f) Mount Piper Power Station

Mount Piper Power Station was commissioned in the early 1990s. It comprises two 700 MW generators. It is a base load power station. Mount Piper Power Station is located in the Central West Region of New South Wales, around 25km west of Lithgow and 5km east of Portland. <sup>36</sup>

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<sup>32</sup> http://www.csenergy.com.au/content-(19)-callide.htm and CS Energy, Callide Power Station fact sheet, October 2009.

<sup>33</sup> Ibid.

<sup>34</sup> http://www.nrggos.com.au/page/About\_Us/History/; http://www.nrggos.com.au/page/About\_Us/

<sup>35</sup> http://en.wikipedia.org/wiki/Bayswater\_Power\_Station

<sup>36</sup> http://en.wikipedia.org/wiki/Mount\_Piper\_Power\_Station

Pozzolanic understands that fly ash from Mount Piper Power Station is primarily distributed for use throughout New South Wales by Fly Ash Australia Pty Ltd (**FAA**) (a joint venture company owned equally between Cement Australia and Blue Circle Southern Cement).

#### (g) Eraring Power Station

Eraring Power Station comprises four 660MW generating units which were commissioned between 1982 and 1994. It was designed and operates as a base load power station. It is located on the western shore of Lake Macquarie, New South Wales, near the Dora Creek around 120km from metropolitan Sydney.<sup>37</sup>

Pozzolanic understands that fly ash from Eraring Power Station is primarily distributed for use throughout New South Wales by FAA, but understands that in the past, fly ash from Eraring Power Station has been transported north for use in northern New South Wales and southeastern Queensland.

Set out in **Annexure C** is a summary map which depicts the general locations of the power stations referred to above, as well as Tarong and Tarong North Power Stations.

#### (h) Additional power stations

In addition, the following power stations produce fly ash:

- Stanwell Power Station (Queensland);
- Kogan Creek Power Station (which commenced operations in 2009) (Queensland)<sup>38</sup>;
- Vales Point Power Station (NSW);
- Wallerawang Power Station (NSW);
- Munmorah Power Station (NSW);
- Collie Power Station (Western Australia); and
- Northern Power Station (South Australia).

No fly ash for use in concrete can be sourced from Victoria, Tasmania or the Territories. In particular, the power stations in Victoria burn brown coal which makes the fly ash unsuitable.

#### 7.2 Industry participants

There are numerous participants across the supply chain in which Cement Australia and Pozzolanic compete. Most participants in the fly ash and cement industries are vertically integrated to varying degrees. The following describes fly ash suppliers that compete with Pozzolanic, though all have interests in either the downstream cement or concrete industries.

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<sup>&</sup>lt;sup>37</sup> http://www.eraring-energy.com.au/Default.aspx?aCateId=795 and *Eraring Energy*, Eraring Power Station Facts and Figures, May 2009.

<sup>38</sup> http://www.csenergy.com.au/content-(42)-kogan-creek.htm

#### (a) Sunstate Cement Ltd

Sunstate is a joint venture between Blue Circle Southern Cement owned by Boral and Adelaide Brighton (ABL).

Boral is Australia's largest building and construction materials supplier, with international market positions. Boral operates its concrete and aggregates businesses in all States and Territories. Boral operates its concrete and aggregates businesses in all States and Territories. ABL produces cement in New South Wales, South Australia, Western Australia and the Northern Territory and supplies cement principally both in those States and in Victoria. ABL is vertically integrated into aggregates, masonry products and concrete production through its subsidiary Hy-Tec. 40

Pozzolanic understands that Sunstate supplies both fly ash blended cement and fine grade fly ash for distribution in at least south-eastern Queensland. Pozzolanic understands that Sunstate has supplied fine grade fly ash since approximately 2007.

Pozzolanic understands that Sunstate acquires fly ash from the silo at Tarong North Power Station and then grinds this coarse fly ash into fine grade fly ash using its cement milling facilities. **[CONFIDENTIAL]**. Pozzolanic has assumed that given Boral and ABL are Sunstate's ultimate shareholders that a significant proportion of this fine grade fly ash is used by these concrete producers.

#### (b) Independent Flyash Brokers

IFB was established in about November 2005 to purchase fly ash from power stations. Pozzolanic understand IFB to be a joint commercial venture between a number of concrete producers, namely: 42

- (i) Wagners Concrete which owns 60%;
- (ii) Neilsen's Concrete which owns 27%;
- (iii) Cordwells Concrete which owns 7%; and
- (iv) Sunmix which owns 6%.

Set out below is a brief description of these companies:

• Wagners is a privately owned business which produces and supplies cement and concrete in Queensland. <sup>43</sup> Pozzolanic understands Wagners maintains 20 concrete batching plants in and around Brisbane, the Gold Coast, Townsville and Toowoomba. Further, Pozzolanic is aware that Wagners has recently completed construction of a cement grinding plant in Brisbane. <sup>44</sup> Pozzolanic assumes Wagners receives its required volumes of fly ash from IFB.

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<sup>39</sup> http://www.boral.com.au/aboutBoral/index.asp

<sup>40</sup> http://www.adbri.com.au/ablprofile.html

<sup>41 [</sup>CONFIDENTIAL]

<sup>&</sup>lt;sup>42</sup> Participants and their respective shares in IFB were obtained from an ASIC Search of IFB, dated 14 March 2010.

<sup>43</sup> http://www.wagner.com.au/Divisions/Concrete/tabid/62/language/en-US/Default.aspx

<sup>44</sup> http://www.wagner.com.au/AboutWagners/PortofBrisbane/tabid/84/language/en-US/Default.aspx

- Neilsen's Concrete began trading in 1993. It produces and supplies premixed concrete and concrete aggregate. It owns 4 batching plants.<sup>45</sup> Pozzolanic assumes Neilsen's now receives its required volumes of fly ash from IFB.
- Cordwells Concrete has operated since 1965 and supplies pre-mixed concrete to the Sunshine Coast and Hinterland areas.<sup>46</sup> Pozzolanic assumes Cordwells receives its required volumes of fly ash from IFB.
- Sunmix is a small supplier of pre-mixed concrete in Queensland.

Whilst Pozzolanic is not aware of the details it understands that IFB has entered into a contract with the owners of Millmerran Power Station, Millmerran Power Partners, to purchase fly ash from Millmerran Power Station. [CONFIDENTIAL]. 47 EXCLUDED FROM

#### (c) Nucon Concrete

Nucon Concrete (**Nucon**) is one of the largest independent pre-mix concrete producers in Queensland. Pozzolanic understands it owns 8 concrete batching plants and forms parts of the Nucrush Companies, which in turn, are part of wider group of companies known as the Neumann Group with interests in petroleum and steel. <sup>48</sup>

Pozzolanic understands that Nucon supplies both general purpose cement and exposed aggregate concrete (where gravel, particularly coloured gravel, is deliberately exposed as part of the aesthetic design of a building) to small and medium builders.

Pozzolanic understands from market enquiries that since 2002, Nucon has purchased fly ash from Bayswater Power Station for use in its concrete and, at times, for on supply to others. The precise quantities of fly ash being imported by Nucon is not known to Pozzolanic, however, it is likely that most of the fly ash is being consumed by Nucon for its own use rather than being on sold.

## 8 The Public Benefits to be derived from the Agreement

#### 8.1 Relevant markets

The Applicants have considered the public benefits and any likely public detriments within the context of patterns of supply and demand for cementitious products including cement, fly ash and granulated slag, in eastern Australia. The Applicants have also considered any impact on the electricity generation industry as a result of the conduct.

If the Commission considers that the weighing of public benefits against any public detriments in assessing the Application ought to take place within a narrower sphere of commercial activity, such as the market for the acquisition and supply of fly ash in south-eastern Queensland, the Applicants submit that irrespective of this, due to the provision for third party access under the Agreement, the current industry environment and the benefits set out below, that the public benefits from the Agreement are substantial and are likely to outweigh any public detriments which might flow from the conduct.

<sup>45</sup> http://www.neilsens.com.au/

<sup>46</sup> http://www.cordwells.com.au/

<sup>&</sup>lt;sup>47</sup> [CONFIDENTIAL]

<sup>48</sup> http://www.neumann.com.au/our-businesses/NUCON-CONCRETE.aspx

#### 8.2 Public benefits

The Applicants submit there are significant public benefits flowing from the Agreement. These include:

#### (a) Environmental benefits

The acquisition and sale of fly ash by the Applicants for use as a cementitious substitute offers significant benefits to the environment, in both a practical and economic sense in that:

- less hazardous waste is required to be disposed of by the power stations, thus reducing the attendant economic costs of disposal and associated safety issues;
- (ii) less hazardous waste is stored in ash dams or other landfills by the power stations, thus reducing the damage to the environment and the opportunity cost of lost land;
- (iii) by using fly ash as a partial substitute for cement in concrete, less cement is required to be manufactured, in turn reducing the environmental costs related to the production of concrete; and
- (iv) through the use of less cement in concrete, natural inputs into cement such as limestone, which is a finite resource, can be reduced and conserved.

The environmental benefits facilitated by the Agreement will ultimately extend, either directly or indirectly, to the Queensland community as a whole, through reduction in the volume of regulated waste that is disposed in ash dams or other landfill waste disposal sites.

The Applicants actively foster and invest in the development of alternative uses for fly ash thus aiming to increase the volume of fly ash consumed and conversely, reduce the volume of fly ash disposed of, more so than any other fly ash supplier in the industry. Accordingly, the above environmental benefits may be exemplified and extended through this Agreement where Pozzolanic is able to find a commercially viable alternative use for fly ash which results in the off take of more fly ash from Tarong and Tarong North Power Stations.

#### (b) Cost efficiency benefits

As fly ash acts as a partial substitute for cement in the manufacture of concrete, each tonne of fly ash used displaces the same volume of cement in the production of concrete. Cement is a highly capital intensive product to manufacture. By comparison, fly ash, available only as a byproduct of coal fired power generation, has historically been less expensive than cement. It is for this reason, as well as the production efficiency benefits discussed below, that concrete producers use fly ash as a partial substitute for cement as it decreases their overall cost of production, enables them to compete more vigorously, and ultimately, results in lower prices for consumers. The Agreement therefore provides a public benefit in that it facilitates the off take of fly ash for use in concrete.

In addition, the removal of concrete-grade fly ash assists coal-fired power stations in the removal of a waste product, and relieves powers stations from the cost and burden of arranging their own removal of this ash. It also supplies power stations with an additional supplementary income source. This reduction in costs and the addition income generated from selling fly ash has the potential to enable coal-fired power stations to bid in the National Electricity Market at lower prices, which in turn offers competitive benefits at the wholesale level of electricity supply, and ultimately benefits electricity retail customers.

#### (c) Concrete performance benefits

As discussed above, fly ash brings additional properties to a concrete mix and for certain applications provides superior performance.

Fly ash of particular specifications can significantly enhance the strength, durability and longevity of concrete, thus representing increased value for money for consumers of concrete products. Further, fly ash in concrete can reduce the time in which it takes for concrete to set, thus reducing construction times and improving productivity.

By providing for third party access to fly ash, the Agreement enables third parties to also obtain access to these efficiency benefits. That is, third parties are able to access fly ash produced at Tarong and Tarong North Power Stations and may subsequently process and use that fly ash in the production of concrete (or sell the fly ash for such use), and in turn concrete applications produced using fly ash are likely to be more cost-effective and durable, which in turn benefits the customers who purchase those concrete products.

#### (d) Efficient utilisation of existing assets

Over the years of interaction with TEC, Pozzolanic has invested significant capital and resources into constructing and maintaining plant and facilities at both Tarong Power Station and Tarong North Power Station.

The continued use of these facilities reduces unnecessary economic costs that may result through the dismantling and redistribution of these assets were Pozzolanic to depart from Tarong and Tarong North Power Station. Further, the utilisation of assets which have depreciated over time can assist in the maintenance of a lower wholesale per tonne price than if this investment were required to be incurred again by an alternative off taker.

#### (e) Security of supply

The Agreement provides the Applicants with a secure and reasonably consistent source of supply. This security of supply will assist the Applicants to continue to operate competitively and to make more efficient and informed investment decisions in the medium-term.

#### 9 Minimal Public Detriments

#### 9.1 Structure of the agreement

The Agreement has been structured to confer on Pozzolanic a non-exclusive entitlement to collect fly ash from Tarong and Tarong North Power Stations.

To minimise any potential public detriment, the Agreement contemplates access by third parties to the fly ash generated at Tarong Power Station via a number of provisions. As discussed above in section 6.6, as well as the potential for TEC to sell Reserved Ash to third parties, these provisions include:

- third party access to fly ash:
  - clause 4.2(c) which provides access to Contestable Ash;
  - · clause 5(a) which provides potential access to Surplus Ash; and
  - clause 7(b) which provides access to Unused Ash,

- · regulation of the manner of access to Surplus Ash (as defined in the Agreement):
  - clause 9.1(b) which states that Pozzolanic has no rights in respect of Surplus Ash;
  - clause 9.2 which expressly contemplates access to Surplus Ash by third parties; and states that all parties (whether Pozzolanic or a third party) will be restricted from using or connecting to other parties' fly ash processing plant without TEC's prior written consent;<sup>49</sup>
  - clause 9.5 which provides that, where Pozzolanic takes less than 50% of available fly ash for an interval of 3 consecutive months or more and is not able to satisfy TEC that it has the capacity and intention to use at least 50% of the total amount of fly ash available for the following 3 months, third parties may have access to Pozzolanic's fly ash processing services (subject to the payment of a fee to Pozzolanic under clause 9.6); and
  - clause 12.5 which provides that Pozzolanic does not have exclusive use of the Licensed Area under the Agreement.

In addition, the Agreement is likely to operate for a term of just over 3 years (depending upon its Commencement Date).

#### 9.2 Competitive nature of the agreement

The Agreement is pro-competitive in that in provides various avenues for third parties to access fly ash from Tarong and Tarong North Power Station. In particular, it allows smaller competitors the ability to approach TEC with offers to purchase and remove more limited quantities of fly ash, and in turn allows TEC the ability to offer those smaller competitors security of supply to pre-negotiated quantities of fly ash, thereby promoting new entry and investment into the industry.

Lastly, as discussed above, a number of Pozzolanic's competitors have already established fly ash supply agreements resulting from tender processes in respect of coal-fired power stations in Queensland; for example, Sunstate acquires significant quantities of fly ash from Tarong North Power Station for on supply to its shareholders and independent customers. Further, the IFB consortium, which operates at Millmerran Power Station, is a recent entrant and now a supplier of fly ash.

#### 10 Conclusion

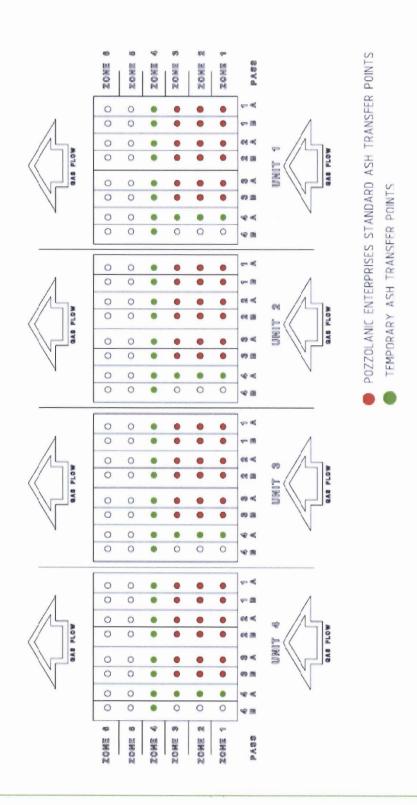
In conclusion, it is submitted that there are significant public benefits that flow from the Agreement, including efficiencies obtainable from environmental benefits, the reduced cost of concrete, production efficiencies for concrete, the utilisation of current assets and those obtainable from certainty of supply. In comparison the potential for any public detriments is minimal due to the structure of the Agreement, which provides for third party access, and the fact that there are other suppliers of fly ash within the industry.

For these reasons, the Commission should grant authorisation in accordance with the Application.

<sup>&</sup>lt;sup>49</sup> Clause 9.2(b) and (c) of the Agreement.

Annexure A - Photograph of the hoppers along zones 1 to 6 of passes 1A and 1B at unit 1 of Tarong Power Station.





# Annexure C - Map depicting the locations of power stations

