

## Appendix C. Stakeholder Engagement Table

Stakeholder	Date	Details	Issues raised	How addressed
Greg Piper MP Member for Lake Macquarie	11 January 2021	Advised of project, offered to answer questions and commitment to keep updated	Investment value Local employment opportunities	<p>The CIV value of the Project has been calculated as exceeding \$500 million.</p> <p>The Project is anticipated to require the recruitment and training of a construction workforce of up to 128 people during peak construction periods. The Project will also provide localised upskilling and training in the region for the deployment of batteries. Major contractors will be asked to demonstrate their commitment to using a regional workforce and creating Indigenous and equal opportunity employment.</p>
Eraring Community Forum	11 January 2021	Advised of the proposed EPS battery project	No concerns.	N/A
Community Investment Recipients and selected near neighbours	11 January 2021	Advised of the proposed EPS battery project	No concerns.	N/A
Eraring Ash Dam Community	11 January 2021	Advised of the proposed EPS battery project	No concerns.	N/A

Stakeholder	Date	Details	Issues raised	How addressed
Consultative Committee				
External Stakeholders	12 January 2021	Media release issued and Project website established. Media release communicated that Origin is progressing plans for nation's largest battery at Eraring Power Station. Plans for proposed battery project were detailed on Origin's website ( <a href="https://www.originenergy.com.au/about/who-we-are/what-we-do/generation/eraring-projects/#battery">https://www.originenergy.com.au/about/who-we-are/what-we-do/generation/eraring-projects/#battery</a> ) for community and investors, with contact details provided for enquiries.	No concerns	N/A
Glenn Bunny Head of Development, Planning and Regulation LMCC	9 March 2021	Provided overview of proposed battery project and offered invitation for Origin to present project to Council	No concerns	N/A
Glenn Bunny Head of Development, Planning and Regulation Lake Macquarie City Council	25 March 2021	Presentation to LMCC with overview of project	No concerns	N/A
Near neighbours on Border Street	25 March 2021	Opportunistic telephone call with a limited number of near neighbours to advise on the	Majority of people had not heard the media announcement but did not express any	N/A

Stakeholder	Date	Details	Issues raised	How addressed
and Short Streets (Eraring)		details of the proposed EPS battery project in the event that letter box drop could not proceed due to weather conditions.	concerns with the battery. One resident raised concerns with coal ash unrelated to the battery project.	
Near neighbours on Border Street (Eraring) and Gradwells Road (Dora Creek)	29 March 2021	Opportunistic telephone call with a limited number of near neighbours to advise on the details of the proposed EPS battery project in the event that letter box drop could not proceed due to weather conditions.	Majority of people had not heard the media announcement but did not express any concerns with the battery.	N/A
All residents of Border St and Gradwells Road	29 March 2021	Letter-box drop to approximately 60 residents on Border Street and Gradwells Road. Refer to letter attached.	No follow-up received	N/A
EPA	01 April 2021	Input to SEARs	Specified expectations for assessment of key issues of air quality, water and noise.	The Water assessment and Noise assessment are provided in <b>Appendix L</b> and <b>Appendix J</b> respectively.  No SEAR for air quality was applied by DPIE. Nevertheless, brief consideration of air quality impacts which are limited to construction dust generation potential is provided in <b>Section 6.12</b> .
DPIE Water and NRAR	1 April 2021	Input to SEARs	Identification of adequate and secure water supply, detailed water balance, assessment of water source impacts as per SEARs, proposed monitoring and consideration of applicable legislation.	Water impact assessment is provided in <b>Appendix L</b> .
HNSW	8 and 9 April 2021	Input to SEARs	Aboriginal Cultural Heritage Assessment Report (ACHAR) and SOHI are to be prepared.	ACHAR and SOHI are provided in <b>Appendix F</b> and <b>Appendix G</b> respectively.

Stakeholder	Date	Details	Issues raised	How addressed
TransGrid	12 April 2021	Input to SEARs	<p>EIS to include:</p> <ul style="list-style-type: none"> <li>▪ Details of connection into the TransGrid switchyard to be described and assessed;</li> <li>▪ The customer will need to continue to engage with TransGrid, via executing a Connection Process; and</li> <li>▪ Agreement to finalise the connection to the TransGrid's network.</li> </ul>	<p>The connection to the TransGrid switchyard is described in <b>Section 3.2.2</b>.</p> <p>Origin is continuing to consult with TransGrid in relation to network connection.</p>
MEG	12 April 2021	Input to SEARs	We request to be consulted in relation to the proposed location of any biodiversity offset areas (both on and off site) or any supplementary biodiversity measures to ensure there is no consequent reduction in access to prospective land for mineral exploration, or potential for sterilisation of mineral or extractive resources.	Biodiversity offset sites are not currently identified.
TfNSW	14 April 2021	Input to SEARs	Specified traffic impact assessment expectations.	Traffic impact assessment is provided in <b>Appendix K</b>
DPIE Hazard Branch	Undated	Input to SEARs	Specified Preliminary Hazard Analysis expectations	A PHA is provided in <b>Appendix M</b>
SA NSW	16 April 2021	Input to SEARs	<p>SA NSW recommends consultation with coal title holder and operator and the Department of Mining, Energy and Geoscience to identify if a mine subsidence risk caused by future planned mining activity is present.</p>	Consultation undertaken as per this table.
RFS	19 April 2021	Input to SEARs	EIS to be supported by a bush fire report that demonstrates that the Project meets the relevant requirements of Planning for Bush Fire Protection 2019.	A bush fire assessment is provided in <b>Appendix N</b> . The Detailed design would consider the provision of asset protection zones

Stakeholder	Date	Details	Issues raised	How addressed
				and other adaptive management measures as necessary to protect the Project from bushfire.
LMCC	21 April 2021	LMCC input to SEARs	<p>EIS to consider:</p> <ul style="list-style-type: none"> <li>An expanded list of EPI's and strategic documents and how the Project contributes to future land uses and infrastructure;</li> <li>Analysis of alternative sites;</li> <li>Locating of any biodiversity offsets locally;</li> <li>Development contributions;</li> <li>Waste considerations and product stewardship; and</li> <li>Stormwater management.</li> </ul> <p>LMCC input did not raise local heritage significance of the EPS and subsequent follow-up phone call resulted in referral to the library.</p>	<p>Listed EPIs are addressed in Section 4.</p> <p>Listed strategic documents are considered in Section 2.</p> <p>Analysis of alternative sites is provided in Section 2.2.2.</p> <p>Biodiversity offset sites are not currently identified and are addressed in the BDAR.</p> <p>Waste is addressed in Section 6.11</p> <p>Stormwater is assessed in Appendix L with a commitment that drainage would be developed in greater detail as part of detailed design in consideration of specified guidelines.</p>
Eraring Ash Dam Community Consultative Committee	29 April 2021	Presentation and overview of the EPS Battery Project and approval process.	No Concerns	N/A
Border Street (Eraring) and Gradwells Road (Dora Creek) Residents	7 June 2021	Origin sought approval directly from selected residents to undertake noise monitoring.	Residents happy with the installation of noise logger on their property(s) and indicated the area on their property they would prefer the logger to be. The logger was installed in this area. Resident was informed that Jacobs would return a week later to replace the	N/A

Stakeholder	Date	Details	Issues raised	How addressed
			logger's battery and a week on from that to collect the logger.	
Border Street (Eraring) and Gradwells Road (Dora Creek) Residents	14 June 2021	Battery swap on noise loggers	Jacobs spoke with the resident prior to swapping battery. Battery swap was then performed.	N/A
Wider Eraring Community	21 June 2021	Information on the project was included in the Eraring Community Newsletter. This newsletter is distributed to a wide range of stakeholders including community members and organisations, Lake Macquarie City Council, Greg Piper MP, Community Forum and Community Consultative Committee. Newsletter attached for reference.	No issues	N/A
Centennial Coal	25 June 2021	Project overview presentation for Centennial Coal	No issues	N/A
EPA	8 July 2021	Discussion around the Land SEARs, identified contamination and data publication.	No issues	N/A
Treasury	28 July 2021	Discussion around Land SEARs prior to submission	No issues	N/A
Community Consultative Committee – Ash Dam	5 August 2021	Provided overview of project.	Committee has requested further information at the next meeting scheduled for 11 November 2021	A member from the Project Team will attend the November meeting to present.

25 March 2021

Resident  
Eraring and Dora Creek NSW

Dear Resident

### **Proposed Eraring Battery Project**

The purpose of this letter is to inform you of Origin's plans to develop a large battery at Eraring Power Station. This proposed battery, which will be subject to final approval from the Origin Board, is intended to position Origin's generation portfolio to support Australia's rapid transition to renewables.

The project was announced in mid-January 2021 and you can read more about it on our website. <https://www.originenergy.com.au/about/investors-media/media-centre/origin-progresses-plans-for-nations-largest-battery-at-eraring-power-station.html>

The battery would have an overall capacity of up to 700MW and a dispatch duration of 4 hours, making it one of the largest battery projects currently under consideration in Australia.

A large-scale battery at Eraring will help us better support renewable energy and maintain reliable supply for customers, by having long duration storage ready to dispatch into the grid at times when renewable sources are not available.

We have included Frequently Asked Questions in this letter to provide you with more project information along with a map of the proposed location.

Origin is committed to keeping our communities and stakeholders informed of our proposed projects and we will let you know when you'll have the opportunity to provide feedback and have your say on the project during the planning process. A Scoping Report has now been lodged with the NSW Department of Planning and a copy of the report can be read here: <https://www.planningportal.nsw.gov.au/major-projects>

In the meantime, if you have any questions at all please do not hesitate to contact me on 0400 035 434 or [tania.carlos@originenergy.com.au](mailto:tania.carlos@originenergy.com.au).

Yours sincerely,



Tania Carlos  
Senior Community Relations Business Partner  
Energy Supply and Operations

# Frequently Asked Questions

**Q: Why is Origin planning to build a battery at Eraring Power Station?**

A: We recognise Origin has an important role to play in positioning our electricity generation portfolio to support Australia's rapid transition to renewables.

A large-scale battery at Eraring will help Origin better support renewable energy and maintain reliable supply for our customers.

Renewable energy, such as from solar and wind, needs 'firming' capacity from sources like batteries to provide additional electricity to the grid during times of higher demand, or when supply from renewables is low. Batteries are an example of 'firming' capacity that support the continued growth of renewable energy in our energy system.

A large-scale battery at Eraring will also support Origin's orderly transition away from coal-fired generation by 2032 and the policy objectives of the NSW Electricity Infrastructure Roadmap which will see a substantial increase in renewable energy supply in NSW.

The site's existing links to transmission infrastructure, load centres and availability of suitably zoned land owned by Origin also make Eraring an ideal location for a large-scale battery.

**Q: What's the current status of the proposed battery at Eraring?**

A: Origin has received responses from an Expression of Interest to suitably qualified firms to supply and install the large-scale battery and released a Request For Tender on Monday 8 March. A Connection Enquiry has also been lodged with NSW transmission network service provider TransGrid to connect the battery to the national grid via the Eraring substation. Shortly we'll commence the planning application process, which will include community consultation and an opportunity to comment on this proposal.

**Q: How do batteries support the transition to renewable energy?**

A: Renewable energy, such as from solar and wind, needs 'firming' capacity that can provide additional electricity to the grid during times of higher demand, or when supply from renewables is low. Batteries are an example of 'firming' capacity that can shift energy from periods of abundant renewable supply into periods of low renewable supply and will support the continued growth of renewable energy in our energy system.

**Q: How will the battery be charged?**

A: The battery would be directly connected to the electricity grid, independent from the Eraring Power Station generation units. As a result, it would not be reliant on Eraring Power Station for charging - it could be charged by all forms of generation available in the market, including renewables.

**Q: Where will the battery be located at Eraring?**

A: The proposed battery will be located on Origin-owned land, to the south west of the existing power station. The planned location is close to the power station's transmission switchyard and will be positioned to minimise visual impacts. More details on the proposed location will be provided during the community consultation phase of the planning application process. (map attached)

**Q: Can the battery be built on the ash dam?**

A: No, we are not planning to build the battery on the ash dam.

**Q: When will you know if the project will proceed?**

A: Once we have all the necessary regulatory and technical approvals in place, the project will be taken to the Origin Board for a final investment decision. At the earliest this will occur in the second half of 2021.



**Q: How long will the project take to complete?**

A: Following selection of a preferred supplier and achievement of regulatory and technical approvals, along with Origin Board approval, we expect the battery will be deployed over three phases, with the first phase expected to be delivered between late 2022 and early 2023. We will share details of the timing for subsequent phases when this is available.

**Q: Will there be more traffic movement during construction?**

A: Following selection of a preferred supplier, the project will need to achieve the required planning approval from the NSW Government. As part of this planning process a range of assessments will be completed, including a detailed traffic management plan. The community will be given an opportunity to view and provide comment on all elements of the planning applications including the traffic management plan.

**Q: How many local jobs will be created for the project?**

A: We will be able to share further details on this aspect of the development once the Request For Tender process is complete and a shortlisted firm has been selected to supply and install the battery.

**Q: How much will the project cost?**

A: As we are currently commencing our Request For Tender with firms to supply and install the large-scale battery, we aren't currently able to confirm details such as the project budget.

**Q: How would the project be funded?**

A: The project would be funded by Origin however we have not finalised the detailed methods at this point. We will select the most appropriate financing arrangements for this project as it develops.

**Q: How many hours of output will the battery have?**

A: The proposed battery would have an overall capacity of up to 700 MW and a dispatch duration of 4 hours. This would make it the largest battery project currently under consideration in Australia.

If the battery operates at 700MW, it will be able to provide continual power output at this level for 4 hours. The amount of energy that can be stored in the battery ( $4 \text{ hours} \times 700\text{MW} = 2800\text{MWh}$ ) is the defining constant here. If the battery operates at a lower output, it will be able to provide the power for longer. For example, if we operate at a power output level of 350MW, the battery would be able to continually provide this for 8 hours.

**Q: How long does it take to charge the battery?**

A: Most batteries charge and discharge at the same rate. This means that the battery would take four hours to charge at 700MW draw from the grid, or eight hours at 350MW draw from the grid. However, some batteries can take slightly longer to charge than discharge.

**Q: Will the battery have any environmental impacts e.g. noise from cooling fans?**

A: The battery will create some noise from fans which are used to keep the batteries cool. However, this is expected to be well within the permitted levels of the existing power station. Noise studies will form a critical part of the environmental and planning assessment process.

**Q: Are there any hazards associated with the battery?**

A: Some early-stage technology Lithium-Ion batteries experienced fires when subjected to impacts or high internal temperatures beyond their design. Design of battery cells, charging management, fire suppression systems and temperature monitoring have progressed over recent years helping to significantly improve safety and reduce risk. Additionally, the layout of the plant, maintaining spacing between components manages the risk of the spread of a potential fire. Consideration of fire risk is a key design component for Origin in ensuring safety for both our employees and the surrounding communities.



#### Site layout

- Site access point
- Node
- Cable connection
- Project footprint
- Battery footprint
- Store
- Eraring Power Station
- Eraring site boundary

#### Surrounding context

- Transmission line
- Railway
- Conveyor
- Switchyard
- Arterial road
- Local road
- Service maintenance track
- Easement

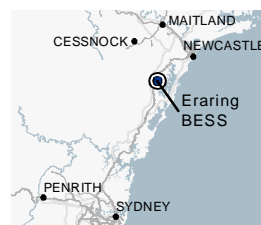
- Minor waterway
- Waterbody
- Lot boundary

0 500 m  
1:15,000 at A4  
GDA94 MGA56



#### Data sources

Origin 2021  
Aerometrex 2020  
© Department Finance, Services  
and Innovation Dec 2020



**Figure 3.1** Indicative Project Layout



June 2021

# Eraring Power Station Community Newsletter



Eraring Power Station (EPS) is owned and operated by Origin Energy. The station comprises four 720 mega watt (MW) coal fired units, and one 42MW diesel fuelled gas turbine. Eraring is Australia's largest power station with a generating capacity of 2922MW, and accounts for approximately 25 percent of New South Wales' power requirements.

## A message from the Group Manager, EPS

The end of 2020 saw the site focus on maintenance inspections and routines to maximise reliability during the crucial summer period. However, after a year like no other, summer 2020/21 was also very different with mild and wet conditions and the impact of COVID-19 seeing subdued energy demand which resulted in lower generation over the period.

Although demand has been subdued, our generation assets including EPS, have been performing at a high level of reliability and flexibility. The lower than expected demand did provide further opportunities to undertake maintenance, seeing the station operating during periods of summer with one of the four units out of service.

The team is now preparing for the winter period as well as the upcoming Unit 4 major outage commencing in August. This preparation involves confirming work scopes and planning for the hundreds of additional contractors working on site within our COVID-19 plan.

A significant percentage of our workforce have begun the transition back to working on site, but we continue to monitor the situation to ensure we are managing and mitigating risks so we can reduce exposure to the virus. This means we still have restrictions on visitors and community interactions at site.

In January, Origin also announced plans for a large battery project on the EPS site and you can read about the project in this edition. And don't forget to take a look at our new website, which you can read about later in this newsletter.

**Tony Phillips – Group Manager, Eraring Power Station**

## Environment Update

The ash dam management team continues to build on the existing dust control system on the ash dam. Over the past few months, a spray irrigation network has been extended across the entire dam, having first been introduced on the eastern portion. This system provides coverage of a large surface area and can be used in conjunction with the existing water cannons.

Our Indigenous trainees and land management team are continuing to undertake weed management and rehabilitation works on the site including works to remove weeds near the outlet canal.

## Eraring Battery Project

In January 2021 Origin announced plans to develop a large-scale battery at EPS.

The battery will have an overall capacity of up to 700MW and a dispatch duration of 4 hours. The proposed battery is intended to position Origin's generation portfolio to support Australia's rapid transition to renewables.

A long duration storage battery at Eraring will be charged from the grid and will help us maintain reliable supply for our customers by being ready to dispatch into the grid when renewable sources are not available.

Origin is committed to keeping our community informed of the project and you will have the chance to have your say during the planning phase. However, if you have any questions at all please do not hesitate to contact [Tania Carlos](#), Senior Community Relations Business Partner.



## Site Projects and Activities

As outlined in our previous newsletter, there are several projects and activities currently being undertaken at EPS.

**Southern Embankment Stability Project:** The proposed ash dam southern embankment stability project is in detailed design phase, including the completion of a Quantitative Risk Assessment. Ground improvement works are planned to commence upon completion of the detailed design and once construction contractor has been selected. Origin has undertaken an environmental assessment of the project to ensure we remain compliant with the requirements of our Environment Protection Licence and minimise impacts on the local community during construction.

**Ash Dam Expansion Project:** In late 2019, the Independent Planning Commission (IPC) approved the Ash Dam Expansion Project. Project details are available on the Department of Planning Infrastructure and Environment (Department) [website](#). During the detailed design phase in 2020, we identified that some changes to the project would be required and a further modification of this project's approval would be needed. The new approach to the project has a smaller footprint with reduced impact on native vegetation. The Community Consultative Committee (CCC), which was established as a condition of approval, has now met five times with the most recent meeting seeing the committee visit site for the first time. Minutes of the meetings can be found on our [website](#).

**Ash Recycling:** In early 2021 Origin (with a local industry partner) completed commissioning of a large fly ash classifying plant at Earning. The new classifier replaces a smaller plant and will facilitate increased ash recycling into the future. Origin is also progressing a project approval modification to install additional storage silos at Earning which will also further increase recycling rates by smoothing supply for our customers. Origin has secured EPA approval to recycle ash from the ash dam for use in a mine rehabilitation project that is commencing in mid 2021. A further project is also due to commence in the second half of 2021 where Origin and a technology partner will trial the manufacturing of an ash aggregate product for use in the Australian construction industry. These projects, along with Origin's ongoing investigations into the beneficial use of fly ash opportunities demonstrate our commitment to increase ash recycling at Earning consistent with the ash recycling recommendations in the NSW Parliamentary Inquiry: Costs for Remediation of Sites Containing Coal Ash Repositories.

Below: Southlake Youth Service food packages

### New Earning website

Earlier this year we launched the new Earning [website](#). The new site features information on key projects, station operations, environmental performance, and our activity in the community. The site also houses important regulatory documents and reports including emissions monitoring data. The site will be regularly updated and will be key resources as we increase our communications with the local community.



## Community Investment

Origin is committed to supporting the communities around where we operate. Here are some of the local community initiatives we're currently supporting.

### Morisset High School:

In 2020, Origin entered a partnership with Morisset High School to support awards and scholarships to help students reach their full potential.

The partnership supports students' academic growth, develops interpersonal and life skills, discovers and nurtures talent in sport or creative and performing arts, or to learn new skills that will support the pursuit of opportunities for employment and careers.

### Southlake Youth Service:

Southlake Youth Service provide food packages for disadvantaged families and students at risk of homelessness. They also run a local school breakfast program and offer families links to local support services.

*"Southlake Community Services is incredibly grateful for the ongoing support from Origin Energy for our Hub program which runs weekly on Mondays from 12:00noon-1:30pm. Within The Hub, we supply free food parcels to people experiencing disadvantage and vulnerability in our community. Within our Youth Service, we also facilitate breakfast programs in three local schools offering free healthy breakfast meals for children and young people to access at school. Origin Energy's contribution has provided our organisation the opportunity to support a greater number of people across the local community, and we cannot thank them enough for their ongoing support!"* Liam Lewis – Coordinator, Southlake Youth Services.

### Hunter Valley Training Company (HVTC):

Origin is pleased to again support the HVTC Excellence Awards.

The Excellence Awards celebrate HVTC's ongoing commitment to quality vocational education and training while also providing an opportunity to recognise the outstanding achievements of apprentices, trainees, students and host employers. This event recognises accomplishment across all HVTC branches across NSW including the Hunter.

### Community Consultative Committee:

Nominations are open to fill a vacancy on the Earning Power Station Ash Dam expansion project Community Consultative Committee (CCC).

Established in early 2020, the CCC comprises seven community members and a representative of the Lake Macquarie City Council. Due to a resignation, there is a vacancy on this committee and we're seeking applications from members wanting to voluntarily contribute by joining this group.

For further information on the CCC and how to apply, please visit our [website](#).

## Contact us

To discuss anything relating to EPS Operations please contact Tania Carlos, Senior Community Relations Business Partner:

 [tania.carlos@originenergy.com.au](mailto:tania.carlos@originenergy.com.au)  **0400 035 434**

If something on or near EPS requires urgent attention, contact site security.

 **02 4973 0700**

Origin Energy Retail Limited ABN 22 078 868 425 • Origin Energy (Vic) Pty Limited ABN 11 086 013 283 • Origin Energy Electricity Limited ABN 33 071 052 287 • Origin Energy LPG Limited ABN 77 000 508 369 • OC Energy Pty Ltd ABN 62 144 655 514 • Sun Retail Pty Limited ABN 97 078 848 549 • 100 Waymouth Street, Adelaide SA 5000 Telephone 13 24 61 • Facsimile 1800 132 463 • Web enquiries [originenergy.com.au/contactus](http://originenergy.com.au/contactus)

# Eraring Ash Dam Expansion Community Consultative Committee – Meeting 5



29 April 2021

# Agenda

Item no.	Description	Who
1.	<ul style="list-style-type: none"><li>• Introductions to meeting</li><li>• Context of Covid restrictions and future meetings (update)</li></ul>	Margaret Harvie and all
2.	<ul style="list-style-type: none"><li>• Declarations of pecuniary interest</li></ul>	
3.	Actions from Previous Meeting: <ul style="list-style-type: none"><li>• See responses to actions from meeting 4 (December 2020)</li><li>• Restorative Justice Presentation – Joan McCarthy (10 mins)</li></ul>	Margaret Harvie and all
4.	Correspondence <ul style="list-style-type: none"><li>• See responses to questions from Meeting 4 (December 2020) and responses to follow up questions from Garry Blaschke</li><li>• Additional question since from Neil Wynn about whether Origin support the recommendations of the recently released coal ash enquiry.</li></ul>	All
5.	Update on Project progress <ul style="list-style-type: none"><li>• Look ahead of future activity in the coming 3 months</li></ul>	Origin
6.	Next meeting <ul style="list-style-type: none"><li>• Suggest 5 August 2021</li></ul>	Margaret Harvie



# Battery Project Overview

## Key Parameters

- 700MW peak output
- Flexible output - 2800MWhrs over 4 hrs @ full load to 350MW over 8 hrs or longer durations at lower loads
- Lithium Ion battery technology
- Connection to vacant transmission bay at the Eraring substation - no external transmission works are anticipated
- All works will be contained within the current power station site primarily on previously disturbed land
- Able to operate at full load with the existing power station still in operation
- Charges directly from the Grid - does not charge directly from Power Station
- State Significant Development - SEARS have been Issued for EIS



Feedback ?

good  
energy