Australian Government
Department of the Environment and Energy

Title of Proposal - Clarke Creek Solar Farm

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.

A detailed description of the proposed action is contained within the attached Biodiversity Assessment Report (BAR), by NGH, September 2017. Maps are provided as Figure 1 and Figure 2 attached as "ClarkeCreekSolarFarmMaps.pdf."

This referral is for the solar farm and ancillary infrastructure (the Project), and is a stand-alone project near to the potential Clarke Creek Wind Farm. The project is being developed by Clarke Creek Energy Pty Ltd. The construction of the solar farm is not dependent on the approval or construction of the Clarke Creek Wind Farm.

The proposed development is a utility scale solar PV plant, with the solar panels mounted in rows on either fixed tilt or horizontal tracking systems. The rows of solar panels are electrically connected into arrays which are connected to inverters where they are inverted from direct current (DC) to alternating current (AC) electricity, which is the standard form of electricity used throughout Australia.

Electricity is connected between the array areas via an underground cable or overhead line. The power is collected together at the Substation and transformed to a voltage of 275 kilo-volts (kV) to connect directly into the Powerlink electricity network of transmission lines that traverse the site.

Key elements of the Project include the following:
• Solar panels, installed in regular arrays, up to 4 m in height.
• Each solar panel will be fixed to a metal mounting structure. The mounting structure will be piled or screwed into the ground without the need for any concrete.
• Above ground DC cabling that will connect each module in a string to field combiner boxes mounted underneath the solar panels. The majority of combiner boxes will be elevated approximately 1.0 m off the ground.
• Underground DC cabling from the combiner boxes to the central inverters.
• Central inverters, step up transformers and switchgear in 40 ft (approximately 12 m) containers or container skid pads (power conversion station (the PCS)) within each array block which convert DC electricity generated by the solar panels into AC electricity for connection to the national electricity grid.
• Underground AC cabling or overhead line running from each PCS to the solar substation.

• Three substation option areas are proposed for the Project. The substations will ensure the voltage level of the electricity put out by the inverters is elevated to a level suitable to feed into the electricity grid.
• Also with the substation area battery energy storage will be located. The substations will be located within the identified footprint on Figures 2 and 3 of the BAR. However,
the final micrositing of the substation will be determined during detailed design. The maximum height of the substation will be 8.5 m.
• A main step up transformer and associated equipment in the solar substations to convert on site AC reticulated 33 kV electricity to 275 kV electricity for direct connection to the electricity network on site.
• Internal access tracks from the entrance point to each PCS and to the solar substation to allow for maintenance of the site.
• Perimeter safety fencing around the site and fixed CCTV system within the fence perimeter of the site.
• Supervisory control and data acquisition (SCADA) control system to monitoring performance of the equipment.
• An operations and maintenance building and compound is proposed. An indicative footprint of 1ha has been provided on Development Plans however the final location will be subject to micro-siting in the detail design. Based on preliminary design, the building will be one storey and contain a control room, storage room and staff facilities. The maximum height of the building will be 8.5 m.
• Temporary infrastructure associated with site construction including the site compound and storage areas.
• Energy storage facility of 4 hectares located within each of the Substation areas. This is likely to be suitable for 100MW and 400MWh storage at each substation location.

The final design of the solar farm, energy storage and ancillary infrastructure will be dependent on many factors, such as market conditions and the cost of solar and energy storage equipment. The power output of the solar and energy storage capacity may be scaled up or down to reflect this changing environment at the time of final investment decision at the end of the feasibility process. This application defines the footprint within which this Project may be located.

The Project consists of four areas containing solar arrays and ancillary infrastructure, and three areas within which the substation, energy storage and ancillary infrastructure may be located, as shown in Figure 1 and 2 of the attached "ClarkeCreekSolarFarmMaps.pdf" It is not anticipated that all of the Substation areas will be built or all the land containing the solar arrays will be built in their entirety.

The footprint of the project is based on the following likely criteria: 200MW array in the north at locations SF1 And SF2; 200MW array in the south at locations SF3 and SF4; Two substations (one north & one south) each with a footprint of upto 2.5 hectares; Two energy storage areas (one north & one south) each with a footprint of upto 4 hectares; Two Solar Farm Operation and Maintenance compounds(one north & one south) each with a footprint of 1 hectare; and Three site entrances (one north & two south).

A kmz and a zip file containing shape files of the project layout is attached.

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
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	1	-22.750962195226	149.32035114299
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	2	-22.743759119971	149.31348468791
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	3	-22.738218034516	149.30987979899
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	4	-22.727214356232	149.30455829631
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	5	-22.708133938523	149.29451610576
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	6	-22.680656633165	149.2800107194
Solar Farm Location. Please refer to the	7	-22.655550072881	149.26747943889

Area	Point	Latitude	Longitude
attached kmz and shape files for the detailed development boundary.			
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	8	-22.62425944659	149.25151493083
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	9	-22.603738434574	149.24190189372
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	10	-22.603738434574	149.24679424296
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	11	-22.586067311995	149.23735286723
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	12	-22.588286232158	149.2703976823
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	13	-22.646282453108	149.30112506877
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	14	-22.669569128916	149.31348468791

Area	Point	Latitude	Longitude
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	15	-22.665371482703	149.32593013774
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	16	-22.70979665333	149.32052280437
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	17	-22.695781710745	149.34095050822
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	18	-22.703541573684	149.34507038127
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	19	-22.72103924251	149.32893421184
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	20	-22.724047666064	149.3261876298
Solar Farm Location. Please refer to the attached kmz and shape files for the detailed development boundary.	21	-22.751199652781	149.32584430705
Solar Farm Location. Please refer to the attached kmz and shape files for the	22	-22.750962195226	149.32035114299

Area	Point	Latitude	Longitude
detailed development boundary.			

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 Project is situated in the Clarke Creek locality, approximately 150 kilometres North-West of the town of Rockhampton in Central Queensland, and within the Isaac Regional Council Local Government Area.

1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

See attachment Clarke Creek Solar Farm Footprints and Lots Description.pdf

1.7 Is the proposed action a street address or lot?

Lot

1.7.2 Describe the lot number and title. See attachment Clarke Creek Solar Farm Footprints and Lots Description.pdf

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.

Manus Basson, Manager Land and Development

1.10.1.2 E-mail

Manus.Basson@isaac.qld.gov.au

1.10.1.3 Telephone Number

07 4846 3500

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

Start date 01/2019

End date 01/2021

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

The project has applied for a Material Change of Use approval from Isaac Regional Council. This application was suported by a Development Application which assessed the project against the Broadsound Development Code of the Broadsound Shire Planning Scheme 2005 and the State Planning Policies on Agriculture,Biodiversity,Energy and Water supply.

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

On 21 September 2017, the Applicant ran a public exhibition at Clarke Creek Campdraft facilities to present the Project to the local community. The exhibition provided proposed layouts and discussion on construction and operation of the Project. The exhibition was advertised through the Project website and it was advertised by the Clarke Creek Community Reference Group, via their email lists and Facebook Page.

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.

None

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 have ANY direct or indirect impact on the values of any World Heritage properties?

No

2.2 Is the proposed action likely to have ANY direct or indirect impact on the values of any National Heritage places?

No

2.3 Is the proposed action likely to have ANY direct or indirect impact on the ecological character of a Ramsar wetland?

No

2.4 Is the proposed action likely to have ANY direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?

No

2.5 Is the proposed action likely to have ANY direct or indirect 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 to be taken on or near Commonwealth land?

No

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

No

2.9 Is the proposed action likely to have ANY direct or indirect 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 have ANY direct or indirect impact on a water resource related to coal/gas/mining?

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.

A summary of Flora and Fauna is provided in the attached Biodiversity Assessment Report, by NGH, September 2017.

The Project site fronts the Marlborough-Sarina Road, with a combined total frontage of approximately 18 km. Safe access to the site is available from Marlborough-Sarina Road, given the straight nature of the road and sufficient site distances. The Project site does not contain any connections to water or sewerage services.

The Project site has relatively flat terrain. The balance of the lots containing the Project site contains land with considerable elevations.

The Project site is currently used for grazing purposes. There are a number of structures and infrastructure located on and in the vicinity of the Project site which relate to the current agricultural use of the land. These include a number of dams, fencing, access tracks and site buildings. Waterways cross through the subject lots, with the predominant waterways being Clarke Creek,Stockyard Creek and Bora Creek. The Project site has been designed to avoid intrusion or impacts on these waterways.

There is extensive vegetation communities mapped on the hilly terrain that frames the eastern side of the Project lots. There is no mapped native vegetation present within the solar farm or ancillary infrastructure footprints.

The Project area is in a highly disturbed condition through historic land clearing, pasture modification and ongoing grazing by domestic stock. The site investigations and desktop assessment revealed that the site does not support any remnant vegetation mappable as a Regional Ecosystem under the Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland. Further, given the disturbed nature of the site, it is considered unlikely that the site would support any listed threatened flora species. Specifically the database records as well as the habitat evaluations and site traverses indicate that there is an overall low probability of any undetected threatened flora species occurring within the Project area. The fauna species encountered within the Project area are all common, widespread species, and include mainly generalist fauna species that are capable of tolerating disturbed habitats, particularly open cleared modified grasslands, and low shrubby regrowth areas. While there are a number of threatened fauna species included in the database records as having potential to occur in the local area, the habitat evaluations and site surveys indicate that these species are unlikely to occur within the proposed solar farm project area, with suitable habitat

available in the more intact riparian areas of Clarke Creek, as well as within the remnant woodlands and open forests of the hills and ridges country. This biodiversity assessment has concluded that the proposed solar farm project is unlikely to result in any unacceptable impacts to any listed threatened flora or fauna species or ecological communities.

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

A Surface Water Assessment (SWA) by AECOM (2017) is attached.

The Project site consists of four individual areas as illustrated in Figure 1 of the Surface Water Assessment. In the SWA they are referred to as:Northern Solar Farm Project Sites (Northern Solar Farms) which are located in the Clarke Creek catchment; and Southern Solar Farm Project Sites (Southern Solar Farms) which are located in the Mundi Creek,Stockyard Creek and Bora Creek catchments.

Stormwater drainage from the site has been determined on the basis of available topographic data (SRTM 1 second (approximately 30 m grid)) which was obtained from Geoscience Australia. Catchment SIM terrain analysis software has been used to identify potential stormwater drainage paths and to delineate catchments relevant to the Northern and Southern Sites. Stormwater drainage will discharge from the Project site via four distinct catchments which all discharge into the Isaac River to the south west:

- For the Northern Solar Farms, drainage is predominantly in a south westerly direction,entering a number of minor unnamed tributaries of Clarke Creek which flow for approximately 6 km in a south-westerly direction before entering Clarke Creek.

- For the Southern Solar Farms the northern site will predominantly drain in an easterly direction before entering an unnamed tributary of Stockyard Creek and flow for approximately 4 km in a southwesterly direction before entering Stockyard Creek. A small portion will also drain north east into Mundi Creek which flows in a south westerly direction for approximately 8 km before entering the Isaac River. Stormwater drainage originating from the southern site will flow in either a northwesterly or south easterly direction into either Stockyard Creek or Bora Creek respectively.

Multiple small farm dams are noted to be located either within the Project site or immediately downstream on drainage lines that traverse the Project site.

Both of the southern sites are also noted to contain significant numbers of gilgai (melon holes).Stormwater drainage from the Project site will enter tributaries of Clarke Creek, Mundi Creek, Stockyard Creek and Bora Creek which are all tributaries of the Isaac River. The confluence of Clarke Creek and the Isaac River is approximately 12 km southwest of the proposed northern Solar Farm site. The confluence of Stockyard Creek and Bora Creek to the Isaac River is approximately 7.5 km southwest of the proposed southern Solar Farm site. The Isaac River catchment covers an area of approximately 22,365 km2. The Project site is not traversed by the main channels of Clarke, Mundi, Stockyard or Bora Creeks and

therefore runoff is predominantly expected to comprise of sheet flow. However, the presence of minor drainage lines and numerous farm dams within and immediately adjacent to the Project site indicates that some concentrated flow is likely to occur.Review of available topographic data indicates that existing stormwater discharge from the Project site is likely to originate from one of four catchments. Delineation of each catchment has been undertaken to enable the estimation of the potential changes in stormwater runoff under pre- and post development scenarios and is discussed in further detail in Section 5.1 of the Surface Water Assessment. No publically available stream gauge data is available for any of the local watercourses relevant to the Project site. The closest publically available stream gauge is located on the Isaac River, approximately 12 km upstream of the confluence with Clarke Creek (Isaac River at Yatton, 130401A). Data for the gauge was obtained from the DNRM Water Monitoring Information Portal in order to develop a high level characterisation of regional streamflow.

Figure 5 and Figure 6 of the Surface Water Assessment respectively show median monthly discharge and daily flow duration for the Isaac River gauge (130401A). From the figures the following can be seen: Median daily discharge shows a similar seasonal distribution to rainfall and is highest during the wet season months of January through March with February having the highest median daily discharge of 107 ML/d;Median streamflow during the winter dry season (April through November) gradually reduces from

a maximum of 13 ML/d in April to a minimum of 0.3 ML/d in October throughout; Cease to flow conditions are noted to occur on approximately 15% of all days (Figure 6) and the

relatively shallow gradient of the flow duration from 20% to 60% probability of exceedance indicates a moderately significant baseflow contribution and is likely to be predominantly as a result of lagged interflow from the summer wet season rather than a spring fed groundwater interaction.

While the data presented in Figure 5 and Figure 6 enables the flow in the Isaac River at Yatton (reporting catchment area of 19,720 km2) to be characterised as moderately perennial, streamflow for watercourses relevant to the Project site (approximately 100 km2 for Clarke, Stockyard and Bora Creeks combined) is likely to be highly ephemeral and episodic. Flow will typically be restricted to periods of high rainfall and subject to relatively rapid recession once rainfall has ceased.

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

Several soils types have been recorded on the Soil and Land Information(SALI) system database which was accessed on 15/01/18 via the Queensland Globe interface.

The following soils were classified using the Australian Soils Classification have been recorded at the Project site,

Dermosol Red Calcic Haplic;Sodosol Red Subnatric Eutrophic;and Vertosol Grey Massive Epicalcareous-Epihypersodic

The vegetation community present within all parts of the proposed solar farm project area was confirmed as being non-remnant vegetation (i.e. no applicable Regional Ecosystem), consistent with the state Regional Ecosystem mapping database.

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

There are no known outstanding natural features and/or any other important or unique values relevant to the project area.

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

As discussed in the BAR, NGH has undertaken a flora and fauna assessment across the Project site to ground truth the mapped vegetation.The entirety of the solar farm footprint has avoided the need to clear native vegetation under the Queensland *Vegetation Management Act 1999*.

The project consists of extensively cleared agricultural land, primarily used for grazing. The vegetation community present within all parts of the proposed solar farm project area was confirmed as being non-remnant vegetation (i.e. no applicable Regional Ecosystem), consistent with the state Regional Ecosystem mapping database. The vegetation condition within the project area was generally homogenous, comprising cleared land with a mix of native and exotic pasture as well as some low (<2 m in height) shrubby regrowth, consisting of native and exotic tree and shrub species.

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

The Project is located on land at an altitude of between 100m and 160m AHD.

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

The Clarke Creek region is characterised by agricultural activities (primarily beef cattle production), and large areas of the region are extensively cleared to support these uses. The project area has been entirely cleared for the agricultural uses. Environmental condition is considered to be generally poor.

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

None

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

A search of the Department of Aboriginal and Torres Strait Partnerships (DATSIP) Aboriginal Cultural Heritage Database and Register on 16 November 2017 (ID# 29721) indicates that that there a number of Aboriginal Parties with interests in the land within the Project Area.

Under the Aboriginal Cultural Heritage Act 2003 (ACH Act), the Project must meet its Duty of Care requirements including appropriate assessment, consultation and agreement of management measures.

The Project intersects one Native Title Application/Claim (QC2013/004), lodged by Barada Kabalbara Yetimarala People in 2013. The Barada Kabalbara Yetimarala People have been contacted about the Project with meetings planned for Q1-Q2 2018 with the mutual aim of entering into a Cultural Heritage Management Agreement.

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

Freehold

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

Land use across the project area predominately consists of extensively cleared agricultural land, primarily used for grazing. The areas where the solar farm is proposed on the site have been previously cleared for grazing and support areas of highly modified pastures.

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.

Avoidance of impacts has been first achieved through the site selection process. Clarke Creek Energy has undertaken an extensive site selection process across Queensland to identify sites which are suitable for the Project needs. The location was selected due to the following attributes of the site: cleared grazing land;limited environmental constraints;close proximity to an existing substation and transmission easement;access to the highway;suitable terrain;and lack of surrounding sensitive receptors.

The site contains a number of waterways defined under the *Fisheries Act 1994* and watercourses defined under the *Water Act 2000*. To ensure the Project has a minimal impact on waterways and watercourses, a buffer of 10 m has been included within the conceptual design.

The Applicant has undertaken a flora and fauna assessment across the Project site to ground truth the mapped vegetation. The entirety of the solar farm footprint has avoided the need to clear native vegetation under the *Vegetation Management Act 1999*.

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.

N/A

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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 Biodiversity Assessment Report produced by NGH states that the Project area is in a highly disturbed condition through historic land clearing, pasture modification and ongoing grazing by domestic stock. The site investigations and desktop assessment revealed that the site does not support any remnant vegetation mappable as a Regional Ecosystem under the Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland. Further, given the disturbed nature of the site, it is considered unlikely that the site would support any listed threatened flora species. Specifically the database records as well as the habitat evaluations and site traverses indicate that there is an overall low probability of any undetected threatened flora species occurring within the Project area. The fauna species encountered within the Project area are all common, widespread species, and include mainly generalist fauna species that are capable of tolerating disturbed habitats, particularly open cleared modified grasslands, and low shrubby regrowth areas. While there are a number of threatened fauna species included in the database records as having potential to occur in the local area, the habitat evaluations and site surveys indicate that these species are unlikely to occur within the proposed solar farm project area, with suitable habitat available in the more intact riparian areas of Clarke Creek, as well as within the remnant woodlands and open forests of the hills and ridges country. This biodiversity assessment has concluded that the proposed solar farm project is unlikely to result in any significant impacts to any listed threatened flora or fauna species or ecological communities.

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 company directors of Clarke Creek Energy Pty Ltd have a combined experience of over 35 years in similar projects and have no adverse environmental record in any juristriction.

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.

None

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and 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 company is a special project company for this project and currently has no environmental policy and planning framework, however it is committed to a Construction Environment Management Plan to manage the environmental impact of the construction and operation of the solar farm.

The construction of the Clarke Creek Solar Farm will be undertaken by a contractor with a proven track record in environmental performance on similar projects. As part of the selection process for the site contractor, the contractors will be required to provide the details of their corporation's environmental policy and environment management system.

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.

Clarke Creek Wind Farm Referal. Proposal Number 2018/8141.

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
Clarke Creek Solar Farm Biodiversity Assessment Report (BAR) prepared by NGH Environmental (2017). The report also lists additional references.	High	Flora and fauna surveys have been undertaken by suitably qualified personnel.
Clarke Creek Solar Farm Surface Water Assessment by AECOM. The report also lists additional references.	High	Surface Water Assessment has been completed by suitable qualified personnel within AECOM.

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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?

Clarke Creek Solar Farm is the focus for a solar energy project for Clarke Creek Energy Pty Ltd. The avoidance of impacts through site selection of extensively cleared agricultural land for the Project is decribed in section 4.1.

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

Director

9.2.2 First Name

James

9.2.3 Last Name

Townsend

9.2.4 E-mail

james@lacour.com.au

9.2.5 Postal Address

PO Box 7533

Cloisters Square
Perth WA 6850
Australia

9.2.6 ABN/ACN

ABN

34614169096 - CLARKE CREEK ENERGY PTY LTD

9.2.7 Organisation Telephone

Australian Government
Department of the Environment and Energy

(08) 9321 6632

9.2.8 Organisation E-mail

james@lacour.com.au

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

Small business

9.2.9.1 You must provide the Date/Income Year that you became a small business entity:

Wed, 08/10/2016

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: 22/01/18

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, JAMES TOWNSEND, 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: 22/01/18

I, JAMES TOWNSEND, the person proposing the action, consent to the designation of CLARKE CREEK ENERGY PTY LTD as the proponent of the purposes of

the action describe in this EPBC Act Referral.

Signature:..... Date: 22/01/18

9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Organisation

9.5 Organisation

9.5.1 Job Title

Director

9.5.2 First Name

James

9.5.3 Last Name

Townsend

9.5.4 E-mail

james@lacour.com.au

9.5.5 Postal Address

PO Box 7533

Cloisters Square
Perth WA 6850
Australia

9.5.6 ABN/ACN

ABN

34614169096 - CLARKE CREEK ENERGY PTY LTD

9.5.7 Organisation Telephone

(08) 9321 6632

9.5.8 Organisation E-mail

Australian Government
Department of the Environment and Energy

james@lacour.com.au

Proposed designated proponent - Declaration

I, JAMES TOWNSEND, 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: 22/01/18

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Director

9.8.2 First Name

James

9.8.3 Last Name

Townsend

9.8.4 E-mail

james@lacour.com.au

9.8.5 Postal Address

PO Box 7533

Cloisters Square
Perth WA 6850
Australia

9.8.6 ABN/ACN

ABN

34614169096 - CLARKE CREEK ENERGY PTY LTD

9.8.7 Organisation Telephone

(08) 9321 6632

9.8.8 Organisation E-mail

james@lacour.com.au

Referring Party - Declaration

I, JAMES TOWNSEND, 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:..... Date: 22/01/18

Australian Government
Department of the Environment and Energy

Appendix A - Attachments

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

1. 170814_clarkecreeksolarfarm.zip
2. 171004solarfarmapplication.kmz
3. clarke_creek_solar_farm_footprints_and_lots_description.pdf
4. clarkecreeksolarfarm_ngh_biodiversityassessmentreport_sept17_part1.pdf
5. clarkecreeksolarfarm_ngh_biodiversityassessmentreport_sept17_part2.pdf
6. clarkecreeksolarfarm_ngh_biodiversityassessmentreport_sept17_part3.pdf
7. clarkecreeksolarfarm_ngh_biodiversityassessmentreport_sept17_part4.pdf
8. clarkecreeksolarfarm_ngh_biodiversityassessmentreport_sept17_part5.pdf
9. clarkecreeksolarfarmmaps.pdf
10. surfacewaterassessment_part1.pdf
11. surfacewaterassessment_part2.pdf