

## APPENDIX A REVISED MITIGATION MEASURES

The complete set of updated mitigation measures are presented below. New or modified measures are in **Bold**.

PC: Pre-construction, C: Construction, PO: Pre-operation, O: Operation, D: Decommissioning

Safeguards and mitigation measures	PC/C	PO/O	D
<b>Biodiversity (Flora and Fauna)</b>			
<ul style="list-style-type: none"> <li><b>If the credit profile of the final infrastructure layout cannot be reduced to zero, retirement of the biodiversity credits from the biodiversity register established under Part 7A of the TSC Act would be undertaken.</b></li> </ul>	PC		
<ul style="list-style-type: none"> <li>Hollow-bearing trees within the development site would not be cleared between June and January, to avoid the breeding season of Superb Parrot and Corben's Long-eared Bat and the core hibernation period for Corben's Long-eared Bat.</li> <li>If clearing outside of this period cannot be achieved, pre-clearing surveys would be undertaken to ensure these species do not occur.</li> </ul>	C		
<ul style="list-style-type: none"> <li>Preparation of a Flora and Fauna Management Plan (FFMP) that would incorporate protocols for:               <ul style="list-style-type: none"> <li>Protection of native vegetation to be retained</li> <li>Best practice removal and disposal of vegetation</li> <li>Staged removal of hollow-bearing trees and other habitat features such as fallen logs with attendance by an ecologist</li> <li>Weed management</li> <li>Unexpected threatened species finds</li> <li>Rehabilitation of disturbed areas</li> </ul> </li> </ul> <p><b>The FFMP would consider the potential to link and enhance remnant patches on the site.</b></p> <p>The FFMP would form part of the Wellington Solar Farm Construction Environmental Management Plan (CEMP).</p>	C		
<ul style="list-style-type: none"> <li>Stockpiling materials and equipment and parking vehicles will be avoided within the dripline (extent of foliage cover) of any native tree.</li> <li>Prior to the commencement of work, a physical vegetation clearing boundary at the approved clearing limit is to be clearly demarcated and implemented. The delineation of such a boundary may include the use of temporary fencing, flagging tape, parawebbing or similar.</li> </ul>	C		

Safeguards and mitigation measures	PC/C	PO/O	D
<ul style="list-style-type: none"> <li>A riparian buffer zone of 40m along Wuuluman Creek would be clearly delineated prior to works commencing. Works would be avoided within the riparian buffer zone.</li> <li>Existing native riparian vegetation is retained to the greatest extent possible in an undamaged and unaltered condition.</li> <li>Works occurring around the Wuuluman Creek should be in accordance with the DPI Fisheries Policy and Guideline document: <i>Policies and Guidelines for Fish Habitat Conservation and Management</i>.</li> </ul>			
<ul style="list-style-type: none"> <li>A groundcover management plan would be developed and implemented to ensure an appropriate perennial ground cover is established and maintained beneath the arrays during operation of the solar farm. This will require consideration of existing groundcover and may require expert input and trials to achieve the objective.</li> </ul>	C	O	
<ul style="list-style-type: none"> <li>Where possible, landscape plantings will be comprised of local indigenous species with the objective of increasing the diversity of the existing vegetation. Planting locations would be designed to improve the connectivity between patches in the landscape where consistent with landscaping outcomes.</li> </ul>	C		
<ul style="list-style-type: none"> <li>Carry out refuelling of plant and equipment, chemical storage and decanting off site or at least 50m away from farm dams in impervious bunds.</li> <li>Ensure that dry and wet spill kits are readily available.</li> </ul>	C	O	
<ul style="list-style-type: none"> <li>The Construction Environmental Management Plan will include measures to avoid noise encroachment on adjacent habitats such as avoiding night works as much as possible.</li> </ul>	C		
<ul style="list-style-type: none"> <li>Avoid night works.</li> <li>Direct Lights away from vegetation.</li> </ul>	C	O	
<ul style="list-style-type: none"> <li>Weed, hygiene and pest management protocols will be prepared and implemented as part of the Flora and Fauna Management Plan for the proposal.</li> </ul>	C	O	
<ul style="list-style-type: none"> <li>Awareness training during site inductions regarding enforcing site speed limits.</li> <li>Site speed limits to be enforced.</li> </ul>	C	O	
<b>Aboriginal heritage</b>			
The development must avoid the site Wellington Scarred Tree 1, as per the current development design plans detailed in this report. A minimum 10m buffer around the tree should be in place to protect the tree given its current condition.	Design		
If complete avoidance of the ten artefacts scatters and 15 isolated find sites recorded within the proposal area is not possible, the artefacts within the development footprint must	C		

Safeguards and mitigation measures	PC/C	PO/O	D
be salvaged prior to the proposed work commencing and moved to a safe area within the property that will not be subject to any ground disturbance.			
The collection and relocation of the artefacts should be undertaken by an archaeologist with representatives of the registered Aboriginal parties. A new site card/s will need to be completed once the artefacts are moved to record their new location on the AHIMS database.	C		
A minimum 5m buffer should be observed around all sites including those outside the development footprint.	C	O	D
<b>If the complete avoidance of PAD1 and PAD2 is not possible, further archaeological investigation in the form of test excavations in order to establish the nature and significance of any sub surface deposits should be undertaken. Alternatively, if PAD 1 and PAD 2 impacts are significantly reduced, monitoring certain areas for archaeological material during construction, could be undertaken. Excavations would be conducted prior to any development and would be undertaken in consultation with the Registered Aboriginal Parties in compliance with the OEH Code of Practice. A technical report on the results of the testing would be provided and management strategies recommended depending on the outcome. The testing would be conducted by a qualified archaeologist and members of the registered Aboriginal parties. Any monitoring or testing would be undertaken in consideration of OEH advice and outlined through a Cultural Heritage Management Plan.</b>	C		
The proponent should prepare a Cultural Heritage Management Plan (CHMP) to address the potential for finding additional Aboriginal artefacts during the construction of the Solar Farm and management of known sites and artefacts. The Plan should include the unexpected finds procedure to deal with construction activity. Preparation of the CHMP should be undertaken in consultation with the registered Aboriginal parties.	C		
<b>Visual Impact</b>			
<ul style="list-style-type: none"> <li>• Solar farm vegetation screening: <ul style="list-style-type: none"> <li>○ A sparse vegetation screen, 1 -2 rows deep, would be established with reference to Appendix C Proposed onsite screening.</li> <li>○ The screen would be comprised of varying native species appropriate to the area and of varying height to soften not block the view of the site.</li> <li>○ Breaks in the screen, reflecting natural breaks in existing remnants would be appropriate.</li> </ul> </li> </ul>	Pre-construction though operation		

Safeguards and mitigation measures	PC/C	PO/O	D
<ul style="list-style-type: none"> <li>○ Planting should be undertaken as soon as practical in the construction process depending on the season, as it will take time for the plants to establish and become effective as a screen. Seasonal requirements for planting should also be considered.</li> <li>● The screen would be maintained for the operational life of the solar farm. Dead plants would be replaced. Pruning and weeding would be undertaken as required to maintain the screen’s visual amenity and effectiveness in breaking up views. Residential receiver screening               <ul style="list-style-type: none"> <li>○ Establish plantings for receivers R2 and R8, in consultation with landowners, based on the as-built views of the solar farm.</li> </ul> </li> </ul>			
<ul style="list-style-type: none"> <li>● Where feasible, underground rather than overhead power lines would be considered.</li> <li>● Where feasible, co-location of powerlines would be undertaken to minimise the look of additional power poles. If additional poles are required, these would match existing pole design as much as possible.</li> <li>● <b>The materials and colour of onsite infrastructure will, where practical, be non-reflective and in keeping with the materials and colouring of existing infrastructure or of a colour that will blend in with the landscape. Where Practical:</b> <ul style="list-style-type: none"> <li>○ <b>Proposed new buildings will be non-reflective and colouring will be in keeping with the existing landscape</b></li> <li>○ <b>Pole mounts will be non-reflective</b></li> <li>○ <b>Security fencing posts and wire would be non-reflective; colouring would be chosen to reduce the industrial character of the fence and fit the existing landscape</b></li> </ul> </li> </ul>		Design stage	
<ul style="list-style-type: none"> <li>● During construction, dust would be controlled in response to visual cues.</li> <li>● Areas of soil disturbed by the project would be rehabilitated progressively or immediately post-construction, reducing views of bare soil.</li> <li>● Ground cover would be maintained beneath the panels and within the site boundary, to break up views of the infrastructure from the side and back views.</li> </ul>	C		

Safeguards and mitigation measures	PC/C	PO/O	D
<ul style="list-style-type: none"> <li>Night lighting would be minimised to the maximum extent possible (i.e. manually operated safety lighting at main component locations).</li> </ul>			
<ul style="list-style-type: none"> <li>Maintenance of ground cover beneath panels, to reduce dust.</li> <li>Minimise traffic movements on unsealed tracks, to reduce dust.</li> <li>Night lighting would be minimised to the maximum extent possible (i.e. manually operated safety lighting at main component locations).</li> </ul>		O	
<b>Noise impacts</b>			
<ul style="list-style-type: none"> <li>Implement noise control measures such as those suggested in Australian Standard 2436-2010 “Guide to Noise Control on Construction, Demolition and Maintenance Sites”, to reduce predicted construction noise levels.</li> </ul>	C		
<ul style="list-style-type: none"> <li>A Noise Management Plan would be developed as part of the CEMP and will specifically target R1 and R7 in order to achieve compliance. The plan would include, but not be limited to: <ul style="list-style-type: none"> <li>Use less noisy plant and equipment where feasible and reasonable</li> <li>Plant and equipment to be properly maintained.</li> <li>Provide special attention to the use and maintenance of ‘noise control’ or ‘silencing’ kits fitted to machines to ensure they perform as intended.</li> <li>Strategically position plant on site to reduce the emission of noise to the surrounding neighbourhood and to site personnel.</li> <li>Avoid any unnecessary noise when carrying out manual operations and when operating plant.</li> <li>Any equipment not in use for extended periods during construction work should be switched off.</li> <li>Complaints procedure deal with noise complaints that may arise from construction activities. Each complaint would need to be investigated and appropriate noise amelioration measures put in place to mitigate future occurrences, where the noise in question is in excess of allowable limits.</li> <li>Establish good relations with people living in the vicinity of the site at the beginning of proposal and maintain. Keep people informed, take complaints seriously, deal with complaints expeditiously. The community liaison member of staff should be adequately experienced.</li> </ul> </li> </ul>	C		

Safeguards and mitigation measures	PC/C	PO/O	D
<ul style="list-style-type: none"> <li>If the ESF is constructed outside the main construction period, a specific construction noise management plan would be undertaken to manage any additional impacts.</li> </ul>	C		
<b>Historic heritage</b>			
<ul style="list-style-type: none"> <li>The Applicant must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the Building Code of Australia.</li> </ul>	C		
<ul style="list-style-type: none"> <li>It is understood that, under Part 4A of the EP&amp;A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works. Part 8 of the EP&amp;A Regulation sets out the requirements for the certification of the development.</li> </ul>	C		
<ul style="list-style-type: none"> <li>Should an item of historic heritage be identified, the Heritage Division (OEH) would be contacted prior to further work being carried out in the vicinity.</li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>The Narrawa Homestead should not be altered whilst in use as an Office and Maintenance building for the solar farm.</li> </ul>	C	O	
<ul style="list-style-type: none"> <li>The existing cultural plantings around the Narrawa Homestead and its driveway should be maintained.</li> </ul>	C	O	D
<b>Traffic, transport and road safety</b>			
<ul style="list-style-type: none"> <li>Carpooling/shuttle bus arrangements to minimise vehicle numbers during construction (the proponent is committed to transporting 80% of construction traffic to the site by bus. Pick up points will be identified in the Traffic Management Plan which will be developed prior to construction)</li> </ul>	C		
<ul style="list-style-type: none"> <li>The proponent would consult with the Roads and Maritime Services regarding the proposed upgrading of the site access from Goolma Road. The upgrade would be subject to detailed design and must be designed and constructed to the standards specified by RMS Guidelines.</li> </ul>	Design stage		
<ul style="list-style-type: none"> <li>A Haulage Plan would be developed with input from the roads authority, including but not limited to: <ul style="list-style-type: none"> <li>Assessment of road routes to minimise impacts on transport infrastructure.</li> <li>Scheduling of deliveries of major components to minimise safety risks (on other local traffic).</li> <li>Consideration of cumulative traffic loads due to other local developments.</li> <li>Traffic controls (signage and speed restrictions etc.).</li> </ul> </li> </ul>	PC		D

Safeguards and mitigation measures	PC/C	PO/O	D
<ul style="list-style-type: none"> <li>Upon determining the haulage route(s) for construction vehicles associated with the Project, and prior to construction, undertake a Road Dilapidation Report. The Report shall assess the current condition of the road(s) and describe mechanisms to restore any damage that may result due to traffic and transport related to the construction of the Project. The Report shall be submitted to the relevant road authority for review prior to the commencement of haulage.</li> </ul>			
<ul style="list-style-type: none"> <li>A Traffic Management Plan would be developed as part of the CEMP and DEMP, in consultation with the Dubbo Regional Council and Roads and Maritime. The plan would include, but not be limited to:               <ul style="list-style-type: none"> <li>The designated routes of construction traffic to the site.</li> <li>Carpooling/shuttle bus arrangements to minimise vehicle numbers during construction.</li> <li>Scheduling of deliveries.</li> <li>Community consultation regarding traffic impacts for nearby residents and school bus operators.</li> <li>Consideration of cumulative impacts, undertaken consultation with Bodangora Wind Farm.</li> <li>Consideration of impacts to the railway.</li> <li>Traffic controls (speed limits, signage, etc.).</li> <li>Procedure to monitor traffic impacts and adapt controls (where required) to reduce the impacts.</li> <li>Procedure to monitor traffic impacts and adapt controls (where required) to reduce the impacts.</li> </ul> </li> </ul>	PC		D
<ul style="list-style-type: none"> <li>If the EFS is constructed outside the main construction period, a specific traffic management plan would be undertaken to manage any additional impacts.</li> </ul>	C		
<b>Land use (including mineral resources)</b>			

Safeguards and mitigation measures	PC/C	PO/O	D
<ul style="list-style-type: none"> <li>• Consultation with local community, to minimise impact of construction of adjacent agricultural activities and access.</li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>• Consultation would be undertaken with TransGrid regarding connection to the substation and design of electricity transmission infrastructure.</li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>• Consultation with proposal site mineral titleholders regarding the proposal and potential impacts.</li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>• A Rehabilitation Plan would be prepared to ensure the array site is returned to its pre-solar farm land capability. The plan would be developed with reference to base line soil testing and with input from an Agronomist to ensure the site is left stabilised, under a cover crop or other suitable ground cover. The plan would reference: <ul style="list-style-type: none"> <li>○ Australian Soil and Land Survey Handbook (CSIRO 2009)</li> <li>○ Guidelines for Surveying Soil and Land Resources (CSIRO 2008)</li> </ul> The land and soil capability assessment scheme: second approximation (OEH 2012)</li> </ul>			D
<ul style="list-style-type: none"> <li>• The materials and colour of onsite infrastructure will, where practical, be non-reflective and in keeping with the materials and colour of the landscape.</li> </ul>	C		
<b>Soils</b>			
<ul style="list-style-type: none"> <li>• The array would be designed to allow sufficient space between panels to establish and maintain ground cover beneath the panels and facilitate weed control.</li> </ul>	Design stage		
<ul style="list-style-type: none"> <li>• As part of the CEMP, a Soil and Water Management Plan (SWMP) (with erosion and sediment control plans) would be prepared, implemented and monitored during the proposal, in accordance with Landcom (2004), to minimise soil (and water) impacts. These plans would include provisions to: <ul style="list-style-type: none"> <li>○ Carry out soil testing prior to any impacts, to inform any soil treatments and provide baseline information for the decommissioning rehabilitation.</li> <li>○ Install, monitor and maintain erosion controls.</li> <li>○ Ensure that machinery leaves the site in a clean condition to avoid tracking of sediment onto public roads which may cause risks to other road users through reduced road stability.</li> <li>○ Manage topsoil: In all excavation activities, separate subsoils and topsoils and ensure that they are replaced in their natural configuration to assist revegetation. Stockpile topsoil appropriately so as to minimise weed</li> </ul> </li> </ul>	C		D



Safeguards and mitigation measures	PC/C	PO/O	D
<p>infestation, maintain soil organic matter, maintain soil structure and microbial activity.</p> <ul style="list-style-type: none"> <li>○ Minimise the area of disturbance from excavation and compaction; rationalise vehicle movements and restrict the location of activities that compact and erode the soils as much as practical. Any compaction caused during construction would be treated such that revegetation would not be impaired.</li> <li>○ Manage works in consideration of heavy rainfall events; if a heavy rainfall event is predicted, the site should be stabilised, and work ceased until the wet period had passed.</li> </ul>			
<ul style="list-style-type: none"> <li>• A Spill and Contamination Response Plan would be developed as part of the overall Emergency Response Plan to prevent contaminants affecting adjacent surrounding environments. The plan would include measures to: <ul style="list-style-type: none"> <li>○ Respond to the discovery of existing contaminants at the site (e.g. pesticide containers or asbestos), including stop work protocols and remediation and disposal requirements.</li> <li>○ Requirement to notify EPA for incidents that cause material harm to the environment (refer s147-153 <i>Protection of the Environment Operations Act</i>).</li> <li>○ Manage the storage of any potential contaminants onsite.</li> <li>○ Mitigate the effects of soil contamination by fuels or other chemicals (including emergency response and EPA notification procedures and remediation.</li> <li>○ Ensure that machinery arrives on site in a clean, washed condition, free of fluid leaks.</li> <li>○ Prevent contaminants affecting adjacent pastures, dams, water courses and native vegetation.</li> <li>○ Monitor and maintain spill equipment</li> <li>○ Induct and train all site staff.</li> </ul> </li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>• A Groundcover Management Plan would be developed in consultation with an agronomist and taking account of soil survey results to ensure perennial grass cover is established across the site as soon as practicable after construction and maintained throughout the operation phase. The plan would cover: <ul style="list-style-type: none"> <li>○ Soil restoration and preparation requirements</li> <li>○ Species election</li> <li>○ soil preparation</li> </ul> </li> </ul>	C	O	

Safeguards and mitigation measures	PC/C	PO/O	D
<ul style="list-style-type: none"> <li>○ Establishment techniques</li> <li>○ Maintenance requirements</li> <li>○ Perennial groundcover targets, indicators, condition monitoring, reporting and evaluation arrangements – i.e. Live grass cover would be maintained at or above 70% at all times to protect soils, landscape function and water quality. Any grazing stock would be removed from the site when cover falls below this level. Grass cover would be monitored on a fortnightly basis using an accepted methodology.</li> <li>○ Contingency measures to respond to declining soil or groundcover condition</li> <li>○ Identification of baseline conditions for rehabilitation following decommissioning.</li> </ul>			
<ul style="list-style-type: none"> <li>● A protocol would be developed in relation to discovering buried contaminants within the proposal site (e.g. pesticide containers). It would include stop work, remediation and disposal requirements.</li> </ul>	C		D
<b>Hydrology surface and groundwater), water quality and water use</b>			
<ul style="list-style-type: none"> <li>● <b>The maximum harvestable right for surface water of approximately 32.05ML would not be exceeded.</b></li> <li>● <b>A WAL would be obtained, should onsite ground water sources be used.</b></li> <li>● <b>The proponent would purchase water from Council if onsite requirements are not sufficient.</b></li> </ul>	C		
<ul style="list-style-type: none"> <li>● <b>As part of the CEMP, DOI would be consulted regarding water quality impacts.</b></li> </ul>	PO		
<ul style="list-style-type: none"> <li>● Design waterway crossings and services crossing in accordance with the publications: <ul style="list-style-type: none"> <li>○ <i>Why do fish need to cross the road? Fish Passage Requirements for Waterway Crossings</i> (Fairfull &amp; Witheridge, 2003); and</li> <li>○ <i>Policy and Guidelines for Fish Friendly Waterway Crossings</i> (NSW DPI, 2003).</li> <li>○ <i>Guidelines for Watercourse Crossings on Waterfront Land</i> (NSW DPI, 2012)</li> <li>○ <i>Guidelines for Laying Pipes and Cable in Watercourses on Waterfront Land</i> (NSW DPI, 2012)</li> </ul> </li> </ul>	Design		
<ul style="list-style-type: none"> <li>● All fuels, chemicals, and liquids would be stored at least 40m from any waterways or drainage lines, not on sloping land and would be stored in an impervious bunded area.</li> </ul>	C	O	D

Safeguards and mitigation measures	PC/C	PO/O	D
<ul style="list-style-type: none"> <li>The proposed network of access roads is to be constructed from gravel, and within the floodplain itself are to be constructed at the existing surface level so as not to result in adverse impact on flood behaviour.</li> <li>Any proposed crossings of existing watercourses should, where possible, consist of fords constructed flush with the bed of the watercourse to minimise any hydraulic impact.</li> </ul>	C		
<ul style="list-style-type: none"> <li>The refuelling of plant and maintenance would be undertaken in impervious bunded areas on hardstand areas only.</li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>All potential pollutants stored on-site would be stored in accordance with HAZMAT requirements and bunded.</li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>Roads and other maintenance access tracks would incorporate appropriate water quality treatment measures such as vegetated swales to minimise the opportunity of dirty water leaving the site or entering the waterways.</li> </ul>	C	O	
<b>Flooding</b>			
<ul style="list-style-type: none"> <li>The design of buildings, equipment foundations and footings for electrical componentry and panel mounts would be designed to avoid the 1% AEP flood level to minimise impacts from potential flooding including: <ul style="list-style-type: none"> <li>The solar array mounting piers are designed to withstand the forces of floodwater (including any potential debris loading) up to the 1% AEP flood event, giving regard to the depth and velocity of floodwaters;</li> <li>The layout of the solar array mounting piers are designed to minimise encroachment within the areas of highest velocity and depth. This may necessitate solar module frame spans in excess of those proposed.</li> <li>The mounting height of the solar module frames should be designed such that the lower edge of the module is clear of the predicted 1% AEP flood level.</li> <li>All electrical infrastructure, including inverters, should be located above the 1% AEP flood level.</li> <li>Where electrical cabling is required to be constructed below the 1% AEP flood level it should be capable of continuous submergence in water.</li> <li>The proposed perimeter security fencing should be constructed in a manner which does not adversely affect the flow of floodwater and should be designed to withstand the forces of floodwater or collapse in a controlled manner to prevent impediment to floodwater.</li> </ul> </li> </ul>		Design	

Safeguards and mitigation measures	PC/C	PO/O	D
<ul style="list-style-type: none"> <li>• The proposed network of access roads is to be constructed from gravel, and within the floodplain itself are to be constructed at the existing surface level so as not to result in adverse impact on flood behaviour.</li> <li>• Any proposed crossings of existing watercourses should, where possible, consist of fords constructed flush with the bed of the watercourse to minimise any hydraulic impact.</li> <li>• Detailed design of fencing to ensure no adverse impact on the flow of floodwater and ability to withstand floodwater, the design may include removable sections or collapsible panels.</li> </ul>	C		
<ul style="list-style-type: none"> <li>• An Emergency Response Plan incorporating a Flood Response Plan would be prepared prior to construction covering all phases of the project. The plan would:               <ul style="list-style-type: none"> <li>○ Detail who would be responsible for monitoring the flood threat and how this is to be done.</li> <li>○ Detail specific response measures to ensure site safety and environmental protection.</li> <li>○ Outline a process for removing any necessary equipment and materials offsite and out of flood risk areas (i.e. rotate array modules to provide maximum clearance of the predicted flood level).</li> <li>○ Consideration of site access in the event that some tracks become flooded.</li> <li>○ Establish an evacuation point.</li> </ul> </li> <li>• Define communications protocols with emergency services agencies.</li> </ul>	C	O	D
<b>Resource use and waste generation</b>			
<ul style="list-style-type: none"> <li>• A Waste Management Plan (WMP) would be developed to minimise wastes. It would include but not be limited to:               <ul style="list-style-type: none"> <li>○ Identification of opportunities to avoid, reuse and recycle, in accordance with the waste hierarchy.</li> <li>○ Quantification and classification of all waste streams.</li> <li>○ Provision for recycling management onsite.</li> <li>○ Provision of toilet facilities for onsite workers and identify that sullage would be disposed of (i.e., pump out to local sewage treatment plant).</li> <li>○ Tracking of all waste leaving the site.</li> <li>○ Disposal of waste at facilities permitted to accept the waste.</li> <li>○ Requirements for hauling waste (such as covered loads).</li> </ul> </li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>• Septic system is installed and operated according to the Dubbo Regional Council regulations.</li> </ul>	C	O	

Safeguards and mitigation measures	PC/C	PO/O	D
<b>Community and socio-economic</b>			
<ul style="list-style-type: none"> <li>Liaison with local industry representatives to maximise the use of local contractors, manufacturing facilities, materials.</li> </ul>	C		
<ul style="list-style-type: none"> <li>Liaison with local representatives regarding accommodation options for staff, to minimise adverse impacts on local services.</li> </ul>	C		D
<ul style="list-style-type: none"> <li>Liaison with local tourism industry representatives to manage potential timing conflicts with local events.</li> </ul>	C		D
<ul style="list-style-type: none"> <li>The Community Consultation Plan would be implemented to manage impacts to community stakeholders, including but not limited to:               <ul style="list-style-type: none"> <li>Protocols to keep the community updated about the progress of the proposal and proposal benefits.</li> <li>Protocols to inform relevant stakeholders of potential impacts (haulage, noise, air quality etc.).</li> <li>Protocols to respond to any complaints received.</li> </ul> </li> </ul>	C		
<ul style="list-style-type: none"> <li>If the ESF is constructed outside the main construction period, a specific community notification procedure would be undertaken to manage any additional impacts of this installation.</li> </ul>	C		
<ul style="list-style-type: none"> <li>A site inspection is to be undertaken prior to construction to ensure no watermills would be impacted by the proposal.</li> </ul>	C		
<b>Air quality and climate</b>			
<ul style="list-style-type: none"> <li>Dust generation by vehicles accessing the site and earthworks at the site would be suppressed using water applications or other means as required.</li> </ul>	C		D
<ul style="list-style-type: none"> <li>Vehicle loads of material which may create dust would be covered while using the public road system.</li> </ul>	C		D
<ul style="list-style-type: none"> <li>All vehicles and machinery used at the site would be in good condition, fitted with appropriate emission controls and comply with the requirements of the POEO Act, relevant Australian standards and manufacturer's operating recommendations. Plant would be operated efficiently and turned off when not in use.</li> </ul>	C	O	D
<b>Hazards</b>			
<ul style="list-style-type: none"> <li><b>Risk control measures would include the level of personal protective clothing required to be worn, the minimum level of respiratory protection required, decontamination procedures, minimum evacuation zone distances and a safe method of shutting down and isolating the photovoltaic system (either in its entirety or partially, as determined by risk assessment).</b></li> <li><b>Other risk control measures for unique site-specific hazards would be included.</b></li> </ul>	C	O	D

Safeguards and mitigation measures	PC/C	PO/O	D
<ul style="list-style-type: none"> <li>Once constructed and prior to operation, the operator of the facility will contact the relevant local emergency management committee (LEMC).</li> </ul>		PO	
<ul style="list-style-type: none"> <li>Two copies of the ERP are stored in a prominent 'Emergency Information Cabinet' which is located in a position directly adjacent to the site's main entry point/s.</li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>Design of the ESF would be undertaken to address fire risks (spacing and setbacks).</li> </ul>	Design		
<ul style="list-style-type: none"> <li>Dangerous or hazardous materials would be stored and handled in accordance with AS1940-2004: <i>The storage and handling of flammable and combustible liquids</i>.</li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>Protocols would be developed for lithium-ion battery storage, maintenance, and incident response to mitigate Li-ion fire risks.</li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>The transportation of new and waste lithium-ion batteries would comply with the requirements of the Dangerous Goods Code, including specific 'special provisions' and 'packing instructions' applying to the transportation of Li-ion batteries.</li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>Develop a Bush Fire Management Plan to include but not be limited to: <ul style="list-style-type: none"> <li>Specific management of activities with a risk of fire ignition (hot works, vehicle use, smoking, use of flammable materials, blasting)</li> <li>Incorporation of fire safety and response in staff and contractor induction, training, OHS procedures and Work Method Statements</li> <li>Designation of a staff safety officer tasked with ensuring implementation of the plan and regular liaison with firefighting agencies</li> <li>Document all firefighting resources maintained at the site with an inspection and maintenance schedule</li> <li>Monitoring and management of vegetation fuel loads</li> <li>A communications strategy incorporating use of mobile phones, radio use (type, channels and call-signs), Fire Danger Warning signs located at the entrance to the site compounds, emergency services agency contacts</li> </ul> </li> <li>In developing the Fire Management Plan, NSW RFS would be consulted on the volume and location of water supplies, fire-fighting equipment maintained on-site, fire truck connectivity requirements, proposed APZ and access arrangements, communications, vegetation fuel levels and hazard reduction measures.</li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>Fire risks associated with the Energy Storage Facility would be managed by:</li> </ul>	C	O	D

Safeguards and mitigation measures	PC/C	PO/O	D
<ul style="list-style-type: none"> <li>○ Locating the ESF as far as practicable from any sensitive receivers (residences) or large stands of vegetation.</li> <li>○ Installing reliable automated monitoring (voltage and temperature), alarm and shutdown response systems.</li> <li>○ Installing reliable integrated fire detection and fire suppression systems (inert gas).</li> <li>○ Ensuring the battery buildings/containers are not vulnerable to external heat effects in the event of a bushfire.</li> <li>○ Designing appropriate separation and isolation between individual battery containers and between batteries and other infrastructure.</li> <li>○ Compliance with all relevant guidelines and standards.</li> <li>○ Preparation of a specific Battery Fire Response Plan under the general Fire Response Plan, in consultation with fire authorities, fire suppression experts, storage team, and with reference to relevant standards and guidelines.</li> </ul>			
<ul style="list-style-type: none"> <li>● An APZ of minimum 10 metres would be maintained between remnant or planted woody vegetation and solar farm infrastructure. The APZ around the perimeter of the site would incorporate a 4 metre wide gravel access track.</li> <li>● Average grass height within the APZ would be maintained at or below 5 centimetres on average throughout the October-March fire season. Average grass height outside the APZ, including beneath the solar array, would be maintained at or below 15 centimetres throughout the fire season.</li> </ul>	C	O	
<ul style="list-style-type: none"> <li>● The overhead powerlines at the site would be managed by maintaining appropriate vegetation clearance limits to minimise potential ignition risks, in accordance with the ISSC 3 Guideline for Managing Vegetation Near Power Lines.</li> </ul>		O	
<ul style="list-style-type: none"> <li>● Appropriate fire-fighting equipment would be held on site to respond to any fires that may occur at the site during construction. This equipment will include fire extinguishers, a 1000 litre water cart retained on site on a precautionary basis, particularly during any blasting and welding operations. Equipment lists would be detailed in Work Method Statements.</li> </ul>	C		
<ul style="list-style-type: none"> <li>● The NSW RFS and Fire and Rescue would be provided with a contact point for the solar farm, during construction and operation.</li> </ul>	C	O	

Safeguards and mitigation measures	PC/C	PO/O	D
<ul style="list-style-type: none"> <li>Following commissioning of the solar farm, the local RFS and Fire and Rescue brigades would be invited to an information and orientation day covering access, infrastructure, firefighting resources on-site, fire control strategies and risks/hazards at the site.</li> </ul>		O	
<ul style="list-style-type: none"> <li>The perimeter access track would comply with the requirements for Fire Trails in the PBP guidelines. All access and egress tracks on the site would be maintained and kept free of parked vehicles to enable rapid response for firefighting crews and to avoid entrapment of staff in the case of bush fire emergencies. Access tracks would be constructed as through roads as far as possible. Dead end tracks would be signposted and include provision for turning firetrucks.</li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>A Hot Works Permit system would be applied to ensure that adequate safety measures are in place. Fire extinguishers would be present during all hot works. Where possible hot works would be carried out in specific safe areas (such as the Construction Compound temporary workshop areas).</li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>Machinery capable of causing an ignition would not be used during bushfire danger weather, including Total Fire Ban days.</li> </ul>	C	O	D
<ul style="list-style-type: none"> <li>Prior to operation of the solar farm, an Emergency Response Plan (ERP) must be prepared in consultation with the RFS and Fire &amp; Rescue NSW. This plan must include but not be limited to:               <ul style="list-style-type: none"> <li>Specifically addresses foreseeable on site and off-site fire events and other emergency incidents.</li> <li>Detail appropriate risk control measures to mitigate potential risks to the health and safety of firefighters and other first responders</li> <li>Outline other risk control measures that may need to be implemented in a fire emergency due to any unique hazards specific to the site.</li> <li>A copy of the ERP is to be stored in a location directly adjacent to the sites main entry points</li> <li>Once constructed and prior to operation, the operator is to contact with the relevant local emergency management committee regarding the site.</li> </ul> </li> </ul>		O	
<ul style="list-style-type: none"> <li>All electrical equipment would be designed in accordance with relevant codes and industry best practice standards in Australia.</li> </ul>	C		



Safeguards and mitigation measures	PC/C	PO/O	D
• All design and engineering would be undertaken by qualified and competent person/s with the support of specialists as required.	C		
• Design of electrical infrastructure would minimise EMFs.	C		