

Vales Point Battery Energy Storage System

Environmental management

Delta Power & Energy (Delta), in partnership with Samsung Construction & Trading (Samsung), is proposing to develop a Battery Energy Storage System (BESS) at the Vales Point Power Station site. This large-scale battery system will store excess energy and release it to the grid when it's needed most, helping to keep NSW's electricity network stable and reliable as more renewable energy enters the network.

This fact sheet has been developed to answer some of the most common questions we've received so far around environmental impacts.

As the project progresses, we'll continue to keep you informed, provide updates on key milestones, and ensure there are continued opportunities for you to share your feedback or concerns.

Will the BESS affect air and water quality or impact on local wildlife?

Minimising environmental impacts – including to air quality, water quality and local wildlife – is important during both construction and operation of the BESS. These matters are being investigated and assessed as part of the Environment Impact Statement (EIS).

If any potential impacts are identified, the project will be designed to avoid these impacts where possible. Where impacts cannot be avoided, mitigation measures and controls will be developed and implemented to minimise them.

Environmental controls during construction will be detailed in a Construction Environmental Management Plan, while operational controls will be outlined in an Operational Environmental Management Plan. These plans may include environmental monitoring programs and regular audits to help protect Lake Macquarie, local wildlife, and the surrounding environment.

Will environmental monitoring be in place?

During construction and operation, the BESS will be managed in accordance with the Vales Point Environmental Protection Licence to ensure safe operations and compliance with environmental regulations. An Environmental Management Plan will outline control measures and a monitoring program to protect our workforce, the community and local ecosystems and waterways.

Can batteries leak chemicals into the ground?

The BESS will contain some hazardous materials, and we understand the community's concern about potential chemical leaks. The BESS modules are sealed and the units also include spill containment systems to capture runoff, including in the rare case of fire where water might be used. The BESS equipment has an advanced safety system design including 24-hour monitoring.

Regular inspections and a comprehensive maintenance program will be in place to ensure ongoing system integrity and performance. These measures will be addressed in the site's construction and operations Environmental and Emergency Management Plans.

How is the site protected from stormwater or flooding?

The Vales Point BESS site is located in a low-flood-risk industrial area. Stormwater and flood risks are managed by Vales Point Power Station through a network of water drains, retention basins and pollution control systems, designed to minimise runoff and protect local waterways.

The project's detailed design phase will include appropriate stormwater controls and drainage infrastructure to manage heavy rainfall and runoff events. Flood risk and water flow characteristics will be assessed during the EIS, and appropriate mitigation strategies will be developed to ensure site and environmental safety.

What will be done to prevent erosion or sediment runoff?

Erosion and sediment controls will be installed before construction starts to prevent soil movement and protect local waterways. These controls will form part of the site's construction and operations Environmental Management Plans and will be regularly inspected to ensure they are working effectively.

Will the BESS produce any emissions?

The BESS will not generate emissions like a coal-fired power station does. It will store excess electricity from the network and release it to the grid when needed, similar to a household battery, but on a much larger scale. There won't be smokestacks, fuel burning, or significant noise from operation. Batteries reduce overall network emissions by storing energy, shifting peak loads, replacing fossil fuel backups, and improving grid efficiency.

What happens at the end of the battery's life?

Battery units will be replaced or upgraded as needed over time. The project will include a battery end-of-life management strategy as part of the EIS. This will outline how used batteries are safely handled, removed, and either recycled or disposed of in line with Australian safety and environmental regulations.

What happens to battery waste?

End-of-life batteries will be managed by working with suppliers to maximise re-use options or disposal through licensed recycling facilities. Waste from construction and operation will be recycled for reuse where possible or disposed of using appropriate methods.

Will there be waste generated from the BESS?

Some waste will be generated during construction, such as packaging and minor spoil which will be managed under a Waste Management Plan. Waste will be recycled for reuse where possible or disposed of using appropriate methods. During operation, waste is expected to be minimal. Battery components will be sealed and contained, and any maintenance waste will be handled through approved procedures.

How can I provide feedback or share my concerns about the project?

We are continuing to engage with the community and stakeholders during the EIS preparation through a range of in-person and online activities.

This includes inviting community feedback on the concept design and as the EIS investigations progress, prior to submitting the State Significant Development (SSD) Application.

Visit the project website to learn more about the proposal and complete an online survey, or visit a community information display in November to talk with the project team.

What happens next?

Community and stakeholder feedback received will be considered to finalise the proposal and EIS.

The SSD Application, including supporting EIS, is expected to be completed and lodged in early 2026 for assessment by the NSW Department of Planning, Housing and Infrastructure.

The NSW Department of Planning, Housing and Infrastructure will place the EIS on public exhibition, providing another opportunity for the community to provide feedback.

The community and stakeholders will be kept updated as planning and EIS activities progress.

Stay informed

We will continue to keep the community and stakeholders updated as the project progresses. Visit the project website for the latest updates, or send us an email to be added to our email list.