Eraring Power Station
Ash Recyling and Closure Planning

October 2024

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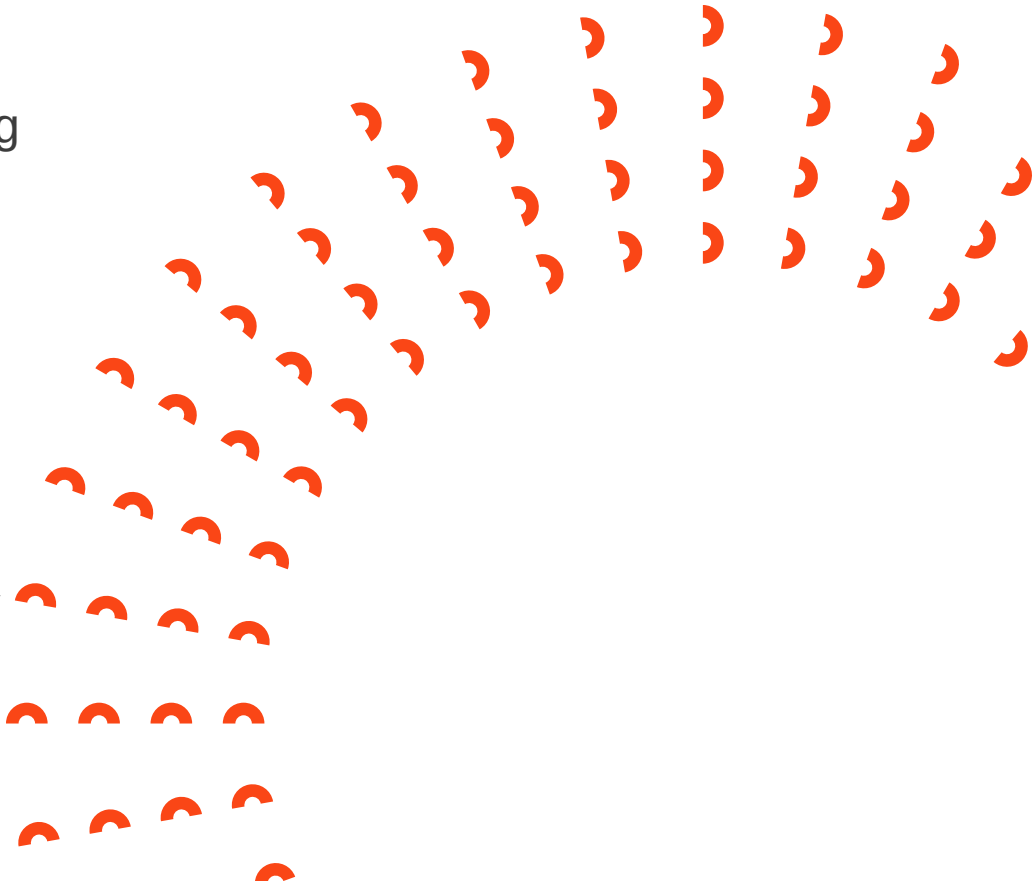


Eraring Power Station Overview

- Eraring is one of Australia's most efficient coal fired power stations, playing a crucial role in maintaining reliable supply of electricity
- Operating since 1982
- Australia's largest power station – total capacity of 2,922 megawatts
- Generating around a quarter of NSW's total energy requirements
- Expanded from 4 x 660 MW to 4 x 720 MW units in 2013 and installed low NOx burners, resulting in a 40% decrease in NOx emissions
- NSW Government agreement guarantees operation until August 2027
- Origin will determine when to retire the power station between August 2027 and April 2029 (Current Government agreement does not allow operation past April 2029)

Eraring Ash Dam – August 24

- Eraring Ash Dam is a declared Dam under the Dam Safety Regulation 2019, managed by Dams Safety NSW
- Footprint of approximately 230 ha
- Major recycling opportunities are bulk civil works, including rehabilitation projects, mine void grouting and infrastructure projects

Eraring Ash Recycling

Volumes

- Ash Produced FY22 (1.2Mt), FY23 (1.2Mt), FY24 (1.5Mt)
- Ash Recycled FY22 (73%), FY23, (49%), FY24 (43%)

Customers/Recyclers

- Flyash Australia, BFG Daracon and Boral
- Origin supplying additional customers

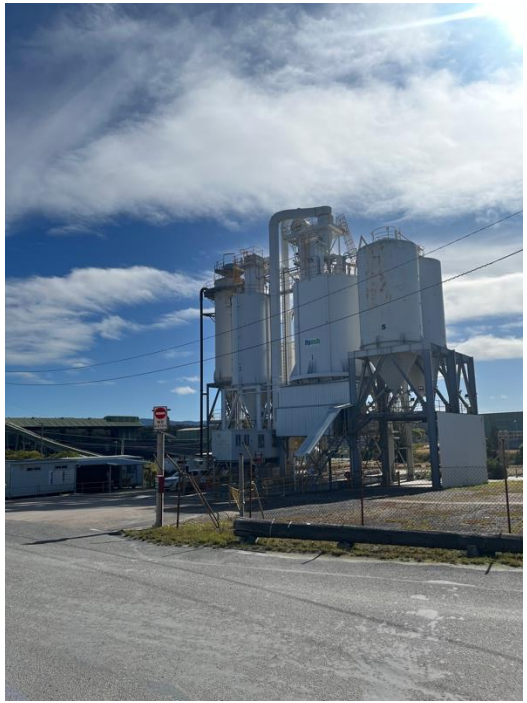
Industry

- Class 1 Flyash (TfNSW spec)
- Run of Station (ROS) Flyash
- Bottom Ash
- Mine Void Grouting
- Mine Rehabilitation projects

Onsite Ash Recycling

Flyash Australia

- Class 1 Flyash (TfNSW spec)



BFG Daracon

- Class 1 Flyash (TfNSW spec)
- Run of Station Flyash
- Cement Blended Ash for Mine void grouting (under Construction)

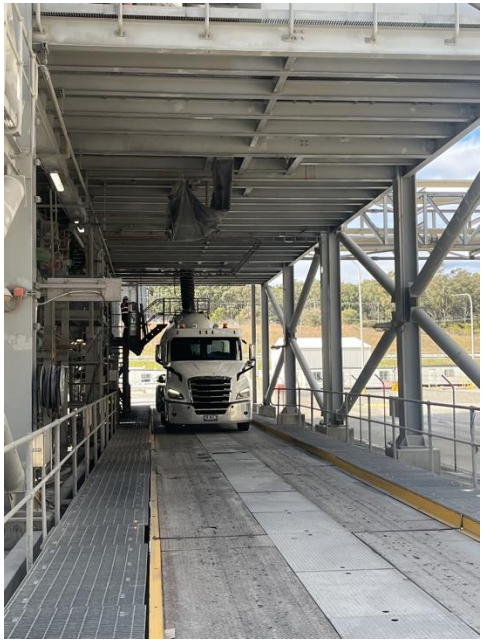
Onsite Ash Recycling

Boral

- Bottom Ash Recycling (100% of Bottom Ash Recycled)

Origin

- Run of Station Ash – Used as Class 2 Flyash in concrete and mine void grouting



Onsite Ash Recycling

Origin Pond Ash, Harvesting, Drying and Screening

- Being used for tailing dam rehabilitation project at West Wallsend
- Mine void grouting and engineered fill projects (This is not a standalone commercial operation it is a cost to Origin to maintain capacity)

Ash Dam Closure Planning

Ash Dam Rehabilitation Management Plan

- Plan was required by Condition 4.9 of Project Approval 07_0084 Modification 1 (Cell 6 and 7) and submitted to Department Planning, Housing and Infrastructure (DPHI) January 2024
- Document current under review by DPHI (including consultation with EPA and local municipal council)
- Plan currently aligns with a cap and close scenario however identifies further works to be completed to refine the closure strategy and criteria for the asset, including resource recovery.

Origin assessing and completing initial planning for 2 scenarios

- Operation of the ash dam as a resource recovery asset, deferring ash dam Closure/Rehabilitation for this period.
- Capping and rehabilitation of the ash dam in accordance with general industry standards (cap and close)

Origin Considerations

- Community Expectations
- Regulatory Bodies (EPA, DSNSW, AEMO, Local/State/Federal Govts)
- Commerciality

Commercial Feasibility for Resource Recovery

- ERAD Classification project currently under way
- Research into currently available beneficiation technology and operating models
- Engaging with Australian and overseas ash processors and end users around pond ash reuse
- Trial processing of pond ash in conjunction with technology suppliers
- Identifying required workstreams to progress rehab planning around ash reuse
- Reviewing potential commercial/operational models for reuse
- Targeting to issue a EOI to the market in early 2025 with the aim of shortlisting potential parties to progress commercial negotiations/feasibility studies in relation to commercial resource recovery operations for the Eraring Ash Dam

Key Challenges

Operational	Commercial	Quality	Technological
• Water management once Power Station water cooling system is not operational	• Selling price of Flyash in NSW will challenge the commercial feasibility of harvesting and processing	• Ash contained within the Dam is not compliant with Class 1 Australian Standards for ash, additional processing required	• Ash processing technology at scale has not yet reached maturity
• Permitting pathway required for pilot/small scale onsite plants	• Importing Ash from other nation's (India) is an alternate option that could be commercially beneficial for users	• Chloride levels currently exceed Australia Standard allowable levels	• Energy required in processing is high
• Not all ash will be suitable for processing		• One processing solution may not be suitable for the life of the operation	• Unknown if current technology is the solution for high chlorides