Title of Proposal - Majors Creek Solar Farm, south of Townsville, Queensland

Section 1 - Summary of your proposed action

Provide a summary of your proposed action, including any consultations undertaken.

1.1 Project Industry Type

Energy Generation and Supply (renewable)

1.2 Provide a detailed description of the proposed action, including all proposed activities.

The proposed action involves the establishment of solar power photovoltaic (PV) facilities at Woodstock Giru Road, Woodstock (see Attachment C, Figure 1). The energy will be grid-connected through a new switchyard forming a 'T' into the existing Powerlink 275kV transmission line which traverses the site. The PV facilities will be located within the proposed development envelope (Attachment A) and the development has been purposefully designed to avoid significant impacts to MNES. The nature of the proposed action is summarised below and described in further detail in Attachment B.

DEVELOPMENT COMPONENTS
The development will consist of solar panels mounted on a frame that track the sun to generate energy. The panels will be connected to inverter stations that convert the DC power to AC power, and will use integrated transformers to step the voltage up to 33kV. A medium voltage AC network will be installed in underground trenches to connect each inverter to a central switchgear.

The following components will be installed:
- Arrays of solar PV modules arranged in a series of long rows (generally 85 m) typically no higher than 2.4 m (subject to final equipment selection) above the ground and supported by a steel and/or aluminium mounting structure including framing and piles which are either screwed or driven into the ground.
- A series of prefabricated, containerised inverters distributed throughout the PV arrays.
- Electrical connections between PV arrays and associated monitoring and protection equipment via underground or frame secured cabling.
- A tracker actuation system.
- Network interconnection facilities to connect the project to the high voltage distribution system via a new on-site switchyard.

Additional infrastructure that will be constructed on site to support operation includes: site office and stores building, site entry road, internal access tracks, car park, site fencing and associated security equipment. Management zones will be established around infrastructure to provide for asset protection. Specific activities for each phase of the proposed action (pre-mobilisation, construction, operation and decommissioning) are discussed in Attachment B.

FINAL PANEL LAYOUT

The final layout of the solar panels within the development envelope has not been finalised. Detailed design will ensure that there are no significant impacts to MNES and will be determined based on environmental and engineering constraints. The final layout will also meet the mitigation and management measures specified in Section 4.

BLACK THROATED FINCH MANAGEMENT PLAN

The proposed action will include a habitat enhancement program to remove weeds and reseed the area under solar panel infrastructure with grasses that are known to provide foraging habitat for Black Throated Finch. The solar panel infrastructure used in the proposed action, in particular the single-axis tracking design which both reduces ground cover ratio and eliminates constant shading effects, enables the growth of grassland habitats under and around solar panels. This improvement of vegetation condition, combined with management measures to reduce potential indirect impacts will improve the foraging habitat value within the proposed development envelope for Black Throated Finch. The Black Throated Finch Management Plan is provided at Attachment E.

1.3 What is the extent and location of your proposed action? Use the polygon tool on the map below to mark the location of your proposed action.

Area	Point	Latitude	Longitude
Indicative project area	1	-19.593731473675	146.84816666248
Indicative project area	2	-19.583785313954	146.84919663074
Indicative project area	3	-19.583380985523	146.84593506458
Indicative project area	4	-19.571250660665	146.84696503284
Indicative project area	5	-19.573838539936	146.87657662037
Indicative project area	6	-19.598259602978	146.87374420765
Indicative project area	7	-19.60003847606	146.86576195362
Indicative project area	8	-19.593812334244	146.84816666248
Indicative project area	9	-19.593812334244	146.84825249317
Indicative project area	10	-19.593731473675	146.84816666248

1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland).

The Solar Farm will be located approximately 35 km south of Townsville, Queensland near the town of Woodstock (see Attachment C, Figure 1). The Project Area (shown as the “Survey Area” in Attachment C, Figure 2): encompasses two properties, Lot 65 on EP197 and Lot 4 on RP904776. It is approximately 742 ha in size and is within freehold land tenure.

The Project Area has been used for cattle grazing and contains a high voltage transmission line that runs through the Area in a north-west/south-east direction. Other infrastructure present includes fences and a number of unsealed access tracks.

The Solar Farm has been designed to make use of areas of the site that are in poor condition, avoiding and minimising impacts to areas of environmental constraint, and incorporates buffers to protect areas with environmental value.

1.6 What is the size of the development footprint or work area?

The proposed development envelope is approximately 539.5 ha.

1.7 Is the proposed action a street address or lot?

Lot

1.7.2 Describe the lot number and title. The development will occur within two lots, Lot 65 on EP197 and Lot 4 on RP904776.

1.8 Primary Jurisdiction.

Queensland

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

No

1.10 Is the proposed action subject to local government planning approval?

Yes

1.10.1 Is there a local government area and council contact for the proposal?

Yes

1.10.1.0 Council contact officer details

1.10.1.1 Name of relevant council contact officer.

Tracey Pascoe

1.10.1.2 E-mail

enquiries@townsville.qld.gov.au

1.10.1.3 Telephone Number

(03) 4727 9619

1.11 Provide an estimated start and estimated end date for the proposed action.

Start date 01/2018

End date 01/2051

1.12 Provide details of the context, planning framework and State and/or Local government requirements.

A development application was submitted to the Whitsunday Regional Council (WRC) in April. The development application is currently being assessed in accordance with the *Sustainable Planning Act 2009* (Qld). Development application documents can be provided on request.

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders.

Edify Energy have consulted the local community. It prepared a flyer for the proposed development and distributed it to letterboxes of residences nearby to the Project Area. This was followed up with Edify Energy representatives door-knocking the same residences to discuss the proposed project. The residents consulted through this process did not express any significant concerns.

Edify Energy has not specifically consulted with Indigenous stakeholders. Edify Energy intends to continue to engage with the local community throughout the application process by providing more detailed information about the proposed project.

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project.

See Section 1.12. No further environmental impact assessment (beyond this EPBC referral) is required under Commonwealth, State or Territory legislation.

1.15 Is this action part of a staged development (or a component of a larger project)?

No

1.16 Is the proposed action related to other actions or proposals in the region?

No

Section 2 - Matters of National Environmental Significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The interactive map tool can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest. Consideration of likely impacts should include both direct and indirect impacts.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The following resources can assist you in your assessment of likely impacts:

• Profiles of relevant species/communities (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;

• Significant Impact Guidelines 1.1 – Matters of National Environmental Significance;

• Significant Impact Guideline 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies.

2.1 Is the proposed action likely to impact on the values of any World Heritage properties?

No

2.2 Is the proposed action likely to impact on the values of any National Heritage places?

No

2.3 Is the proposed action likely to impact on the ecological character of a Ramsar wetland?

No

2.4 Is the proposed action likely to impact on the members of any listed threatened species (except a conservation dependent species) or any threatened ecological community, or their habitat?

Yes

2.4.1 Impact table

Species	Impact
Black-throated Finch (southern) (Poephila	Refer to Attachment D

Species	Impact
cincta cincta)	
Koala (Phascolarctos cinereus)	Refer to Attachment D
Squatter Pigeon (southern) (Geophaps scripta scripta)	Refer to Attachment D
Bare-rumped Sheathtail Bat (Saccolaimus saccolaimus nudicluniatus)	Refer to Attachment D

2.4.2 Do you consider this impact to be significant?

No

2.5 Is the proposed action likely to impact on the members of any listed migratory species, or their habitat?

No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

No

2.7 Is the proposed action likely to impact on any part of the environment in the Commonwealth land?

No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

No

2.9 Will there be any impact on a water resource related to coal / gas / mining?

No

2.10 Is the proposed action a nuclear action?

No

2.11 Is the proposed action to be taken by the Commonwealth agency?

No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage Place

Overseas?

No

2.13 Is the proposed action likely to impact on any part of the environment in the Commonwealth marine area?

No

Section 3 - Description of the project area

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed in Section 2).

3.1 Describe the flora and fauna relevant to the project area.

FLORA AND FAUNA ASSESSMENT

Flora and fauna assessments were undertaken within the Project Area in early 2017.

On 1st February, two ecologists from RPS undertook an initial reconnaissance field survey.

Over four days from 27th February – 2nd March, two ecologists from Ecological Survey and Management (ES&M) carried out a more detailed flora and fauna survey that assessed the habitat values on-site for threatened fauna with potential to occur in the area. At this time, they also actively surveyed for their presence in the Project Area. The flora survey methodology used complies with Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland, Version 3.2 (Neldner et al. 2012), and was undertaken after recent rain which created optimal conditions for identifying groundstorey species.

Two ‘Song Meters’ were installed for 12 nights (between 6 and 17 April 2017, inclusive) to detect significant microbat species. Analysis of microbat echolocation recordings was undertaken by specialist Greg Ford of Balance Environmental.

The assessment found that the Project Area contained a mosaic of woodland vegetation (open eucalypt with a mixed native and exotic grassy understorey), riparian communities and non-remnant vegetation. There are three remnant vegetation communities on site. Using the Regional Ecosystem mapping classification in the Vegetation Management Act 1999 (Qld), two least concern Regional Ecosystems are in the Project Area (REs 11.3.30 and 11.3.35), and one smaller area containing 'of concern' vegetation was found in the south-east corner of the Project Area (RE 11.3.13, ‘Beefwood’ open woodland on coastal alluvial plains). The vegetation communities in the Project Area are described in detail and mapped in the attached ecological survey report (ES&M 2017, Attachment B).

The survey did not find any EPBC-listed Threatened Ecological Communities (TECs) in the Project Area.

The Project Area contains habitat for four species listed as threatened under the EPBC Act:

-Black-throated Finch (southern) (Peophila cincta cincta) – Endangered.

-Koala (Phascolarctos cinereus) – Vulnerable.

-Squatter Pigeon (southern) (Geophaps scripta scripta) – Vulnerable.

-Bare-rumped Sheathtail Bat (Saccolaimus saccolaimus nudicluniatus) – Vulnerable.

The vegetation in the Project Area was found to be degraded and all vegetation communities across the site are infested with the woody weeds Chinee Apple (Ziziphus mauritiana) and Rubber Vine (Cryptostegia grandiflora). This limits its value as habitat for species that require more complex and intact vegetation communities for foraging, breeding and denning/roosting.

Habitat in the Project Area is not habitat critical to the survival of the Bare-rumped Sheathtail Bat, Koala or Squatter Pigeon (southern), and this is supported by surveying and associated habitat analysis contained in the Ecological Assessment Report (ES&M 2017, Attachment B).

The significance of on-site habitat for Black-throated Finch (southern) is discussed further in Section 2.

3.2 Describe the hydrology relevant to the project area (including water flows).

Most of the Project Area is characterised by flat alluvial plains that generally grade in an easterly direction. The highest point is a low, gravelly rise in the south-east corner of the Project Area.

Surface water flow is in a north-east direction, towards an aggregation of wetlands called the Serpentine Aggregation. The aggregation is located outside the Project Area (adjacent to the north-east corner of the Project Area) and is made up of approximately 350 ha of permanent and semi-permanent ephemeral lagoons. The wetlands drain into Majors Creek and then into the Haughton River approximately 20 km downstream of the Project Area.

Several ephemeral watercourses run across the Project Area towards the aggregation (three stream order 1 and one stream order 2 streams). Additionally, small, shallow depressions of heavy clay in the central and north-eastern parts of the Project Area may contain ponded water for short periods of time.

3.3 Describe the soil and vegetation characteristics relevant to the project area.

The Project Area is on cracking clay soils (Vertosols) (Qld Govt 2017), with a mix of open eucalypt woodlands and exotic grassy understorey. All of the vegetation communities across the Project Area have been exposed to high levels of cattle grazing and three large areas have been cleared and/or thinned to the extent that they are no longer considered to be remnant. Two of these non-remnant areas are now dominated by mid-dense thickets of Chinee Apple (Ziziphus mauritiana), to the exclusion of almost all other species of woody vegetation.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area.

Not applicable.

3.5 Describe the status of native vegetation relevant to the project area.

The Project Area was found to support a mosaic of woodland vegetation, riparian communities and non-remnant vegetation. The flora assessment completed by ES&M found three types of remnant vegetation currently exist within the Project Area. Of these, two are listed as least concern and one is of concern (under the Queensland Vegetation Management Act 1999). The vegetation communities present within the Project Area include:

- 11.3.13 Beefwood (Grevillea striata) open woodland on coastal alluvial plains (of concern).

- 11.3.30 Narrow-leaved Red Ironbark, Dallachy's Gum woodland on alluvial plains (least concern). This includes areas of 11.3.30d across the site (Narrow-leaved Red Ironbark (E. drepanophylla)/ Mt Stuart Ironbark (E. paedoglauca) +/- Dallachy's Gum +/- Poplar Gum (E. platyphylla) woodland.

- 11.3.35 Poplar Gum, Clarkson's Bloodwood (Corymbia clarksoniana) woodland on alluvial plains (least concern).

These RE areas are shown in Figure 3 (Field-validated vegetation management), contained in Attachment B.

There are also areas of non-remnant vegetation in the Project Area where historic clearing, cattle grazing and infestations of Chinee Apple have adversely affected the structure and composition of the vegetation.

3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

Not applicable.

3.7 Describe the current condition of the environment relevant to the project area.

The Project Area is currently used for cattle grazing. A history of cattle grazing and weed invasion across the Project Area has altered the mid and ground strata of the majority of vegetation communities present, and has degraded waterways and associated riparian vegetation. Vegetation has also been selectively cleared for roads/tracks and electricity infrastructure. The existing infrastructure in the Project Area is a 66 kV powerline that dissects the site in an east-west direction, and an easement for a 275kV high voltage transmission line that runs in a north-west/south-east direction, as well as access tracks.

All vegetation communities in the Project Area are infested with the weeds Chinee Apple (Ziziphus mauritiana) and Rubber Vine (Cryptostegia grandiflora), especially in non-remnant

areas. Both species are restricted invasive plants under the Biosecurity Act 2014 (Qld), and Rubber Vine is also recognised as a weed of national significance (WONS). Mimosa Bush (Vachellia farnesiana) was also recorded in some vegetation communities within the Project Area, but this species is not recognised as a WONS or a restricted invasive plant.

The introduced pasture grasses, Indian Blue Grass (Bothriochloa pertusa) and Sabi Grass (Urochloa mosambicensis) were abundant in the groundstorey of most vegetation communities within the Project Area.

The Cane Toad (Rhinella marina) was the only introduced fauna species recorded during the flora and fauna assessment survey. This species is currently not listed as either a prohibited or restricted invasive species under the Biosecurity Act 2014 (Qld). Other introduced fauna species that weren't directly observed, but are known from the region and likely to be present in the Project Area include Wild Dog (Canis lupus), Feral Pig (Sus scrofa) and Feral Cat (Felis catus).

3.8 Describe any Commonwealth Heritage Places or other places recognised as having heritage values relevant to the project area.

Not applicable.

3.9 Describe any Indigenous heritage values relevant to the project area.

Not applicable.

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area.

The Project Area is freehold title.

3.11 Describe any existing or any proposed uses relevant to the project area.

The landscape is rural and characterised by uncultivated cattle pasture grasslands and remnant and non-remnant woodlands.

The only easements in the Project Area are a high-voltage 275kV transmission line.

There are no proposed uses (other than as a solar farm) for the Project Area.

Section 4 - Measures to avoid or reduce impacts

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action.

Edify Energy has undertaken a substantial set of work to understand the MNES values within the Project Area and define a process to avoid direct impacts to important habitat areas. This has included the following key pieces of work.

A Preliminary Environmental Assessment of the broader landholding undertaken in early 2017. The assessment identified the key features of the environment including known and potential occurrences of MNES and identified a potential Black Throated Finch movement corridor through areas of wetland in the northern Lots of the landholding. A decision was made at this stage of the project to avoid these areas of value and focus development on Lots outside of this movement corridor.

The second set of work involved more detailed ecological surveys in February/March 2017 of the two preferred Lots identified through the Preliminary Environmental Assessment. This process involved detailed surveys and resulted in a detailed and accurate understanding of the vegetation types and associated habitat values for threatened species, specifically for Black Throated Finch. The proposed development envelope was then defined to avoid areas identified as potential nesting habitat on the site, and a Black Throated Finch Management Plan developed. Buffers around ephemeral watercourses were also applied.

The Black Throated Finch Management Plan provides management measures to ensure:

-permanent loss of nesting and foraging habitat does not occur

-bushfire risk is managed to protect assets and promote foraging habitat value

-foraging habitat within the development envelope is cleared of weeds

-impacts to watercourses within and adjacent to the Project Area are avoided.

In addition, the Plan provides for a Habitat Enhancement Program to be undertaken. The program will be implemented for the life of the project and aims to improve foraging habitat and

foraging resources within the development envelope for the Black Throated Finch. This will be achieved through the reseeding of cleared areas with grass species suitable for the Black Throated Finch.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved.

As discussed in Section 2 of this referral, there are four MNES relevant to the proposed action. These include the Black Throated Finch, Koala, Squatter Pigeon and Bare-rumped Sheathtail Bat.

No significant impacts to any of these MNES will occur as a result of the proposed action. The following specific outcomes will be delivered:

-Black Throated Finch: Temporary disturbance of an area of low quality foraging habitat. Improved availability of grassland habitat within the development envelope.

- Koala: No habitat critical to the survival of the Koala is present within the Project Area.

- Squatter Pigeon: Potential habitat for the species within the Project Area will be avoided. No long term disruption to the species' use of the Project Area.

-Bare-rumped Sheathtail Bat: Minor, temporary disturbance to an area of foraging habitat for the species. No long-term disruption to the species' use of the Project Area.

There is a high level of confidence in the ability to deliver these outcomes for the following reasons:

1. The proposed action involves a set of commitments and design measures to avoid significant impacts to MNES habitat.

2. A comprehensive suite of mitigation and management measures are proposed to address potential indirect impacts to MNES habitat adjacent to development. The types of potential indirect impacts that may be relevant are well understood and the proposed measures are standard, best practice.

3. Understanding of MNES values within the Project Area and surrounds is based on two survey events by qualified ecologists with experience conducting ecological surveys in the area. The second survey event was very recent and targeted to the key MNES issues relevant to the area.

4. The proponent has a strong commitment to good environmental practice. This is demonstrated by their willingness to define and refine the development to specifically avoid significant impacts to MNES, despite notable compromises to development outcomes and efficiencies.

Section 5 – Conclusion on the likelihood of significant impacts

A checkbox tick identifies each of the matters of National Environmental Significance you identified in section 2 of this application as likely to be a significant impact.

Review the matters you have identified below. If a matter ticked below has been incorrectly identified you will need to return to Section 2 to edit.

5.1.1 World Heritage Properties

No

5.1.2 National Heritage Places

No

5.1.3 Wetlands of International Importance (declared Ramsar Wetlands)

No

5.1.4 Listed threatened species or any threatened ecological community

No

5.1.5 Listed migratory species

No

5.1.6 Commonwealth marine environment

No

5.1.7 Protection of the environment from actions involving Commonwealth land

No

5.1.8 Great Barrier Reef Marine Park

No

5.1.9 A water resource, in relation to coal/gas/mining

No

5.1.10 Protection of the environment from nuclear actions

No

5.1.11 Protection of the environment from Commonwealth actions

No

5.1.12 Commonwealth Heritage places overseas

No

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action.

The proposed action has been specifically designed to avoid significant impacts to MNES. Direct impacts have been avoided and minimised, and a suite of measures are proposed to mitigate and manage indirect impacts.

Section 6 – Environmental record of the person proposing to take the action

Provide details of any proceedings under Commonwealth, State or Territory law against the person proposing to take the action that pertain to the protection of the environment or the conservation and sustainable use of natural resources.

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Please explain in further detail.

The Proponent is an Australian renewable energy development and investment company. Its primary business is the development and delivery of renewable energy facilities, including the solar farm at this location.

The Proponent company will develop an EMP to manage environmental issues at the project site.

The Proponent takes its environmental obligations seriously, rigorously assessing its environmental impacts and executing with integrity, ideally improving biodiversity outcomes in the process.

The founder and chief executive of the Proponent led the development and delivery of 27 utility scale solar farms in the UK as part of the business Low Carbon (lowcarbon.com) which he co-founded.

The Proponent has never been convicted, fined or prosecuted of any environmental breach. The Proponent has shown great leadership in responsible environmental management in the development of this project and gaining the appropriate approvals.

The Proponent (in conjunction with its development partner, Solar Choice) has successfully consented other renewable energy facilities in Australia, and is presently constructing three solar farms, two of which are in Queensland, in strict compliance with environmental management plans and conditions of approval.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application.

Not applicable.

6.3 Will the action be taken in accordance with the corporation's environmental policy and planning framework?

Yes

6.3.1 If the person taking the action is a corporation, please provide details of the corporation's environmental policy and planning framework.

The Proponent's business is focused on improving environmental outcomes through the generation of electricity from renewable sources, primarily solar power. It is determined to deliver the solar farm at this location and has prepared extensively for this project by working through the local, state and federal planning framework.

The planning framework applies to the action by way of allowing the action to proceed, with all appropriate approvals and consents being gained.

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

Yes

6.4.1 EPBC Act No and/or Name of Proposal.

Edify Energy - Gannawarra Solar Farm Development (2016/7807)

Edify Energy - Solar Farm Development, north-west of Collinsville, Queensland (2016/7824)

Edify Energy – Stage 2 Solar Farm Development, north-west of Collinsville, Queensland (2017/7904)

Section 7 – Information sources

You are required to provide the references used in preparing the referral including the reliability of the source.

7.1 List references used in preparing the referral (please provide the reference source reliability and any uncertainties of source).

Reference Source	Reliability	Uncertainties
Brooker, M.I.A. and Kleinig, D.A., (2008). Field Guide to Eucalypts: Northern Australia, Field Guide to Eucalypts. Bloomings Books, Melbourne.	High. Published reference material.	Not applicable.
CSIRO (2017) Atlas of Living Australia. Global Biodiversity Information Facility, Canberra. http://biocache.ala.org.au	High. Published material.	Not applicable.
Department of the Environment (DoE) (2013) Matters of National Environmental Significance Significant impact guidelines 1.1 - Environment Protection and Biodiversity Conservation Act 1999. Commonwealth of Australia.	High. Australian Government guidance.	Not applicable.
Department of the Environment (2014) EPBC Act referral guidelines for the vulnerable Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory. Commonwealth of Australia, Canberra. Available from: http://www.environment.gov.au/biodiversity/threatened/publications/epbc-act-referral-guidelines-vulnerable-Koala	High. Australian Government guidance.	Applicability to project locality given habitat preference for Koalas in the region.
Department of the Environment (DoE) (2015). Red Hill Mining Project EPBC Act Approval (EPBC 2013/6865).	High. Australian Government EPBC approval.	Not applicable.
Department of the Environment and Energy (DEE) (2017)	High. Australian Government reference material.	General species advice. Potentially requires more

Reference Source	Reliability	Uncertainties
Species Profile and Threats Database. Available from: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl. Accessed March 2017		detailed and current information to be considered. Information relating to the Bare-rumped Sheathtail Bat is currently out-of-date. Expert opinion has been sought to obtain more recent details about the distribution of the species.
Department of the Environment, Water, Heritage and the Arts (2009a) Significant impact guidelines for the endangered black-throated finch (southern) (Poephila cincta cincta). National threatened species and ecological communities. Background paper to the EPBC Act policy statement 3.13. Commonwealth of Australia.	High. Australian Government reference material.	Gaps in species ecology information due to insufficient scientific published data.
Department of the Environment, Water, Heritage and the Arts (2009b) Significant impact guidelines for the endangered black-throated finch (southern) (Poephila cincta cincta). National threatened species and ecological communities. EPBC Act policy statement 3.13. Commonwealth of Australia.	High. Australian Government reference material.	Not applicable.
Ecological Survey & Management (ES&M) (2017). Majors Creek Solar Farm Project Ecological Assessment Report. Report for Edify Energy.	High. Recent detailed ecological surveys conducted across the Project Area	Appropriate level of detail and information for the referral. Limitations discussed in Section 2.4 of the report.
Natural Resource Assessments (NRA) Environmental Consultants (2007) Review of the ecology, threats and management requirements of the Black Throated Finch (Poephila cincta cincta) to support assessment processes under the Environment Protection and Biodiversity Act	High. Specialised advice provided to the Department to assist in the development of the Significant Impact Guidelines.	Not applicable.

Reference Source	Reliability	Uncertainties
1999. Report to the Department of the Environment and Water Resources, Canberra.		
NSW National Parks & Wildlife Service (NSW NPWS) 2003, Draft Recovery Plan for the Black-throated Finch southern subspecies (Poephila cinta cinta), NSW National Parks & Wildlife Service, Hurstville.	High. State Government reference material.	Gaps in species ecology information due to insufficient scientific published data.
Queensland Government (2017) Soil Survey of the Townsville Coastal Plains, North Queensland ZED, http://qldspatial.information.qld.gov.au/catalogue/custom/detail.page?fid={CD65F3D3-4F4E-40BA-A4F0-B02355F9E8DB}	High. State Government reference material.	Gaps in soil data due to insufficient survey.
Rechetelo, J. Grice A., Reside A.E., Hardesty B.D. and Moloney J. (2016) Movement patterns, home range size and habitat selection of an endangered resource tracking species, the Black-Throated Finch (Poephila cincta cincta). PLoS ONE 11(11):e0167254. Available from: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0167254	High. Published reference material.	Not applicable.
Threatened Species Scientific Committee (TSSC) (2015). Approved Conservation Advice for Geophaps scripta scripta (Squatter Pigeon (southern)).	High. TSSC species advice.	Not applicable.
Milne D., Jackling F. C., Sidhu M. and Appleton B. R. (2009) Shedding new light on old species identifications: Morphological and genetic evidence suggest a need for conservation status review of the critically endangered bat, Saccolaimus saccolaimus. Wildlife Research. 36:496-508.	High. Published CSIRO reference material.	Not applicable.
Threatened Species Scientific	High. TSSC species advice.	Not applicable.

Reference Source	Reliability	Uncertainties
Committee (TSSC) (2016). Approved Conservation Advice for Saccolaimus saccolaimus nudicluniatus.		

Section 8 – Proposed alternatives

You are required to complete this section if you have any feasible alternatives to taking the proposed action (including not taking the action) that were considered but not proposed.

8.0 Provide a description of the feasible alternative?

No alternatives to development at the site were considered. A range of alternative development scenarios were considered with a view to avoiding significant impacts on MNES (see Section 4).

8.1 Select the relevant alternatives related to your proposed action.

8.27 Do you have another alternative?

No

Section 9 – Contacts, signatures and declarations

Where applicable, you must provide the contact details of each of the following entities: Person Proposing the Action; Proposed Designated Proponent and; Person Preparing the Referral. You will also be required to provide signed declarations from each of the identified entities.

9.0 Is the person proposing to take the action an Organisation or an Individual?

Organisation

9.2 Organisation

9.2.1 Job Title

Head Engineering & Technical

9.2.2 First Name

Ian

9.2.3 Last Name

Christmas

9.2.4 E-mail

ian.christmas@edifyenergy.com.au

9.2.5 Postal Address

Level 6

140 Creek Street
Brisbane City QLD 4000
Australia

9.2.6 ABN/ACN

ABN

85606684995 - EDIFY ENERGY PTY. LTD.

9.2.7 Organisation Telephone

0447347974

9.2.8 Organisation E-mail

ian.christmas@edifyenergy.com

9.2.9 I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

Not applicable

Small Business Declaration

I have read the Department of the Environment and Energy's guidance in the online form concerning the definition of a small a business entity and confirm that I qualify for a small business exemption.

Signature:..... Date: .....

9.2.9.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations

No

9.2.9.3 Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made

Person proposing the action - Declaration

I, Ian Christmas, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

Signature:..... Date: 8/6/17

I, Ian Christmas, the person proposing the action, consent to the designation of Ian Christmas as the proponent of the purposes of the action describe in this EPBC Act Referral.

Signature:..... Date: 8/6/17

9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Individual

9.4 Individual

9.4.1 Job Title

Head Engineering & Technical

9.4.2 First Name

Ian

9.4.3 Last Name

Christmas

9.4.4 E-mail

ian.christmas@edifyenergy.com

Proposed designated proponent - Declaration

I, Ian Christmas, the proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature:..... Date: 8/6/17.....

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Environmental Consultant

9.8.2 First Name

Jennifer

9.8.3 Last Name

Hulme

9.8.4 E-mail

jennifer@openlines.com.au

9.8.5 Postal Address

GPO Box 1321
Canberra ACT 2601
Australia

9.8.6 ABN/ACN

ABN

90150901965 - Open Lines Consulting Pty Ltd

9.8.7 Organisation Telephone

0431211677

9.8.8 Organisation E-mail

jennifer@openlines.com.au

Referring Party - Declaration

I, Jennifer Hulme, I declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.

Signature: J. L. Hulme Date: 8/6/2017

Appendix A - Attachments

The following attachments have been supplied with this EPBC Act Referral:

1. attachment_a_majorscreekdevelopmentenvelo.kmz
2. attachment_b_project_description.pdf
3. attachment_c_esm2017.pdf
4. attachment_d_-_analysis_of_potential_impacts.pdf
5. attachment_e_btf_managementplan_final.pdf