

Your ref: SSD-61707209  
Our ref: DOC23/761453-2

Jai Reid  
Principal Planning Officer Assessments  
Department of Planning and Environment

By email: [jai.reid@planning.nsw.gov.au](mailto:jai.reid@planning.nsw.gov.au)

Dear Jai,

**Input into Secretary's Environmental Assessment Requirements – Upper Hunter Battery Energy Storage System (SSD-61707209)**

I refer to your Major Projects Portal request on 28 August 2023 seeking input into the Secretary's Environmental Assessment Requirements (SEARs) for the Upper Hunter Battery Energy Storage System, located at Campbell Street, in Aberdeen (Lots 35, 36, 37, 38, 39 & 56 in Deposited Plan 752485). The proposed development is within the Upper Hunter Shire Council local government area.

The Biodiversity Conservation Division (BCD) of the Department of Planning and Environment (the Department) understands that Maizewood Pty Ltd (the applicant) are proposing to install lithium-ion batteries, a switching station, cables to connect the project to the grid, fencing and associated infrastructure. The project site entry at Campbell Street, Aberdeen will also be upgraded. BCD understands that the proposal is a State Significant Development (SSD-61707209) project under the *Environmental Planning and Assessment Act 1979*.

BCD has reviewed the document '*Scoping Report – Upper Hunter Battery Energy Storage System*', dated 23 August 2023, and has prepared Standard SEARs which are presented in **Attachment A**. There are no project-specific SEARs provided for this project (**Attachment B**). Details of guidance documents are provided in **Attachment C**.

If you have any further questions about this issue, please contact Jayme Lennon, Senior Conservation Planning Officer, on 9585 6935 or at [huntercentralcoast@environment.nsw.gov.au](mailto:huntercentralcoast@environment.nsw.gov.au)

Yours sincerely



Joe Thompson  
**Director Hunter Central Coast Branch**  
**Biodiversity and Conservation Division**

31 August 2023

Enclosure: Attachments A, B, C

## Attachment A – Standard Environmental Assessment Requirements

<b>Biodiversity</b>
<ol style="list-style-type: none"><li>1. Biodiversity impacts related to the proposed development (SSD-61707209) are to be assessed in accordance with the <a href="#">Biodiversity Assessment Method 2020</a> and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the <i>Biodiversity Conservation Act 2016</i> (s6.12), <i>Biodiversity Conservation Regulation 2017</i> (s6.8) and <a href="#">Biodiversity Assessment Method 2020</a>.</li><li>2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the <a href="#">Biodiversity Assessment Method 2020</a>.</li><li>3. The BDAR must include details of the measures proposed to address the offset obligation as follows;<ul style="list-style-type: none"><li>• The total number and classes of biodiversity credits required to be retired for the development/project;</li><li>• The number and classes of like-for-like biodiversity credits proposed to be retired;</li><li>• The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules;</li><li>• Any proposal to fund a biodiversity conservation action;</li><li>• Any proposal to conduct ecological rehabilitation (if a mining project);</li><li>• Any proposal to make a payment to the Biodiversity Conservation Fund.</li></ul>If seeking approval to use the variation rules, the BDAR must contain details of the <a href="#">reasonable steps</a> that have been taken to obtain requisite like-for-like biodiversity credits.</li><li>4. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the <i>Biodiversity Conservation Act 2016</i>.</li></ol>
<b>Water and soils</b>
<ol style="list-style-type: none"><li>5. The EIS must map the following features relevant to water and soils including:<ol style="list-style-type: none"><li>a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).</li><li>b. Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method).</li><li>c. Wetlands as described in s4.2 of the Biodiversity Assessment Method.</li><li>d. Groundwater.</li><li>e. Groundwater dependent ecosystems.</li><li>f. Proposed intake and discharge locations.</li></ol></li><li>6. The EIS must describe background conditions for any water resource likely to be affected by the development, including:<ol style="list-style-type: none"><li>a. Existing surface and groundwater.</li><li>b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.</li></ol></li></ol>

<ul style="list-style-type: none"> <li>c. Water Quality Objectives (as endorsed by the NSW Government <a href="http://www.environment.nsw.gov.au/ieo/index.htm">http://www.environment.nsw.gov.au/ieo/index.htm</a>) including groundwater as appropriate that represent the community's uses and values for the receiving waters.</li> <li>d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the <a href="#">ANZECC (2000) Guidelines for Fresh and Marine Water Quality</a> and/or local objectives, criteria or targets endorsed by the NSW Government.</li> </ul>
<p>7. The EIS must assess the impacts of the development on water quality, including:</p> <ul style="list-style-type: none"> <li>a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction.</li> <li>b. Identification of proposed monitoring of water quality.</li> </ul>
<p>8. The EIS must assess the impact of the development on hydrology, including:</p> <ul style="list-style-type: none"> <li>a. Water balance including quantity, quality and source.</li> <li>b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.</li> <li>c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.</li> <li>d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).</li> <li>e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.</li> <li>f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.</li> <li>g. Identification of proposed monitoring of hydrological attributes.</li> </ul>
<p><b>Flooding and coastal erosion</b></p>
<p>9. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:</p> <ul style="list-style-type: none"> <li>a. Flood prone land.</li> <li>b. Flood planning area, the area below the flood planning level.</li> <li>c. Hydraulic categorisation (floodways and flood storage areas).</li> </ul>
<p>10. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 1 in 10 year, 1 in 100 year flood levels and the probable maximum flood, or an equivalent extreme event.</p>
<p>11. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:</p>

<ul style="list-style-type: none"> <li>a. Current flood behaviour for a range of design events as identified in 11 above. This includes the 1 in 200 and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.</li> </ul>
<p>12. Modelling in the EIS must consider and document:</p> <ul style="list-style-type: none"> <li>a. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood.</li> <li>b. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories.</li> <li>c. Relevant provisions of the NSW Floodplain Development Manual 2005.</li> </ul>
<p>13. The EIS must assess the impacts on the proposed development on flood behaviour, including:</p> <ul style="list-style-type: none"> <li>a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.</li> <li>b. Consistency with Council floodplain risk management plans.</li> <li>c. Compatibility with the flood hazard of the land.</li> <li>d. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.</li> <li>e. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.</li> <li>f. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.</li> <li>g. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council.</li> <li>h. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council.</li> <li>i. Emergency management, evacuation and access, and contingency measures for the development considering the full range of flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES.</li> <li>j. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.</li> </ul>
<p>14. The EIS must describe the potential effects of coastal processes and hazards (within the meaning of the Coastal Management Act 2016), including sea level rise and climate change:</p> <ul style="list-style-type: none"> <li>a. On the proposed development</li> <li>b. Arising from the proposed development.</li> </ul>
<p>15. The EIS must consider have regard to any certified Coastal Management Program (or Coastal Zone Management Plan) and be consistent with the management objectives described in the Coastal</p>

Management Act 2016 and development controls for coastal management areas mapped under the State Environmental Planning Policy (Coastal Management) 2018.

**Attachment B – Project specific environmental assessment requirements**

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<b>Biodiversity</b> - nil
<b>Water and soils</b> - nil
<b>Flooding and coastal erosion</b> - nil

## Attachment C – Guidance material

Title	Web address
<b>Relevant legislation</b>	
<i>Biodiversity Conservation Act 2016</i>	<a href="https://www.legislation.nsw.gov.au/#/view/act/2016/63/full">https://www.legislation.nsw.gov.au/#/view/act/2016/63/full</a>
<i>Coastal Management Act 2016</i>	<a href="https://www.legislation.nsw.gov.au/#/view/act/2016/20/full">https://www.legislation.nsw.gov.au/#/view/act/2016/20/full</a>
<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>	<a href="http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/">http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/</a>
<i>Environmental Planning and Assessment Act 1979</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N</a>
<i>Fisheries Management Act 1994</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N</a>
<i>Marine Parks Act 1997</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N</a>
<i>National Parks and Wildlife Act 1974</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N</a>
<i>Protection of the Environment Operations Act 1997</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N</a>
<i>Water Management Act 2000</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N</a>
<i>Wilderness Act 1987</i>	<a href="http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N">http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N</a>
<b>Biodiversity</b>	
Biodiversity Assessment Method (OEH, 2020)	<a href="https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/biodiversity-assessment-method-2020-200438.pdf">https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/biodiversity-assessment-method-2020-200438.pdf</a>
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	<a href="http://www.environment.nsw.gov.au/resources/bcact/guidance-decision-makers-determine-serious-irreversible-impact-170204.pdf">http://www.environment.nsw.gov.au/resources/bcact/guidance-decision-makers-determine-serious-irreversible-impact-170204.pdf</a>
Surveying threatened plants and their habitats - NSW survey guide for the Biodiversity Assessment Method (DPIE, 2020)	<a href="https://www.environment.nsw.gov.au/research-and-publications/publications-search/surveying-threatened-plants-and-their-habitats-survey-guide-for-the-biodiversity-assessment-method">https://www.environment.nsw.gov.au/research-and-publications/publications-search/surveying-threatened-plants-and-their-habitats-survey-guide-for-the-biodiversity-assessment-method</a>
NSW Survey Guide for Threatened Frogs – A guide for the survey of threatened frogs and their habitats for the Biodiversity Assessment Method (DPIE 2020)	<a href="https://www.environment.nsw.gov.au/research-and-publications/publications-search/nsw-survey-guide-for-threatened-frogs">https://www.environment.nsw.gov.au/research-and-publications/publications-search/nsw-survey-guide-for-threatened-frogs</a>
'Species credit' threatened bats and their habitats – NSW survey guide for the Biodiversity Assessment Method	<a href="https://www.environment.nsw.gov.au/research-and-publications/publications-search/species-credit-threatened-bats-nsw-survey-guide-for-biodiversity-assessment-method">https://www.environment.nsw.gov.au/research-and-publications/publications-search/species-credit-threatened-bats-nsw-survey-guide-for-biodiversity-assessment-method</a>
Fisheries NSW policies and guidelines	<a href="http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation">http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation</a>
List of national parks	<a href="http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx">http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx</a>
Revocation, recategorisation and road adjustment policy (OEH, 2012)	<a href="http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm">http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm</a>

Title	Web address
Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010)	<a href="http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm">http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm</a>
<b>Acid sulphate soils</b>	
Acid Sulfate Soils Planning Maps via Data.NSW	<a href="http://data.nsw.gov.au/data/">http://data.nsw.gov.au/data/</a>
Acid Sulfate Soils Manual (Stone et al. 1998)	<a href="http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf">http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf</a>
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	<a href="http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf">http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf</a> This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
<b>Flooding and coastal erosion</b>	
Reforms to coastal erosion management	<a href="http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm">http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm</a>
Floodplain development manual	<a href="http://www.environment.nsw.gov.au/floodplains/manual.htm">http://www.environment.nsw.gov.au/floodplains/manual.htm</a>
Guidelines for Preparing Coastal Zone Management Plans	Guidelines for Preparing Coastal Zone Management Plans <a href="http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf">http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf</a>
NSW Climate Impact Profile	<a href="http://climatechange.environment.nsw.gov.au/">http://climatechange.environment.nsw.gov.au/</a>
Climate Change Impacts and Risk Management	<a href="#">Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation</a>
<b>Water</b>	
Water Quality Objectives	<a href="http://www.environment.nsw.gov.au/ieo/index.htm">http://www.environment.nsw.gov.au/ieo/index.htm</a>
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	<a href="http://www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1">www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1</a>
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	<a href="http://deccnet/water/resources/AWQGuidance7.pdf">http://deccnet/water/resources/AWQGuidance7.pdf</a>
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	<a href="http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf">http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf</a>