

NSW Parliamentary Inquiry into the Costs for Remediation of Sites Containing Coal Ash Repositories: Questions on Notice

Questions on Notice Origin Energy

1. Will Origin recover ash dam remediation costs from its customers?

The CHAIR: When you say you have put money aside in your accounts, when did you do that?

Mr JARVIS: We increased the provision this year again and that is in our accounts.

The CHAIR: Is that recoverable against the State?

Mr JARVIS: No.

The CHAIR: Is it intended, therefore, that in your pricing filings that you would be making to the energy operators—which, to be fair, is very complicated itself—is the intention that that is recoverable through that mechanism? Or do you not know yet?

Mr JARVIS: I do not think so. I will take that on notice.

The CHAIR: Sure. Basically, is the cost of this going to be passed on to consumers of electricity?

Mr JARVIS: No.

Origin has made a provision in its accounts for Eraring ash dam remediation costs. The National Electricity Market is a competitive market where individual generators such as Eraring have limited ability to recover site specific costs. Origin seeks to recover its costs from customers, insofar as the market allows, but Eraring ash dam remediation costs are not expected to be directly recovered from customers.

2. How many jobs would be created if Origin pursued ash recycling to the maximum ability?

The CHAIR: How many jobs would be created if each of you were to make a decision to pursue your recycling option to the maximum ability?

Mr JARVIS: That is really hard to say. We have not made that assessment. I have looked at going into the concrete business, so there is the opportunity to increase employment.

The CHAIR: I am going to press for an answer. We are politicians and we are after jobs in the current climate. Do you have a view on the jobs growth that could come from this part of the business?

Mr JARVIS: We have not made that assessment. I would not be giving you the full facts without making a better assessment. I could possibly take that on notice and come back to you with a more informed view.

The CHAIR: Could you?

Mr JARVIS: Yes, absolutely.

Origin has not undertaken a process to formally identify the number of jobs that could be created from ash recycling, as this number is subject to the number, type and size of the ash reuse opportunities in which Origin chooses to invest.

Many opportunities that consider the manufacture of an ash binding application, e.g. bricks and lightweight aggregates, would likely require the construction of manufacturing plants and create construction jobs. However, the output of the manufacturing process would likely compete with traditional markets and so it is difficult to quantify any ongoing net growth in jobs.

Reuse opportunities that include the storage and processing of ash are largely automated in operations, however like the manufacturing applications, would require one off construction jobs.

Where Origin pursues an opportunity to harvest ash from the Eraring Ash Dam, investment in the infrastructure and ongoing operations would create jobs. For example, the trial application of 30kt ash in a mine void remediation project required 7 full time employees over the course of an approximate 6-week period.

The delivery of the ash recycling products to market will require significant logistical support, however the extent to which this increases jobs in the logistics sector is difficult to quantify in the event that ash replaces traditional products.

3. How frequently does Origin (Eraring) consult with the community? Could Origin (Eraring) detail its record with the EPA including fines and infringement notices in the last five years?

Ms ABIGAIL BOYD: With Origin, is there a similar direct community consultation?

Mr JARVIS: Yes, there is.

Ms ABIGAIL BOYD: Is that quarterly as well?

Mr JARVIS: I am not too sure if it is quarterly. It could be even more regular than that, but I will need to confirm. Does Mr Orgias know?

Mr ORGIAS: I don't. It is not less than quarterly. It is definitely very regular but we can get back to you with the exact details on those.

The CHAIR: Could Origin also detail its record with the EPA in the last five years?

Mr JARVIS: Yes. We had two dusting events over the last few years where we received fines for that.

The CHAIR: When was that?

Mr ORGIAS: We will have to take that on notice.

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The CHAIR: Again, are you in a position to provide the actual—if there is an order or fine or an infringement notice that is public, can you put that on—

Mr JARVIS: It is all on the EPA website.

The CHAIR: Do you mind providing that to us on notice?

Mr JARVIS: We can provide that.

Community Consultation

Since acquiring Eraring Power Station in 2013, Origin has facilitated quarterly community forums with attendance from local community groups and Lake Macquarie City Council. Note that these have ceased since the COVID -19 pandemic, however Origin has commenced production of a quarterly community newsletter which is distributed to interested parties in lieu of this face to face meeting.

From May 2020 onwards, a formal Community Consultative Committee has been established in accordance with conditions relating to a modification of Project Approval 07_0084 for the augmentation of the ash dam. The independently chaired meeting is held quarterly.

Infringement Notices

In relation to the ash dam, the EPA has issued the following Notices over the past five years:

- Penalty Notice No. 3173528903 relating to ash dam dusting on 17 October 2019 (\$15,000) (note EPA public register states it was 2017 which is incorrect).
- Penalty Notice No. 3173527280 relating to ash dam dusting on 15 September 2018 (\$15,000).
- Penalty Notice No. 3085780868 relating to ash dam dusting on 27 September 2016 (\$15,000).

Management of dust events

Different measures are applied at the Eraring Ash Dam in order to control and mitigate dust events such as:

- Using Eraring Ash Dam specific weather forecast to plan site activities;
- Temporary capping;
- Polymer application;
- Wetting the ash with water cannons, water carts and misting system;
- Water bombing with a helicopter in extreme events.

Over the last 12 months, the following improvements were implemented at the Eraring Ash Dam in order to prevent and mitigate dust events:

- Water storage capacity for dust management increased from 500,000L to 1,500,000L;
- Increased irrigation capacity by 35ha;
- Developed an Eraring Ash Dam specific weather and dust forecast system that informs the team daily on the dust probability before the beginning of the shift.

Dust is continuously monitored at the Eraring Ash Dam by four strategically located dust monitoring stations. These monitors measure dust in real-time and send an alarm email of increasing dust if a 5-minute concentration goes above 120 ug/m³ (this is a site-based threshold rather than an environmental criteria).

4. When was the dam stability study and subsequent closure of the Myuna Bay Sport and Recreation Centre notified to the community?

Ms ABIGAIL BOYD: In relation to the issue with the ash dam at Eraring and the sudden closure of Myuna Bay Sport and Recreation Centre, when was that notified to the community?

The engineering reviews commissioned by Origin into the stability of the Eraring ash dam wall were completed in early March 2019 and Origin acted quickly to notify the Office of Sport. These reviews were also provided to Dams Safety NSW, NSW Department of Communities and Justice, then Minister for Sport Mr John Sidoti and local state MP Mr Greg Piper, while Lake Macquarie City Council, Scouts NSW and the NSW Roads and Maritime Service received a detailed briefing on the reviews.

Origin issued a media release on 29 March 2019 and a further statement on 3 April 2019 about the Office of Sport's decision to act on the findings of these engineering reviews. Both media releases received extensive media coverage throughout the Lake Macquarie and Hunter regions in the days following their release.

On 12 December 2019, the Acting Minister for Sport issued a media release confirming the Government's decision to permanently close Myuna following the completion of an independent assessment of Origin's original engineering review. This media release, which also detailed Origin's commitment to support the establishment of a new Sport and Recreation Centre, also received extensive coverage throughout the Lake Macquarie and Hunter regions.

5. Who has been provided with the inundation map? Will Origin provide the inundation map publicly or at least table it for this Committee?

Ms ABIGAIL BOYD: Were people with nearby properties that might have some risk informed of that risk?

Mr JARVIS: We have informed the community extensively on this issue.

Ms ABIGAIL BOYD: Have they seen the flow—I don't know what it that is called but basically the—

Mr ORGIAS: The inundation map.

Ms ABIGAIL BOYD: Have they seen that flow map?

Mr ORGIAS: I am not sure who individually—

Ms ABIGAIL BOYD: Has that been publicly released or has it just been released to the Government?

Mr ORGIAS: It has just been released the Government.

Ms ABIGAIL BOYD: So it is for the Government to release that to people. Is there any unilateral possibility of you releasing the information to the public? Are you restricted in some way from doing that?

Mr ORGIAS: At this stage we have just released it to the Government. I do not believe there is a restriction in releasing it publicly.

Ms ABIGAIL BOYD: Will you release that information? Could you at least table it for this Committee?

Mr JARVIS: I will take that on notice.

The reports containing inundation mapping have been provided to key regulators and those parties with property or assets that may be directly impacted in the event of a breach of the ash dam wall. The reports have been provided to the Office of Sport, Dams Safety NSW, NSW Department of Communities and Justice, then Minister for Sport Mr John Sidoti and local state MP Mr Greg Piper, while Lake Macquarie City Council, Scouts NSW and the NSW Roads and Maritime Service received a detailed briefing on the report.

6. Are there other jurisdictions in the world that use high proportions of coal ash in road construction?

The CHAIR: Has RMS, or Transport for NSW in its current form, identified a specific barrier or specific reason for why they do not wish to progress, or at least why they are supporting a criteria-based standard as opposed to a performance-based standard? Do we know what their objection is?

Mr ORGIAS: Their objection is just that the engineering around the use of a significant quantity of ash in major arterial roads is not proven. So it is something that is new and it requires testing and experimentation to get it correct. I do not think they are saying that it is not possible; they are just saying that it is unproven.

The CHAIR: Is there any other jurisdiction in the world that undertakes road construction with the ash like you would like New South Wales to do?

Mr ORGIAS: I would have to take that question on notice.

The use of fly ash in roads and other construction applications is generally governed by two standards, one relates to the quality of ash and the second relates to the quantity of ash in an application.

In our inquiry response, Origin noted that the RMS Specification governing the quality of ash was more conservative than the Australian Standard. This also holds true for other jurisdictions, including the United States. The American standards, ASTM C618, limits the proportion of unburned carbon in ash to only 12% in some applications, much higher than the 4% maximum applied in the RMS Specification. This allows a higher proportion of produced fly ash to be reused in beneficial applications, including the construction of roads.

7. Where does Australia import fly-ash from?

The CHAIR: I can only presume that there is not much of an export market for coal ash.

Mr FLOOD: It is imported.

Mr JARVIS: We actually import some of that into, I think, South Australia. When they closed down the coal-fired power station in South Australia they actually import fly-ash for cement production.

The CHAIR: From where?

Mr FLOOD: India, China.

Mr JARVIS: I thought it was India, but, again, we would need to confirm that.

Through discussions with industry participants, Origin understands that following the closure of coal fired generation in South Australia, some ash is being imported from India.