

ENVIRONMENTAL RISK ASSESSMENT AND MITIGATION MEASURES

The following section provides recommendation for mitigation measures in response to potential impacts identified in **Section 6** of the EIS. The structure of mitigation measures is based on the DPIE's hierarchy of approaches for managing impacts identified in the *Draft Environmental Impact Assessment Guidance Series* released by DPE in June 2017, as:

- **Performance based measure** – identify performance criteria that must be complied with to achieve an appropriate environmental outcome but do not specify how the outcome is to be achieved.
- **Prescriptive measure** – require action to be taken or specify something that must not be done.
- **Management based measure** – identify one or more management objectives that must be achieved through the implementation of a management plan.

Following the implementation of appropriate mitigation measures as recommended, it is determined that the proposal will not result in any significant adverse impacts on the surrounding environment. The following table illustrates how the matters raised within the SEARs will be addressed.

This analysis comprises a qualitative assessment consistent with AS/NZS ISO 31000:2009 *Risk Management—Principles and Guidelines* (Standards Australia 2009). The level of risk was assessed by considering the potential impacts of the proposed development prior to application of any mitigation or management measures. In accordance with the SEARs, the Environmental Risk Assessment (ERA) addresses the following significant risk issues:

- The adequacy of baseline data;
- The potential cumulative impacts arising from other developments in the vicinity of the site; and
- Measures to avoid, minimise, offset the predicted impacts where necessary involving the preparation of detailed contingency plans for managing any significant risk to the environment.

Risk comprises the likelihood of an event occurring and the consequences of that event. For the proposal, the following descriptors were adopted for 'likelihood' and 'consequence'.

Likelihood		Consequence	
A	Almost certain	1	Widespread and/or irreversible impact
B	Likely	2	Extensive but reversible (within 2 years) impact or irreversible local impact
C	Possible	3	Local, acceptable or reversible impact
D	Unlikely	4	Local, reversible, short term (<3 months) impact
E	Rare	5	Local, reversible, short term (<1 month) impact

The risk levels for likely and potential impacts were derived using the following risk matrix.

		LIKELIHOOD				
		A	B	C	D	E
CONSEQUENCE	1	High	High	Medium	Low	Very low
	2	High	High	Medium	Low	Very low
	3	Medium	Medium	Medium	Low	Very low
	4	Low	Low	Low	Low	Very low
	5	Very low	Very low	Very low	Very low	Very low

The results of the environmental risk assessment for the proposed development are presented in the below table and are based upon the range of technical and specialist consultant reports appended to the EIS. The table has directly related mitigation measures responding to each impact also based upon the range of technical and specialist consultant reports appended to the EIS.

N.B. 'O' – Operational; 'C' – Construction; 'Pe' – Performance based mitigation measure; 'Pr' – Prescriptive based mitigation measure 'Ma' – Management based mitigation measure

SEARS	Potential Impact	Stage of Project	Likelihood	Consequence	Risk Level	Approach	Mitigation Measure (Pe/Pr/Ma)	Residual Impact
General	The Project will require a comprehensive Environmental Management Plan (EMP) that compiles the mitigation and management measures and summarises the procedures to respond to incidents, non-compliance, audits and other administrative environmental requirements.	All Lifecycle	-	-	-	Preparation of a comprehensive EMP for each stage of the Project.	Ma	-
	The Project will require a detailed Decommissioning Management Plan within three months of cessation of operations.	D	-	-	-	A Decommissioning Management Plan will be prepared at least within 3 months of cessation of operations, which would highlight all ancillary	Ma	-

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						infrastructure removal and rehabilitation measures required to restore the land to its pre-existing conditions, with details to appropriately handle waste, ground cover restitution and traffic operations.		
	Impacts to the Moulamein Channel could have flow-on effects if not appropriately managed	All Lifecycle	D	3	Low	Continuous communication with Murray Irrigation will occur during the project lifecycle. The applicant commits to constructing the culvert over the channel when the channel is drained for maintenance.	Pe/Ma	Low

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Biodiversity	Clearing of 0.01 hectares of PCT 44 – <i>Forb-rich Speargrass</i> – <i>Windmill Grass</i> – <i>White Top grassland of the Riverina Bioregion</i> and two small trees.	C	A	5	Very Low	The extent of native vegetation on site is minimal and its condition has been assessed as ‘highly degraded’. The removal does not entail any impacts on threatened communities or species and does not trigger the need for offsets. Notwithstanding the above, a Biodiversity Management Plan (BMP) will be prepared prior to construction, which will include site induction, appropriate delineation of working areas and	Ma	Low to Nil

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						no-go zones, and other measures identified by the project ecologists to protect the natural values of the area. The BMP will include comprehensive biosecurity control measures that will complement the CEMP and the proposed Weed Management Plan management strategies.		
	Indirect impacts including pathogen and weed propagation	C & O	C	3	Medium	Hygiene protocols will be outlined within a Environment Management Plan (EMP), which will detail measures to sterilise equipment, ensure	Pe/Ma	Low

SEARS	Potential Impact	Stage of Project	Likelihood	Consequence	Risk Level	Approach	Mitigation Measure (Pe/Pr/Ma)	Residual Impact
						the protection of no-go zones from potentially contaminated sources and contingency and monitoring measures to prevent pathogenic outbreaks. A Weed Management Plan will be provided as part of the EMP with measures detailing sequential weed control, including timing and methodology of control.		
Aboriginal Heritage	Potential impact on unexpected Aboriginal artefacts on the development footprint	C	E	4	Very Low	An unexpected finds procedure will be implemented during	Pe/Ma	Low

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						construction which will detail management measures to follow in the unlikely event that any suspected or confirmed archaeological material is uncovered during any works on the Site. A Human Remains Procedures will be similarly prepared and implemented which will detail management measures and coordination to follow in the unlikely event that any suspected or confirmed human remains are uncovered during		

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						any works on the Site. These procedures will be prepared in close consultation with the Registered Aboriginal Parties.		
Land	Erosion and Sedimentation	C	C	4	Low	A Soil and Water Management Plan (SWMP) is to be prepared in accordance with <i>Managing Urban Stormwater – Soils and Construction Volume 1</i> (Landcom, 2004). The SWMP will be prepared as part of a Construction Environmental Management Plan (CEMP) to manage potential risks to soils, surface and ground water. The	Pe/Ma	Low

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						construction SWMP is to be prepared with reference to relevant development controls within the Deniliquin DCP. Recommended measures for the construction SWMP include but are not limited to: ▪ Measures to minimise and manage the potential for erosion and sediment transport within and from the Project area. ▪ Measures to manage accidental spills and waste storage. ▪ Measures to manage		

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						stormwater and the potential for contaminated runoff from the Development site. - Measures to ensure that excavation activities and any stockpiling are managed to minimise the potential for downstream contamination. - Measures to ensure that areas of exposed soil and the time in which they are exposed are minimised as far as practical.		
	Soil disturbance and sedimentation associated with vegetation clearing, excavation, and stockpiling activities.	C & O	D	4	Low	The construction of the development shall be managed in compliance with measures	Pe	Low

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						specified within the construction SWMP to ensure impacts to water quality are appropriately managed. Measures shall be implemented to ensure that areas of exposed soil and the time in which they are exposed, are minimised as far as practical during construction.		
	Wastes, Spill and Emergency Management.	C	D	2	Low	The construction SWMP shall include procedures to reduce and manage the risk of emergency events and the potential for wastes and spills to	Pr/Ma	Low

SEARS	Potential Impact	Stage of Project	Likelihood	Consequence	Risk Level	Approach	Mitigation Measure (Pe/Pr/Ma)	Residual Impact
						contaminate soils. Recommended measures to manage the potential for contaminated discharge include: ▪ The storage of all fuel chemicals and liquids in sealed bunded areas on level ground away from stormwater drainage lines and waterways ▪ Ensuring refuelling and maintenance activities are restricted to designated areas with appropriate bunding and spill capture controls ▪ Implementing controls as part of the construction		

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						SWMP that provide procedures to respond to emergencies and spills. ▪ Ensuring visual inspections of drainage lines and disturbed areas are undertaken during construction to assess any potential soil or surface water issues. ▪ The installation and maintenance of stormwater control measures including drainage networks that segregate stormwater runoff according		

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						to its contamination.		
		O	D	2	Low	During operation procedures shall be developed to reduce the potential contamination of soils, surface and ground water, resulting from wastes, spills and/or emergency incidents. Suggested measures to control the potential for contamination during operation include: The appropriate storage of equipment and hazardous substances during operation.	Pe/Ma	Low

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						- Ensuring that plant and stormwater control measures are maintained to prevent contamination of soil. - Preparation of appropriate procedures to response to emergency incidents, spills and leaks from the Development site, including operational equipment and maintenance activities.		
		D	D	2	Low	Decommissioning A decommissioning plan shall be developed which minimises the contamination of soils, surface and ground	Ma	Low

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						water, resulting from wastes, spills and/or emergency incidents. Suggested measures to control the potential for contamination during decommissioning including: ▪ A soil sampling plan to be undertaken prior to decommissioning to assess any risk of contamination. ▪ Preparation of procedures to minimise risk of contamination		
	Soil mixing / topsoil loss	C, O & D	C	4	Low	As part of the CEMP for the Project, soil management measures should include:	Pr/Ma	Low

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						▪ Assessment of topsoil depth prior to stripping to minimise mixing of topsoil and subsoil ▪ Topsoil and subsoil should be stripped and stockpiled separately for rehabilitation works following excavation ▪ Avoid stripping and stockpiling soil following heavy rain periods ▪ Avoid compaction of topsoil during stripping and stockpiling operations ▪ If required, amelioration of topsoil and/or subsoil during stripping in accordance with		

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						a soil scientist's recommendations. - Prevent erosion of stockpiles using soil stabilising biopolymers, cover crops or other forms of stabilisation - Test stockpiled soils to determine amelioration requirements prior to reinstatement.		
	Soil compaction	C, O & D	B	4	Low	As part of the CEMP for the Project, soil compaction management measures should include: Development of controlled traffic practices for	Pr/Ma	Low

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						plant machinery movements ▪ Avoid excavation and plant machinery movements on wet soils following heavy rain periods ▪ Prevent long term storage of plant machinery on clay or wet soils ▪ Avoid long term exposure of subsoils which are more susceptible to compaction ▪ Progressively stabilise and rehabilitate soil as soon as practically possible after excavation ▪ Ensure soil is replaced in correct		

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						subsoil/topsoil orders Ensure vegetative cover is re-established after soil rehabilitation		
Contamination	During construction activities at the site, work health and safety (WHS) controls are to be implemented to mitigate risks if unexpected findings of potentially impacted material is identified	C	E	5	Very Low	If unexpected findings of potentially impacted material are identified, the following controls will apply: - Avoiding skin contact with soil that is discoloured, malodorous, containing foreign matter and/or generally inconsistent with virgin soil. - No entry permitted into confined spaces and excavations; and	Ma	Nil

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						Controls are to be in place to contain soil and soil impacts (e.g. dust, sediment, etc) to within the area of the site.		
Dust	During construction activities, dust suppression protocols will be in place as part of the management measures described in the Construction EMP.	C	D	4	Low	Dust measures will include minimising the length of time that spoil is stockpiled on site, covering loads, sediment tracking, dust suppression and wheel cleaning. The timeframe and extent of these measures will be determined on an ad hoc approach based on the requirements and commitments of the EMP.	Ma	Low to Nil

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Visual impacts	Visual impact of the Project on surrounding landowners and public views.	O	B	4	Low	Inclusion of vegetation buffers around appropriate parts of the perimeter of the project boundary. The landscape screen planting will be properly maintained and monitored during the operation of the Project. This will include regular inspections for the health and performance of planting and replacement of plant stock when necessary. Planting establishment will be implemented within two months of construction	Pe	Low to Nil

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						finalisation, to ensure that land disturbance activities do not impact sapling health and establishment. The southern boundary will be 7 metres wide to screen the Riverina Highway views. The western landscape screening boundary will be 4 metres wide in accordance with the Landscape Plan.		
Noise and Vibration								
Construction Noise	Construction is expected to be carried out during standard work hours where feasible	C	C	3	Low	Ensuring deliveries are made during standard hours.	Ma	Very Low

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	however, some works may be required to be conducted out of these hours.					▪ The selection and duration of use for equipment that is generating noise.		
	During the construction phase, heaving vehicles will be utilised for the delivery of materials and equipment, along with light vehicles transporting workers to and from the site. During peak construction traffic flows, road traffic noise criteria may be exceeded along these routes.	C	C	3	Low	▪ Switching off any equipment not in use for extended periods. ▪ Keeping truck drivers informed of designated vehicle routes, parking locations, and acceptable delivery hours for the site. ▪ Using the most suitable equipment necessary for the works at any one time. ▪ Regularly inspecting and maintaining plants to avoid	Ma	Very Low

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						increased noise levels. ▪ Use of quieter methods where feasible and reasonable. ▪ Use of temporary noise screens around noisy construction plants. Screens will be positioned to interrupt a direct line of sight between the major noise source and potentially affected receivers. ▪ The project-specific CEMP, including noise mitigation measures in accordance with the ICNG prepared by the EPA. The CEMP will also apply to activities		

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						involving refurbishment, upgrades, and decommissioning.		
	Cumulative impacts with nearby projects will require coordination and mitigation	C	C	3	Low	- Coordination with other developments within 2 km from Project to ensure construction works with a high noise impact are not undertaken simultaneously. - Potential coordination to undertake works with high vibration generation in close proximity is not undertaken concurrently.	Pr	Low
Operational Noise	Noise impacts from the project during the operational phase.	O	C	3	Low	Selecting a substation transformer with a Sound Power Level (SWL) of	Pe/Pr	Low

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						equal or less than 90 dBA. ▪ Optimising the detailed design and facing the PCUs towards the north-west. ▪ The installation of a 5m tall acoustic barrier along the eastern side of the site. Upon implementation of all mitigation measures it is considered that the acoustic amenity of the local area will be effectively managed and that the Project won't have a significant noise impact onto		

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						adjacent sensitive receivers		
Transport	Impacts on road network from the construction phase. Operational traffic impacts have been assessed to be negligible.	C	D	4	Low	Prior to construction, the contractor will conduct a dilapidation survey of the nearby roads (two-kilometre radius) which will involve creating a written report and taking photos of any existing damage to public infrastructure. This report will then be used to compare and assess if there was any significant damage caused by the Applicant to be repaired. Traffic controls would be required	Ma	Low

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						to manage and regulate construction vehicle traffic movements to and from the site during construction, including the oversight of prohibited turn moves and other movements on the Riverina Highway. A Traffic Management Plan (TMP) will be prepared and implemented during construction to ensure that there are no enhanced road hazards nor cumulative impacts from surrounding developments.		

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						Construction workers will be transported to and from the site on shuttle buses as detailed in the EIS.		
Water-Flooding	While flood modelling has shown the proposed BESS will have negligible impact upon the peak water levels across the site and wider model domain, and there is no predicted indirect or direct damage to the community in the event of significant flooding, steps should still be taken in the construction, operation and decommissioning phases to minimise the flood risk to the	C & O	D	4	Low	Regarding access implications, works to access roads during the construction phase may impede emergency services. To avoid this, it is recommended to not impede the movement of vehicles on the Riverina Highway more than necessary during the construction and operation of the BESS.	Pe/Ma	Low

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	site and wider community.					Based on the flood depth, velocity and hazard levels estimated in the flood modelling of the site, the site is generally categorised as low risk to surface water flooding. The following measures are proposed to be adopted at the site: Any sensitive infrastructure such as inverters and battery storage, would be located on raised fill pads with 300 mm freeboard above the maximum of the 1% AEP flood level. It is common for this type of infrastructure to		

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						be housed within shipping containers or small sheds with relatively small footprints. Given the shallow depths across the site, raising these small fill pads is highly unlikely to result in any adverse impacts offsite. ▪ The footings should be designed to withstand the flood velocities described in this report, which are mostly low in the lease area. ▪ It is recommended that the best practice principles for stormwater and sediment control be incorporated into the design,		

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						construction, and operation phases of the BESS site. - It is anticipated that vehicles can safely access and egress from the Site, however consideration should be given to not restrict the movement of emergency vehicles on the Riverina Highway with any scheduled roadworks. - Monitoring and maintenance of any installed culverts to avoid blockage is recommended to facilitate conveyance to the west. Upon implementation of the mitigation		

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						measures, it is anticipated that the Project will not have any residual adverse impact on the flood risk and its appropriate management of the local area.		
	Preparation of a pre-construction hydraulic model of the detailed design to verify that the impacts will be consistent with the EIS findings as requested by DCCEEW.	C & O	D	3	Low	The final modelling verification will be issued to DCCEEW for their final comment prior to construction. DCCEEW's feedback will be considered and implemented accordingly.	Pr	Very Low
	Readiness to respond in case of emergencies during flood events will need to be appropriately managed to avoid	C & O	D	4	Low	A Flood Emergency and Response Plan (FERP) will be prepared post-determination to ensure an	Pr/Ma	Very Low

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	risk to human life and property.					appropriate response plan is in place and prevent.		
Water – Groundwater	The risk of aquifer contamination associated with the proposed development during construction and operation is considered low due to the Subject Site only storing a small volume of bunded fuel and no other sources of contamination during operation and no stored materials or refuelling/maintenance or washdowns etc. occurring during construction and therefore having no sources onsite.	C & O	D	3	Low	Mitigation measures are focused primarily on preventing chemical spills from reaching the groundwater system in the unlikely event of leakage. It is anticipated that some of these measures will be contained as part of the Environmental Management Plan during construction and operation post-approval as contingency measures. These include:	Pr/Ma	Low

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						▪ Regular maintenance and inspection of fuel bund, oil bund and battery storage units. ▪ Development of site management plans detailing responses to leaks such as spill kits, removal and appropriate testing and disposal of impacted soils, and options for installing groundwater monitoring bores in the case of a significant fire or unexpected leak. ▪ Drilling of a shallow monitoring bore(s) at the Subject Site to understand the thickness of		

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						overlying clay and water level in the shallow aquifer prior to construction. Should an onsite shallow monitoring bore identify an absence of clay and/or shallow water level at the Subject Site, further shallow monitoring bores may be required and further consideration of potential impacts from proposed excavations. - Failing the above measure, measure water level in the shallow aquifer as close to the Subject Site as possible		

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						to attain current water levels and verify whether construction works may intersect the groundwater system. ▪ If a significant contaminant release or major fire occurs, then additional shallow bores should be installed up- and downgradient of the development to determine local groundwater flow direction and verify impacts to the local groundwater system. Upon implementation of		

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						mitigation measures, it is considered that the Project will have a negligible impact on the groundwater resources of the locality, resulting in no impacts on groundwater quality and quantity during the construction, operation or decommissioning.		
Hazards								
Li-ion battery fault, thermal runaway and fire	Despite the improvement in battery technology, several degradation mechanisms are still present within the battery which can result in thermal runaway. These effects arise primarily	O	D	2	Low	The following recommendations have been made as a result of the assessment to mitigate any potential hazards that could result during the construction and	Pe/Ma	Low

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	as a result of high discharge, overcharging, or water ingress into the battery which results in a host of by-products being formed within the battery during charge and discharge cycles.					operation of the development: ▪ BESS will be tested in accordance with UL9540A. ▪ Testing to demonstrate clearances required to prevent the propagation of fires between separated units.		
Li-ion battery fire and toxic gas dispersion	In the event of a BESS failure causing a fire, toxic by-products of combustion may form. Hydrogen Fluoride could cause danger to life in certain concentrations.	O	D	2	Low	▪ BESS is to be installed in accordance with the manufacturer and UL9540A report recommended clearances based on testing.		
Electrical equipment failure and fire	Potential for electrical equipment failure is a possibility in any project with this type of infrastructure however, the equipment to be	O	E	3	Very Low	▪ BESS to be installed with fire protection systems specified by the manufacturer		

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	used is standard across industry and therefore not a unique dire scenario.					and UL9540A report.		
Transformer internal arcing, oil spill, ignition and bund fire	The oil contained in transformers can vaporise if arcing occurs, resulting in rapid pressurisation within the reservoir. The oil anticipated to be used provides an increased safety margin however, does not negate the possibility of this occurring.	O	E	3	Very Low	- Before construction, a detailed design to validate the system can be installed in the Project area whilst meeting the recommended clearances. - UL testing information shall be made available to the certifying authority. It is noted that a confidentiality agreement may be required.		
Transformer electrical surge protection failure and explosion	In the event the transformer receives an extreme surge of energy and the electrical surge protection measures fail, the mineral oil may start to decompose and vaporise, resulting in	O	E	3	Very Low	The vent covers of the BESS shall be constructed of non-combustible material.		

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	gas bubbles of hydrogen and methane which would lead to an event where these flammable gases increase toward explosive limits.					The vents shall not be located above battery packs within the BESS container.		
Electro-magnetic field Impacts	Electric and Magnetic fields can appear naturally or man-made wherever there may be electricity sources. BESS create EMFs from operational electrical equipment and has the potential to produced extremely low frequency (ELF) EMFs in the range of 30 to 300 Hz.	O	E	4	Very Low			
Fire Fighting Measures	BESS have special problems when fighting fires and					FRNSW recommended the		

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	therefore require additional provisions in their design to account for these differences.					following, to be provided: - Fire safety study is to be submitted to FRNSW prior to the construction phase and is to be prepared in line with the requirements of the Hazardous Industry Planning Advisory Paper No.2, as well as the FRNSW Fire Safety Guideline Technical Information – Large scale external lithium-ion battery energy storage systems – Fire Safety considerations. - An Emergency Plan is to be developed for the site in accordance with		

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						HIPAP No1. Prior to occupation or commissioning. An Emergency Services Information Package is to be developed in accordance with FRNSW fire safety guidance – Emergency services information package and tactical fire plan, prior to occupation or commissioning.		
Bushfire	As determined in the EIS, potential impacts from the BESS could involve accidental ignition and electrical fire in very extreme cases.	O	E	3	Very Low	At the commencement of construction, and in perpetuity, all ground within the subject site shall be maintained as an Inner Protection Area.	Pe/MA	Low

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						▪ New access roads shall comply with the requirements for Non-Perimeter Roads as detailed in Table 5.3b of <i>Planning for Bushfire Protection 2019</i>, ▪ Static water supplies shall comply with the requirements of <i>Planning for Bushfire Protection 2019</i> ▪ Any new electrical services must comply with the relevant Australian Standards in specific <i>AS/NZS 7000 Overhead Line Design</i>. ▪ Post-approval but, prior to occupation, a bushfire		

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						emergency management and operations plan is to be prepared consistent with the NSW Rural Fire Service Guide to developing a Bush Fire Emergency Management and Evacuation Plan. This assessment shall also include the additional detail required within s8.3.5 of <i>Planning for Bushfire Protection 2019</i> .		
	Bushfires could impact the integrity of the BESS site and create ignition impacts if unmitigated.	O	D	2	Low	Asset Protection Zones to be maintained at a minimum of 10m in all directions from the BESS site, as described in the Bushfire Assessment Report. The Project commits	Ma	Low

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						to managing the entire 38m to the north, 10 metres to the east, 13 metres to the south and 35 metres to the west as fire breaks, which complies with the minimum requirements.		
	Not enough resources are provided for firefighting purposes	O	D	3	Low	Three water tanks with a capacity of 20,000L for firefighting purposes will be provided in accordance with Planning for Bushfire Protection 2019 (or latest version post-determination) specifications	Ma	Very Low
Social and Economic	Short-term accommodation and local services may be impacted during construction.	C	C	3	Medium	Workforce accommodation has been assessed within an appropriate catchment area. It has been determined that workers can be	Ma	Low

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						accommodated in nearby towns and a shuttle bus service will be provided to transport them to and from the site. Notwithstanding, the following management measures will be implemented to further decrease the risk of community impact: ▪ Ensure the construction workforce does not occupy more than 20% of available short-term accommodation in the local area. ▪ Prior to selecting a construction partner, prepare a Workforce		

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						Accommodation Plan or Strategy that assesses the potential cumulative impacts on local short term accommodation availability if additional competing renewable energy projects emerge with similar construction timeframes to the proposal. Consult with local short term accommodation providers to align peak construction periods outside of months when they experience peak occupancy rates, such as when major events occur		

SEARS	Potential Impact	Stage of Project	Likelihood	Consequence	Risk Level	Approach	Mitigation Measure (Pe/Pr/Ma)	Residual Impact
						(e.g. Deni Ute Festival). - Provide guidance for the workforce on expected behaviours through a Code of Conduct. Inform the community about measures in place to support harmonious dynamics between workforce and local community. - Continue to consult with the Edward River Council regarding the pipeline of proposed renewable energy projects in the local area. This will enable the Proponent to adequately		

SEARS	Potential Impact	Stage of Project	Likelihood	Consequence	Risk Level	Approach	Mitigation Measure (Pe/Pr/Ma)	Residual Impact
						consider cumulative construction impacts as part of their Workforce Accommodation Plan and/or stage their construction activities to minimise overlapping construction periods with competing renewable energy projects. Engage with local employment and training organisations to ensure that potential local employees are communicated with opportunities associated with the proposal		

SEARS	Potential Impact	Stage of Project	Likelihood	Consequence	Risk Level	Approach	Mitigation Measure (Pe/Pr/Ma)	Residual Impact
						through various channels. The applicant commits to preparing an updated Employment and Accommodation Strategy prior to the commencement of construction to appropriately assess the existing accommodation conditions and most appropriate management approach, in consultation with Council.		
	Contribution to the local economy through increased employment opportunities and spending at local businesses	C, O & D	-	-	-	Wherever possible and practical, engage with local business services to identify and maximise local procurement benefits derived	N/A	Nil

SEARS	Potential Impact	Stage of Project	Likelihood	Consequence	Risk Level	Approach	Mitigation Measure (Pe/Pr/Ma)	Residual Impact
						form the proposal. ▪ Encourage local employment during construction and operation by actively advertising available jobs in various communication means used by the local community, including community boards, local newspapers, and online community groups. ▪ Engage with local employment and training organisations to ensure that potential local employees are communicated with		

SEARS	Potential Impact	Stage of Project	Likelihood	Consequence	Risk Level	Approach	Mitigation Measure (Pe/Pr/Ma)	Residual Impact
						opportunities associated with the proposal through various channels. Wherever possible and practical, prioritise sourcing materials and services from local businesses to stimulate the local economy.		
Non-Aboriginal Cultural Heritage	Potential presence of non-Aboriginal Cultural Heritage.	C	E	5	Very Low	A heritage impact statement has been prepared as part of this development application which concluded there is no potential for the proposed works to have any heritage impacts. Therefore, no mitigation	N/A	Nil

SEARS	Potential Impact	Stage of Project	Likelihood	Consequence	Risk Level	Approach	Mitigation Measure (Pe/Pr/Ma)	Residual Impact
						measures are required.		
Waste								
Construction phase	During the development phases of the Project, a range of waste will be generated from construction operations. This will include materials associated with packaging such as cardboard, as well as excavated material, excess building materials, general waste and other non-putrescible waste that will result from general site operation. The Site does not require the demolition of any buildings or structures, therefore the only waste in	C	A	3	Medium	A Waste Management Plan has been prepared to include the procedures to follow for the handling of waste during construction. Where practicable, and in consultation with Edward River Council, the Applicant will use local facilities to minimise transportation and to ensure the regular removal of waste from the site. Any hazardous waste	Ma	Low

SEARS	Potential Impact	Stage of Project	Likelihood	Consequence	Risk Level	Approach	Mitigation Measure (Pe/Pr/Ma)	Residual Impact
	consideration is in relation to the construction of the BESS compound during the construction phase.					will be handled appropriately by a licenced contractor to be disposed off-site at a suitable facility. The Waste Management Plan will be updated post determination to ensure that the facilities outside the Edward River LGA are explored and waste streams are appropriately handled accordingly, as per Council's comments.		
Operational phase	It is anticipated that waste generated during the operational phase	O	A	5	Very Low	Where practicable, and in consultation with Edward River	Ma	Very Low

SEARS	Potential Impact	Stage of Project	Likelihood	Consequence	Risk Level	Approach	Mitigation Measure (Pe/Pr/Ma)	Residual Impact
	will be minimal and classified as 'general waste'.					Council, the Applicant will use local facilities to minimise transportation and to ensure the regular removal of waste from the site. The availability of disposal arrangements and the forms of waste accepted by contractors and licenced facilities will be reviewed on a continual basis in consultation with Edward River Council and at each stage of the Project, ensuring that facilities are available to accept and appropriately dispose of the		

SEARS	Potential Impact	Stage of Project	Likelihood	Consequence	Risk Level	Approach	Mitigation Measure (Pe/Pr/Ma)	Residual Impact
						types of waste generated. Waste tracking including records of the types of waste generated, quantities and disposal arrangements will be implemented during each stage of the development and inform reviews on the availability of disposal arrangements.		