

# Appendix A Secretary's Environmental Assessment Requirements

The Secretary's Environmental Assessment Requirements (SEARs) for the Proposal were originally issued by the NSW Department of Planning, Industry and Environment on 10 August 2021 (SEAR 1596). The revised SEARs (SSD-56284960) were issued on 30 August 2023, and these are reproduced below.

The requirements are given in the table below along with the relevant Sections in this EIS where they are addressed.

**Table A.1. SSD-56284960 from NSW Planning Industry & Environment.**

| Aspect  | Requirements  | EIS Section Addressed  |
|---------|---|--|
| General | The Environmental Impact Statement (EIS) must meet the minimum form and content requirements as prescribed by Part 8 of the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation) and must have regard to the State Significant Development Guidelines.<br><br>In particular, the EIS must include:   | This EIS   |
|         | <ul style="list-style-type: none"> <li>a stand-alone executive summary;</li> </ul>  | Executive Summary  |
|         | <ul style="list-style-type: none"> <li>a full description of the development, including: <ul style="list-style-type: none"> <li>details of construction, operation and decommissioning, including any staging of the development;</li> <li>high quality site plans at an adequate scale showing all infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process);</li> <li>a high quality detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development;</li> </ul> </li> </ul>  | Section 3<br>Section 3.3.1 / 3.10<br>Appendix D<br>Section 4.2<br>Appendix FF  |
|         | <ul style="list-style-type: none"> <li>a strategic justification of the development focusing on site selection and the suitability of the proposed site with respect to potential land use conflicts with existing and future surrounding land uses (including other proposed or approved energy facilities, rural/residential development and subdivision potential);</li> </ul>   | Section 2<br>Section 28  |
|         | <ul style="list-style-type: none"> <li>an assessment of the likely impacts of the development on the environment, focusing on the specific issues identified below, including: <ul style="list-style-type: none"> <li>a description of the existing environment likely to be affected by the development;</li> <li>an assessment of the likely impacts of all stages of the development, (which is commensurate with the level of impact), including any cumulative impacts of the site and existing, approved or proposed developments in the region and impacts on the site and any road upgrades, taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice including the <i>Cumulative Impact Assessment Guideline</i> (DPIE, 2021);</li> <li>a description of the measures that would be implemented to avoid, mitigate and/or offset the impacts of the development (including draft management plans for specific issues as identified below); and</li> <li>a description of the measures that would be implemented to monitor and report on the environmental performance of the development;</li> </ul> </li> </ul> | Section 1.3 and each assessment section<br><br>This EIS<br>Section 4<br>Section 25<br><br>Appendix C<br><br>Section 26 |

| Aspect                          | Requirements   | EIS Section Addressed   |
|---------------------------------|--|---|
|                                 | <ul style="list-style-type: none"> <li>a general description of any infrastructure that would be required for the project that is the subject of a separate approval process;</li> </ul>   | Section 4.2   |
|                                 | <ul style="list-style-type: none"> <li>a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; and a detailed evaluation of the merits of the project as a whole having regard to: <ul style="list-style-type: none"> <li>the requirements in Section 4.15 of the <i>Environmental Planning and Assessment Act 1979</i>, including the objects of the Act and how the principles of ecologically sustainable development have been incorporated in the design, construction and ongoing operations of the development;</li> <li>the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses; and</li> <li>feasible alternatives to the development (and its key components), including the consequences of not carrying out the development.</li> </ul> </li> </ul> | Appendix C<br><br>Appendix B<br><br>Section 27<br><br>Appendix AA<br><br>Sections 1.5.4 and 1.5.5 |
|                                 | <ul style="list-style-type: none"> <li>Where relevant, the assessment of key issues below, and any other significant issues identified in the risk assessment, must include: <ul style="list-style-type: none"> <li>adequate baseline data;</li> <li>consideration of the potential cumulative impacts due to other developments in the vicinity (completed, underway or proposed); and</li> <li>measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment; and</li> <li>a health impact assessment of local and regional impacts associated with the development, including those health risks associated with relevant key issues.</li> </ul> </li> </ul>   | Sections 6 to 23<br><br>Section 25<br><br>Appendix C<br><br>Appendix Q                            |
|                                 | <ul style="list-style-type: none"> <li>a detailed consideration of the capability of the project to contribute to the security and reliability of the electricity system in the National Electricity Market, having regard to local system conditions.</li> </ul>  | Section 2.1<br>Appendix J   |
|                                 | <p>The EIS must also be accompanied by:</p> <ul style="list-style-type: none"> <li>a report from a AIQS Certified Quantity Surveyor or RICS Chartered Quantity Surveyor providing a detailed calculation of the capital investment value (CIV) (as defined in the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived. The report shall be prepared on company letterhead and indicate applicable GST component of the CIV and include certification that the information provided is accurate for the development at the time of application; and</li> <li>an estimate of jobs that will be created during the construction and operational phases of the proposed development. The development application must be accompanied by the consent of the owner/s of the land (as required in Section 23(1) of the Regulation).</li> </ul>   | Appendix G<br><br>Appendix K<br><br>Owner's Consent Letter  |
| Statutory and Strategic Context | <p>The EIS must address the following specific matters:</p> <p>Address the statutory provisions applying to the development contained in all relevant environmental planning instruments, including:</p> <ul style="list-style-type: none"> <li><i>State Environmental Planning Policy (Planning Systems) 2021;</i></li> <li><i>State Environmental Planning Policy (Resources and Energy) 2021;</i></li> <li><i>State Environmental Planning Policy (Resilience and Hazards) 2021;</i></li> </ul>   | Section 4<br>Appendix B   |

| Aspect              | Requirements  | EIS Section Addressed  |
|---------------------|---|--|
|                     | <ul style="list-style-type: none"> <li>• <i>State Environmental Planning Policy (Biodiversity and Conservation) 2021;</i></li> <li>• <i>State Environmental Planning Policy (Transport and Infrastructure) 2021;</i></li> <li>• <i>Singleton Local Environmental Plan 2013;</i></li> <li>• <i>Upper Hunter Strategic Regional Land Use Plan;</i> and</li> <li>• <i>Hunter Regional Plan 2041.</i></li> </ul>  |  |
| Land and Water      | <ul style="list-style-type: none"> <li>• an assessment of the impacts of the project on soils, including consideration of the extent and nature of any existing contaminated materials on site, and the potential risks to human health and the receiving environmental and measures that would be implemented to avoid and mitigate impacts;</li> <li>• a supply chain assessment demonstrating that the required volumes of feedstock with no higher value use are available;</li> <li>• demonstration that demand for feedstock can be met over the operational lifespan of the plant;</li> <li>• an assessment of the impacts of the project on groundwater aquifers and groundwater dependent ecosystems having regard to the NSW Aquifer Interference Policy and relevant Water Sharing Plans;</li> <li>• an assessment of the impacts of the project on surface water quality having regard to the <i>NSW Water Quality and River Flow Objectives</i> (DECCW, 2006), <i>Australian and New Zealand Guidelines for Fresh and Marine Water Quality</i> (ANZG, 2018);</li> <li>• a detailed site water balance for the project a description of the water demands and identification of a water supply for the life of the project, and any water licensing requirements;</li> <li>• details of wastewater disposal arrangements;</li> <li>• an assessment of flooding and the hydrological impacts of the project; and</li> <li>• a description of the erosion and sediment control measures that would be implemented to mitigate any impacts during construction.</li> </ul> | <p>Section 15<br/>Appendix T<br/>Appendix U</p> <p>Section 3<br/>Appendix M</p> <p>Section 15<br/>Appendix T</p> |
| Air Quality         | <ul style="list-style-type: none"> <li>• an assessment of the likely air quality impacts of the project in accordance with the <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW</i> (EPA, 2022);</li> <li>• ability to comply with the relevant regulatory framework, specifically the <i>Protection of the Environment Operations Act 1997</i> and the <i>Protection of the Environment Operations (Clean Air) Regulation 2010</i>;</li> <li>• an assessment of the likely greenhouse gas impacts of the project; and</li> <li>• preparation of a greenhouse gas mitigation plan and climate change adaptation plan.</li> </ul>   | <p>Section 10<br/>Appendix O</p> <p>Section 11<br/>Appendix P</p>  |
| Noise and Vibration | <ul style="list-style-type: none"> <li>• assessment of the likely construction noise impacts of the project under the <i>Construction Noise Guideline</i> if available, or the <i>Interim Construction Noise Guideline</i> (DECCW, 2009) if the Construction Noise Guideline is not available.</li> <li>• an assessment of the likely operational noise impacts of the project under the <i>NSW Noise Policy for Industry</i> (EPA, 2017);</li> <li>• an assessment of the likely road noise impacts of the project under the <i>NSW Road Noise Policy</i> (EPA, 2011); and</li> <li>• an assessment of the likely vibration amenity and structural impacts of the</li> </ul>   | Section 13<br>Appendix R   |

| Aspect            | Requirements   | EIS Section Addressed   |
|-------------------|--|---|
|                   | project under <i>Assessing Vibration: A Technical Guideline</i> (DEC, 2006) and <i>German Standard DIN 4150-3 Structural Vibration – effects of vibration on structures</i> .  |   |
| Transport         | <ul style="list-style-type: none"> <li>an assessment of the transport impacts of the project on the capacity, condition, safety and efficiency of the local and State road network, including consideration of cumulative impacts from traffic associated with construction of other major projects in the area;</li> <li>an assessment of the likely transport impacts to the site access route and site access point having regard to Oversized or Over mass vehicles (if required);</li> <li>a description of the measures that would be implemented to mitigate any impacts during construction and operation of the development, in the form of a draft traffic management plan; and</li> <li>a description of any proposed road upgrades, including an assessment of associated impacts, developed in consultation with the relevant road authorities (if required);</li> </ul>  | Section 14<br>Appendix S  |
| Waste             | <ul style="list-style-type: none"> <li>identify, quantify and classify the likely waste stream to be generated during construction and operation, and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.</li> </ul>   | Section 8<br>Appendix L   |
| Biodiversity      | <ul style="list-style-type: none"> <li>an assessment of the biodiversity values and the likely biodiversity impacts of the project in accordance with the <i>NSW Biodiversity Conservation Act 2016</i>, the <i>Biodiversity Assessment Method</i> (BAM) and documented in a Biodiversity Development Assessment Report (BDAR); and</li> <li>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 BAM.</li> </ul>   | Section 21<br>Appendix Y  |
| Heritage          | <ul style="list-style-type: none"> <li>an assessment of the likely Aboriginal impacts of the project in accordance with the <i>Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales</i> (DECCW, 2010), including adequate consultation with Aboriginal stakeholders having regard to the <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents</i> (OEH, 2010); and</li> <li>an assessment of likely non-Aboriginal heritage impacts of the project.</li> </ul>   | Section 22<br>Appendix BB<br><br>Section 23   |
| Hazards and Risks | <ul style="list-style-type: none"> <li>a Preliminary Hazard Analysis (PHA), prepared consistent with <i>Hazardous Industry Planning Advisory Paper No. 6 – Guidelines of Hazard Analysis</i> (DPE, 2011) and Multi-level Risk Assessment, covering all aspects of the project that may pose risks to the public. The PHA must: <ul style="list-style-type: none"> <li>be a Quantitative Risk Assessment (QRA) and must include consideration of the change in risk as the quantity and concentrations of hydrogen used for operating the power station and in plant (piping, vessels, equipment, etc.) increases; and</li> <li>consider current and new technologies and standards for the design and operation of the power station and pipelines with hydrogen.</li> <li>must demonstrate that the risks from the project, including cumulative risk from all project components and any ancillary blending facilities, comply with the criteria set out in <i>Hazardous Industry Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning</i> (DPE, 2011); and</li> <li>an assessment of bushfire risk in accordance with <i>Planning for Bush Fire Protection 2019</i> (NSW RFS, 2019); and</li> </ul> </li> </ul> | Section 17<br>Appendix W<br><br><br><br><br><br><br><br><br><br>Section 16<br>Appendix V<br>Appendix EE |

| Aspect              | Requirements  | EIS Section Addressed                           |
|---------------------|---|---|
|                     | <ul style="list-style-type: none"> <li>– a plume rise impact assessment prepared in accordance with CASA’s guidelines for conducting plume rise assessments, and an assessment of the potential impact to aviation in the vicinity of the project.</li> </ul>   | Section 17<br>Appendix W                        |
| Visual              | <ul style="list-style-type: none"> <li>• likely visual and landscape character impacts of the project on the amenity of the surrounding area and private residences in the vicinity of the project.</li> </ul>  | Section 20<br>Appendix CC                       |
| Social              | <ul style="list-style-type: none"> <li>• an assessment of the social impacts of the project prepared in accordance with the Department’s <i>Social Impact Assessment Guideline For State Significant Developments</i> (2021) and the likely impacts on the local community and community infrastructure (including consideration of cumulative impacts from other major projects in the area); and</li> </ul>   | Section 6<br>Appendix I                         |
| Economics           | <ul style="list-style-type: none"> <li>• an analysis of any potential economic benefits and impacts of the development including to NSW and the local and regional community.</li> </ul>  | Sections 5, 6 and 7<br>Appendix G<br>Appendix K |
| Plans and Documents | <p>The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Part 8 of the Regulation. Provide these as part of the EIS rather than as separate documents.</p> <p>In addition, the EIS must include high quality files of maps and figures of the subject site and proposal.</p>  | Appendix D<br>Appendix F                        |
| Engagement          | <p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners.</p> <p>The EIS must detail the engagement undertaken and demonstrate how it was consistent with the <i>Undertaking Engagement Guidelines for State Significant Projects</i>. The EIS must detail how issues raised and feedback provided have been considered and responded to in the project.</p> | Section 5<br>Appendix H                         |
| Expiry Date         | If you do not lodge a Development Application and EIS for the development within 2 years of the issue date of these SEARs, your SEARs will expire. If an extension to these SEARs will be required, please consult with the Planning Secretary 3 months prior to the expiry date.   | Noted   |
| References          | The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.   | This EIS  |