



## Statement of Reasons for a Decision on Controlled Action Under the Environment Protection and Biodiversity Conservation Act 1999

I, GEORGE MORRIS, made this decision while Acting Branch Head, Environment Assessments Queensland Branch, Department of Climate Change, Energy, the Environment and Water (**department**), delegate for the Minister for the Environment and Water (**Minister**). I provide the following statement of reasons for my decision of 16 July 2024, under sections 75 and 87 of the *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**), that:

- a) The proposed action by PSH 1 Pty Ltd (European Energy) (**the proponent**) to construct, operate, and decommission a solar farm and associated infrastructure approximately 50 kilometres (**km**) west of Gladstone, Queensland (EPBC 2023/09752) (**the proposed action**) is a controlled action under the EPBC Act and the controlling provisions are sections 18 and 18A (listed threatened species and communities), sections 12 and 15A (World Heritage properties), sections 15B and 15C (National Heritage places) and sections 24B and 24C (Great Barrier Reef Marine Park).
- b) The relevant impacts of the proposed action are to be assessed by public environment report under Part 8 of the EPBC Act

### LEGISLATION

- 2) Extracts of the EPBC Act relevant to my decision are set out in **Annexure A**.

### BACKGROUND

#### Description of the proposed action

- 3) The proposed action is to construct, operate, and decommission a solar farm and associated infrastructure approximately 50 km west of Gladstone, Queensland.
- 4) I noted that the referral states that the project area is approximately 8,052.62 hectares (**ha**), including a disturbance footprint of approximately 2,677.8 ha.
- 5) The referral also states that the proposed action includes the following development components:
  - a) Solar Farm

- i) Solar panel array, connected through underground cabling, with a capacity of up to 1,300 megawatt (**MW**).
- ii) Tracking system, which will rotate the rows of solar panels from east to west each day to ensure optimal exposure to the sun.
- b) Associated infrastructure
  - i) Inverter stations, which will convert the direct current energy produced by the solar panels to alternating current. The inverter stations will be connected to internal collector substations by underground cabling.
  - ii) Four internal collector substations, which receive energy from inverter stations and will be connected to internal overhead powerlines.
  - iii) Battery Energy Storage Systems (**BESS**) - a BESS may be constructed adjacent to each collector substation.
  - iv) Internal overhead powerlines of 275 kilovolts and associated transmission towers, which will transport electricity from internal collector substations to the Calvale to Calliope River Transmission Line via a proposed Powerlink switching station adjacent to the project.
  - v) Control buildings, which will be located next to internal collector substations and will contain a control room, storage and staff facilities.
  - vi) Utilities, including septic systems and rainwater storage tanks.
  - vii) Parking areas at each internal collector substation.
  - viii) Internal access roads, noting that access to the site would be via the existing local road network.
  - ix) Fencing.
  - x) Meteorological stations.
- 6) The referral indicates that impacts to matters of national environmental significance (**MNES**) may arise through vegetation clearing; water quality reduction caused by sedimentation and erosion; pollution caused by dust, air, noise, and light; direct mortality due to vegetation clearing; the creation of barriers to fauna movement; and lake effects caused by reflection of the surface of solar panels.

#### Description of the environment

- 7) The proposed action area lies at the base of the Mount Alma Range (to the north) and Mount Redshirt (to the southwest) in the Calliope River Basin. The Calliope drainage basin is part of the Great Barrier Reef Catchment Area, in the Fitzroy region.

- 8) Though most of the site is situated on a relatively flat rural landscape associated with the alluvial plains of the Calliope River and its tributaries, hills within the project area drain in a predominately easterly direction, forming several watercourses upstream and within the site. These watercourses converge within the project area and form the Calliope River, which traverses the site and discharges into the ocean at Gladstone.
- 9) The proposed action area has been subject to historical clearing to support ongoing pastoral activities, but supports some remnant vegetation. There are also substantial tracts of mapped high value regrowth vegetation in the northern portion of the project area. Vegetation on the site is dominated by eucalypts, corymbias, and some melaleucas.
- 10) The referral stated that the Calliope River is a regional biodiversity corridor, and that it connects to state biodiversity corridors. Mapping by Queensland Globe indicated that a regional riparian biodiversity corridor runs from west to east along the Calliope River, connected to a state riparian biodiversity further to the east. There is also a state biodiversity corridor approximately 3 km to the west of the project area.

#### **Procedural history**

- 11) A valid referral was received on 18 June 2024 from the proponent. In the referral, the proponent stated its belief that the proposed action is a controlled action for the purposes of the EPBC Act.
- 12) As required by section 74(3) of the EPBC Act, the referral along with an invitation for anyone to give the Minister comments on whether the action is a controlled action, was published on the department's website on 18 June 2024 for a period of 10 business days until 2 July 2024. The department received 42 submissions in response to that invitation.
- 13) On 18 June 2024, in accordance with s 74(1) of the EPBC Act, comments on the referral were invited from the following Commonwealth Ministers having administrative responsibilities relating to the proposed action:
  - a) The Hon Chris Bowen MP, Minister for Climate Change and Energy
- 14) On 18 June 2024, in accordance with s 74(2) of the EPBC Act, the following State Minister was invited to comment on the referral:
  - a) The Hon Leanne Linard MP, Queensland Minister for the Environment and the Great Barrier Reef, Minister for Science and Innovation (through delegate Mr Chris Loveday, Director of Technical and Assessment Services, Department of Environment, Science and Innovation (DESI)).
- 15) On 16 July 2024 I decided that, in accordance with s 75 of the EPBC Act, the proposed action is a controlled action and that the following matters are controlling provisions for the proposed action:
  - a) section 18 and 18A (listed threatened species and communities);

- b) section 12 and 15A (World Heritage properties);
  - c) section 15B and 15C (National Heritage places); and
  - d) sections 24B and 24C (Great Barrier Reef Marine Park).
- 16) On the same date, under section 87 of the EPBC Act, I decided that the relevant impacts of the proposed action will be assessed by a Public Environment Report (PER).

#### **EVIDENCE OR OTHER MATERIAL ON WHICH MY FINDINGS WERE BASED**

- 17) In making my decision under section 75 of the EPBC Act, I gave consideration to the referral decision brief (and its attachments) as prepared by officers of the department, which I signed on 16 July 2024 (**referral decision brief**). Annexure B sets out in full the attachments to the referral decision brief.
- 18) On the basis of this information, I agreed with the department's recommendation that there was sufficient information available to make a decision under section 75 of the EPBC Act.

#### **Comments from the public**

- 19) I noted that the department received a total of 42 public submissions. Of the 42 comments, 40 selected 'yes' and 2 selected 'no' for the proposed action to be considered a controlled action.
- 20) I noted that the public submissions raised many issues, including:
- a) Support for the transition to renewables and net zero, and that co-locating solar and grazing is good for farmers (1 comment)
  - b) That impacts to threatened species would arise from the proposed action (19 comments)
  - c) That toxic chemicals might leak from the proposed action, and this would impact soil and water within and surrounding the proposed action (11 comments)
  - d) That water quality may be reduced in surrounding waterways due to chemical leakage, sedimentation, and erosion caused by the proposed action (9 comments)
  - e) That the proposed action may impact the Great Barrier Reef through chemical leakage if solar panels are damaged by hail or flooding, and erosion and sedimentation from construction or increased flood risk (9 comments)
  - f) That the proposed action is unnecessary as Australia does not need to transition to renewables (8 comments)
  - g) That the proposed action is a waste of farmland (7 comments)
  - h) That other sites would have less environmental impact (6 comments)
  - i) General disapproval of the proposed action (4 comments)

- j) That solar panels result in un-recyclable waste and are not sustainable (4 comments)
  - k) That there may be impacts to human health related to solar farms (2 comments)
  - l) That there is no governmental accountability for any impacts the proposed action may have (2 comments)
  - m) That other sites would have less impact on local communities, because the current site will negatively affect visual amenity and property values (4 comments)
  - n) That the proposed action may result in increased fire and/or flood risk (3 comments)
  - o) That there is a lack of surety about the proponents' commitments about, and capability to, rehabilitate the site once the proposed action is complete (2 comments)
  - p) That the supply chain is not ethical, and involves slave labour (1 comment)
  - q) That allowing the proposed action to proceed would be inconsistent with farmers in the surrounding region not being able to clear vegetation (1 comment)
  - r) That the public consultation undertaken by the proponent was inadequate and/or disingenuous (1 comment)
  - s) That the proposed action might impact on migratory species (1 comment)
  - t) That the department must consider cumulative impacts on the region (1 comment)
  - u) That the proposed action involves allowing foreign purchase of Australian land (1 comment)
  - v) That the insurance liability of neighbours would become untenable (1 comment)
- 21) In accordance with s 75(1A), I considered the public comments when making my decision about whether the proposed action is a controlled action and which (if any) were controlling provisions. I noted that the public comments were taken into consideration by the department in the discussion and recommendations in the decision brief.

**Comments from Commonwealth Ministers**

- 22) I noted that no comments were received from the Hon Chris Bowen MP, Minister for Climate Change and Energy in response to my invitation.

**Comments from State Minister**

- 23) I noted the comments the Director of Technical and Assessment Services, DESI made on behalf of the Hon Leanne Linard MP, Queensland Minister for the Environment and the Great Barrier Reef, Minister for Science and Innovation on 4 May 2024 in response to my invitation, including that:

- a) the proposal will not be assessed under the Environmental Impact Statement process pursuant to Chapter 3 of the Queensland *Environmental Protection Act 1994*;
  - b) the Office of the Coordinator-General within the Queensland Department of State Development and Infrastructure has advised that the proposal is not currently being assessed under Part 4 of the *State Development and Public Works Organisation Act 1971* and is not likely to be assessed under this process in the future.
  - c) that a conservative approach could conclude that the northern quoll (*Dasyurus hallucatus*), spotted-tailed quoll (*Dasyurus maculatus*), Corban's long-eared bat (*Nyctophilus corbeni*), and the large-eared pied bat (*Chalinobus dwyeri*) may be present and require further consideration, because surveys do not meet guidelines or were not scaled proportional to the project's size.
- 24) I took into account the matters raised by DESI insofar as they were relevant to the determination of whether or not the proposed action is a controlled action, and the decision of which approach would be appropriate to assess the relevant impacts of the action (including if the action could be assessed under a bilateral agreement).

## FINDINGS ON MATERIAL QUESTIONS OF FACT

### Referral of a Larger Action

- 25) Section 74A(1) of the EPBC Act states that if the Minister (or delegate) is satisfied the action that is the subject of the referral is a component of a larger action the person proposes to take, the Minister (or delegate) may decide not to accept the referral.
- 26) I noted that this is a discretionary decision and accordingly, I, as the Minister's delegate, was not obliged to exercise the power.
- 27) The *Environment Protection and Biodiversity Conservation Act 1999 (Cth) Policy Statement: Staged Developments – Split referrals: Section 74A of the EPBC Act (Split Referrals Policy Statement)* provides guidance on when the discretion should be exercised and states that “[a] referred action that is part of a larger action can be refused only if there is a reasonable basis for doing so. The key question for the Minister is: does the splitting of the project reduce the ability to achieve the objects of the Act?”
- 28) I noted that the referral states that the proposed action will be connected to the grid via Powerlink Queensland's planned Calvale to Calliope River 275kV transmission line through an adjacent substation that is not yet built but would also be developed by Powerlink. The department considered, and I agreed, that because the proposed action, the planned future transmission link and the substation grid connection would be undertaken by different and unrelated developers, they do not constitute a larger action that the proponent proposes to take.

- 29) I noted that the referral states that a BESS will likely be added to the proposed action in the future, but that BESS were indicated to not be a part of the proposed action. However, because the referral includes information regarding the likely location and size of a BESS, that the BESS would be dependent upon the proposed Upper Calliope Solar Farm, that any proposed BESS infrastructure would be fully contained within the current disturbance footprint (adjacent to each internal collector substation), and that the BESS would not result in any additional vegetation clearance, the department recommended to me that the referral contained adequate information to support the BESS being considered part of the proposed action for the purposes of EPBC assessment. I accepted the department's recommendation that the BESS be considered part of the current proposed action.
- 30) The department therefore considered, and I agreed, that the proposed action is not part of a larger action.

**Part 3 provisions that are controlling provisions**

- 31) Section 67 of the EPBC Act provides that an action is a controlled action if the taking of the action, without the Minister's approval under Part 9 for the purposes of a provision of Part 3, would be prohibited by the provision (the controlling provision of the action).
- 32) As delegate of the Minister, I was required under section 75(1) of the EPBC Act to decide whether the proposed action is a controlled action, and which provisions of Part 3 (if any) are controlling provisions for the proposed action.
- 33) In accordance with subsection 75(2) of the EPBC Act, in making my decision I considered all adverse impacts that the proposed action has or will have, or is likely to have, on matters protected under Part 3 of the EPBC Act. I did not consider any beneficial impacts that the proposed action has or will have, or is likely to have, on matters protected under Part 3 of the EPBC Act.
- 34) Having regard to the matters relevant to my decision and the information before me, I agreed with the department's recommendation that the proposed action is a controlled action. This was because the proposed action is likely to have a significant impact on the following matters protected by part 3 of the EPBC Act:
- a) sections 18 and 18A (listed threatened species and communities);
  - b) sections 12 and 15A (World Heritage properties);
  - c) sections 15B and 15C (National Heritage places); and
  - d) sections 24B and 24C (Great Barrier Reef Marine Park).

***Listed threatened species and communities (sections 18 and 18A)***

- 35) I noted that the department's Protected Matters Search Tool (**PMST**) dated 5 July 2024 identified 58 listed threatened species and communities that are likely or known to occur within

10 km of the proposed action. I considered that based on the location of the action, likely habitat present in the area of the proposed action, and possible impacts of the proposed action, the proposed action may significantly impact the koala and greater glider.

***Greater glider (Petauroides volans) (southern and central) - Endangered***

***Protected matter ecology***

36) I was directed to the SPRAT profile for the greater glider (southern and central).

37) The greater glider (southern and central), hereafter greater glider, is a large arboreal possum found only on the east coast of Australia from the Windsor Tableland in north Queensland to central Victoria. I noted that the *Conservation Advice for Petauroides volans (greater glider (southern and central)) 2022 (Greater Glider Conservation Advice 2022)* states that the species is mostly found in eucalypt forests and woodlands, with the highest abundance in taller, montane, moist eucalypt forests with relatively old trees and abundant hollows.

38) I also noted that the Greater Glider Conservation Advice 2022 states that habitat critical to the survival of the species includes all areas of habitat containing feed trees, live and dead hollow-bearing trees for denning, and patches that provide habitat connectivity across the landscape. Areas suitable for the species are often restricted by structural attributes of the forest overstorey and the forage quality across the landscape.

***Environment within and surrounding the proposed action area***

39) The referral states that there is approximately 107.4 ha of denning habitat and 244.4 ha of foraging habitat available for the greater glider within the proposed disturbance footprint.

40) The referral states that habitat for the greater glider was determined by assuming that areas of eucalypt dominant and subdominant woodland over 15 years old contained trees with diameter at breast height greater than 30 centimetres, being the threshold stated in the Greater Glider Conservation Advice 2022 for den trees. The referral also states that foraging habitat was determined by applying a 50 metre (m) buffer from potential denning habitat into surrounding areas of immature regrowth vegetation or areas sub-dominated by eucalypt species.

41) I considered that the above definition of foraging habitat is inappropriate, as there is no evidence provided to support a 50 m distance threshold between foraging and denning habitat, which does not align with either the Greater Glider Conservation Advice 2022 or the *Guide to greater glider habitat in Queensland 2022 (Greater Glider Habitat Guide 2022)*.

42) Further, I did not consider an assumption about tree size to be an appropriate indicator of den tree presence, but also acknowledge that the approach taken is a conservative approach to approximating tree size compared to regrowth age. However, I did consider that the referral may underestimate the availability of habitat for the greater glider within the disturbance footprint.



*Potential Impacts*

- 43) The referral stated that the proposed action would result in the clearance of up to 107.4 ha of denning and 244.4 ha of foraging habitat critical to the survival of the greater glider.
- 44) The referral considers that the proposed action is likely to have a significant impact to the greater glider, because it will result in the clearance of habitat critical to the survival of the greater glider. I agreed with this conclusion.
- 45) The referral states that it is unlikely that hollow bearing trees will be present within the disturbance footprint. I noted that the referral states that up to 107.4 ha of denning habitat would be cleared as a result of the proposed action; however, noting the issues with habitat definition and survey methodology discussed above, I did not consider that this conclusion was reasonable.

*Avoidance, mitigation, and management measures*

- 46) The referral states that through not clearing areas of high-value remnant and riparian vegetation, impacts to the greater glider will be avoided or minimised, including by not impacting biodiversity corridors.
- 47) I noted that the layout presented in the referral clearly avoids greater areas of riparian vegetation and high-quality habitat than presented in the alternative, original layout for the proposed action. However, the department considered, and I agreed, that the avoidance, mitigation, and management measures proposed were not adequate to prevent a residual significant impact on the greater glider.

*Conclusion*

- 48) In making my decision, I considered the nature of the proposed action, the referral documentation, the Greater Glider Conservation Advice 2022, the Greater Glider Habitat Guide 2022, and the *EPBC Act Policy Statement: Significant Impact Guidelines 1.1 – Matters of National Environmental Significance (Significant Impact Guidelines 1.1)*.
- 49) The department considered, and I agreed, that if the proposed avoidance and mitigation measures are implemented, the clearance of habitat critical to the survival of the greater glider is still likely. I did not consider that the information presented in the referral provided adequate information to assess the extent of this clearance but noted that the referral information stated that this clearance would be up to 107.4 ha of denning and 244.4 ha of foraging habitat critical to the survival of the greater glider.
- 50) The department considered, and I agreed, that the proposed action is likely to have a significant impact on the greater glider, consistent with the department's Significant Impact Guidelines 1.1 for endangered species, because there is a real chance or possibility that the proposed action will:
  - a) adversely affect habitat critical to the survival of a species
  - b) interfere with the recovery of the species.

***Koala (Phascolarctos cinereus) (combined populations of Qld, NSW and ACT) - Endangered***  
***Protected matter ecology***

- 51) I was directed to the Species Profile and Threat (SPRAT) profile for the koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) (hereafter koala).
- 52) I noted the definition of habitat provided in the *National recovery Plan for the Koala Phascolarctos cinereus (combined populations of Queensland, New South Wales and the Australian Capital Territory) 2022 (Koala Recovery Plan 2022)* and *A review of koala habitat assessment criteria and methods 2021 (Koala habitat review)*. This definition considers that koala habitat comprises the total set of resources required by koalas to meet the needs of the individuals' survival and reproduction, and habitat that maintains viable metapopulation processes. This can include any forest or woodland (including remnant, regrowth, and modified vegetation communities) containing species that are koala food trees, or any shrubland with emergent koala food trees. Under this definition koala habitat also includes grassy areas between patches of foraging habitat, which forms dispersal habitat for the species to move between vegetated patches. Climate refugia such as riparian zones can be important as they contribute to a location's resilience to drying conditions and are likely to provide a cooler refuge during periods of bushfire and heatwaves.
- 53) I noted that habitat critical for the survival of the koala is defined in *Conservation Advice for Phascolarctos cinereus (Koala) combined populations of Queensland, New South Wales and the Australian Capital Territory 2022 (Koala Conservation Advice 2022)* as any habitat with characteristics required to meet their needs. This includes foraging, breeding and dispersal habitat, patches and corridors for gene flow, climate refugia, and any habitat which might be currently unoccupied due to seasonal changes to habitat quality and is available for future recolonisation.

***Environment within and surrounding the proposed action area***

- 54) I noted that the referral states that:
- a) there is approximately 439 ha of breeding, foraging, dispersal and 2,231 ha of dispersal only habitat available for the koala within the proposed disturbance footprint;
  - b) because eucalypt dominant and subdominant regrowth vegetation occurs within the disturbance footprint, locally important koala trees may be present, and habitat within the disturbance footprint is therefore considered potential breeding and foraging habitat for the koala;
  - c) potential dispersal habitat was identified based on applying a 2 km buffer to mapped breeding and foraging habitat, typically being open grassland between riparian corridors.
- 55) I noted that because koalas are known to disperse further than 2 km along open grassland, the department did not necessarily accept the methodology used to map dispersal habitat. However, I agreed with the department's view that because the dispersal habitat mapped

encompasses the disturbance footprint the methodology was adequate for the making of the referral decision.

*Potential Impacts*

- 56) I noted that the referral states that the proposed action would result in the clearance of up to 439 ha of breeding, foraging, dispersal and 2,231 ha dispersal habitat critical to the survival of the koala.
- 57) I also noted that the referral provides that the proposed action will likely result in a significant impact to the koala, because it will result in the clearance of habitat critical to the survival of the koala. I agreed with this conclusion.

*Avoidance, mitigation, and management measures*

- 58) The referral states that through not clearing remnant and riparian vegetation, impacts to the koala will be avoided or minimised, including by not impacting biodiversity corridors. The referral also stated that rehabilitation activities along riparian corridors, which the referral does not provide detail on, will create additional habitat for the koala.
- 59) I noted that the layout of the proposed action presented in the referral (see Annexure B, Figure 1.1 of Attachment C3) clearly avoids greater areas of riparian vegetation and high-quality habitat than presented in alternative, original layouts for the proposed action (see Annexure B, Attachment C2). However, the department considered, and I agreed, that the avoidance, mitigation, and management measures proposed were not adequate to prevent a residual significant impact on the koala.

*Conclusion*

- 60) In making my decision, I considered the nature of the proposed action, the referral documentation, the Koala Conservation Advice 2022, the Koala habitat review, the Koala Recovery Plan 2022, and the Significant Impact Guidelines 1.1.
- 61) The department considered, and I agreed that, if proposed avoidance and mitigation measures are implemented, the clearance of up to 439 ha of breeding, foraging, dispersal and 2,231 ha of dispersal only habitat critical to the survival of the koala, is still likely.
- 62) The department therefore considered, and I agreed that the proposed action is likely to have a significant impact on the koala, consistent with the Significant Impact Guidelines 1.1 for endangered species, because there is a real chance or possibility that the proposed action will:
- a) adversely affect habitat critical to the survival of a species.

***Other listed species and communities***

- 63) I considered the comments provided by DESI (paragraphs 23 and 24) regarding potential impacts of the proposed action to protected matters. Based on the information in the SPRAT database, including conservation advices and recovery plans, and the PMST report, I considered it unlikely there will be a significant impact on the spotted-tailed quoll (*Dasyurus maculatus*). In making this decision, I considered the known range and distribution of records of these species, the

habitat present within the disturbance footprint and wider project area, and survey adequacy. For the same reasons I considered that a significant impact on the northern quoll (*Dasyurus hallucatus*), south-eastern long-eared bat (*Nyctophilus corbeni*), and large-eared pied-bat (*Chalinolobus dwyeri*) is likely.

- 64) On the basis of all the information available to me (including the PMST report and comments provided by DESI at paragraphs 23 and 24, and without further detailed assessment of potential impacts, I considered that the proposed action may significantly impact on other listed threatened species including but not limited to the following:
- a) squatter pigeon (southern) (*Geophaps scripta scripta*) - Vulnerable
  - b) grey-headed flying-fox (*Pteropus poliocephalus*) – Vulnerable
  - c) northern quoll (*Dasyurus hallucatus*) – Endangered
  - d) south-eastern long-eared bat (*Nyctophilus corbeni*) - Vulnerable
  - e) large-eared pied-bat (*Chalinolobus dwyeri*) – Endangered

**Overall conclusion – listed threatened species and communities**

- 65) For the reasons set out above, I found that the proposed action is likely to have a significant impact on listed threatened species and communities. Accordingly, I decided that sections 18 and 18A are controlling provisions for the action.

**World Heritage properties (section 12 and section 15A), National Heritage places (section 15B and section 15C) and Great Barrier Reef Marine Park (section 24B and section 24C)**

- 66) I noted that the proposed action is in the Calliope River catchment, which is part of the Great Barrier Reef catchment area. The referral stated that the Calliope River forms in the centre of the proposed action area, fed by numerous tributaries including Alma Creek and Running Creek, and discharges into Gladstone Harbour.
- 67) The referral states that the Great Barrier Reef World Heritage Area (**GBRWHA**) and Great Barrier Reef National Heritage Place (**GBRNHP**) extend approximately 30 km upstream from Gladstone along the Calliope River, ending approximately 34 km downstream from the proposed action area. The referral also states that the Great Barrier Reef Marine Park (**GBRMP**) extends to within 9 km of the Gladstone coast, making it approximately 70 km downstream from the proposed action area.
- 68) I noted that the above referral information provides multiple estimates, varying by up to 50 km, of the proposed action from the GBRWHA, GBRNHP, or GBRMP, but that the above distances were considered reasonable estimates for the purposes of my referral decision.
- 69) The Great Barrier Reef received World Heritage status in 1981 for its ‘Outstanding Universal Value’ (**OUV**). The Great Barrier Reef is listed under four (4) natural World Heritage Criteria as

described in Section 3 of the Department's EPBC Act *Referral guidelines for the Outstanding Universal value of the Great Barrier Reef World Heritage Area 2014*.

- a) Criterion vii: contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance
  - b) Criterion viii: be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features
  - c) Criterion ix: be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals
  - d) Criterion x: contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of OUV from the point of view of science or conservation.
- 70) I noted that the national heritage values of the GBRHNP largely overlap with the values of the GBRWHA, but that the GBRNHP also encompasses Indigenous values.
- 71) Under the Reef 2050 Water Quality Improvement Plan 2017-2022 (**Reef 2050 WQIP**), which informed the department's Reef 2050 Long-term Sustainability Plan 2021-2025 (**Reef 2050 LSP**), water quality targets have been set for each catchment that drains to the Great Barrier Reef.
- 72) I noted that the Reef 2050 WQIP states that the Calliope catchment covers 2241 km<sup>2</sup>, equating to 1% of the Fitzroy region – and has a target of 30% reduction in each of fine sediment, particulate phosphorus, and particulate nitrogen to ensure that broadscale land uses have no detrimental effect on the reef's health and resilience.
- 73) I noted that the referral does not provide consideration of the Reef 2050 WQIP or the Reef 2050 LSP.

#### *Potential impacts*

- 74) I noted that the referral states that the proposed action might increase the concentration of suspended sediment, nutrients, heavy metals, hydrocarbons, or other pollutants or substances in the Calliope Drainage Basin.
- 75) I noted that the potential for the proposed action to result in decreased water quality through erosion and sedimentation or the leakage of toxic chemicals, including from damaged solar panel components, were key public concerns.
- 76) The referral included a Flood Impact Assessment and Stormwater Management Plan (**FIASMP**), which concludes that the proposed action will not result in a significant increase in impervious areas within the site, as the natural ground cover will be maintained where the solar panels will be installed and all proposed access tracks and pads around inverters and substations will be

gravel covered. The FIASMP concluded that the proposed action is therefore unlikely to result in changes to the flooding behaviour of the Calliope River. I considered this reasonable, and agreed with the department's note that further advice will be sought from expert line areas during assessment to review the inputs for the model and the conclusions reached.

- 77) I noted that the referral's FIASMP states that during the development's construction phase, impacts to water quality may arise through erosion and sedimentation, as well as leakage from the storage and handling of hazardous materials.
- 78) I also noted that the FIASMP states that, given the limited changes to topography and impervious ground area throughout the site, the proposed development is not expected to significantly increase pollutant loads and impact on stormwater quality during the development's operational phase.

*Avoidance, mitigation, and management measures*

- 79) The referral stated that there is avoidance through design for impacts to water quality, and therefore to the GBRWHA, GBRNHP, and GBRMP. The referral stated that avoidance will be achieved by not clearing high-quality habitat wherever practicable, the use of buffer zones around riparian areas, and compliance with best-practise standards for drainage control design.
- 80) I noted that the alternative layout presented with the referral is stated to be the optimised layout for energy generation, prior to avoidance of MNES and high-quality vegetation. I noted the layout presented in the referral clearly avoids greater areas of riparian vegetation that are presented in the original layout. However, I did not consider this adequate to prevent a potential residual significant impact on the GBRWHA, GBRNHP, or GBRMP.
- 81) The FIASMP states that it is expected that impacts to water quality during the construction phase could be mitigated through the development and implementation of a certified Erosion and Sediment Control Plan and an Environmental Management Plan. I noted that only a conceptual Erosion and Sediment Control Plan has been provided, which does not adequately describe measures that will be undertaken to avoid, mitigate, or manage potential impacts to water quality during the construction phase.

*Conclusion*

- 82) The referral states that because the proposed action area contributes a small percentage of the catchment's flow (approximately 3%), the water flowing from the proposed action area will mix with downstream contaminants, and that the current grazing practises already cause sedimentation and erosion to a greater extent than the proposed action would, resulting in no significant change in water quality, and therefore no significant impact to the GBRWHA, GBRNHP, or GBRMP.
- 83) The department considered, and I agreed, that an action can have a significant impact on MNES regardless of whether other developments, practises, or activities in the surrounding landscape have a greater impact. The department considered, and I agreed, that impacts arising from an

action need to be assessed based on the impacts of that action, not based on the impacts of past land use relative to that action.

84) In making my decision, I considered the nature and scale of the project, the referral information, the Reef 2050 WQIP, the Reef 2050 LSP, and with consideration of Significant Impact Guidelines 1.1. The department considered, and I agreed, that there is a real chance or possibility that the project will result in:

- a) one or more of the World Heritage values of the Great Barrier Reef being degraded or damaged (at least Criterion x)
- b) one or more of the National Heritage of the Great Barrier Reef values being degraded or damaged
- c) a substantial change in water quality in the environment of the Great Barrier Reef Marine Park, which may adversely impact on biodiversity, ecological health or integrity or social amenity or human health.

85) For the reasons set out above, I found that the proposed action is likely to have a significant impact on the world heritage values of the GBRWHA, the national heritage values of the GBRNHP and the environment in the GBRMP. Therefore, I decided that sections 12 and 15A (World Heritage), 15B and 15C (National Heritage) and 24B and 24C are controlling provisions for the proposed action.

**Protected matters that are not controlling provisions**

<b>Ramsar wetlands (s16 &amp; s17B)</b>	<p>The PMST did not identify any declared Ramsar listed wetlands of international importance within or adjacent to the proposed action area.</p> <p>Further, given the information contained in the referral documentation, the nature and scale of the proposed action and its potential impacts, and the distance to Ramsar listed wetlands of international importance, the proposed action is unlikely to have a significant impact on the ecological character of Ramsar listed wetlands of international importance.</p> <p>For these reasons, I decided that sections 16 and 17B are not controlling provisions for the proposed action.</p>
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**Migratory species  
(s20 & s20A)**

The PMST identified the potential presence of 17 migratory species within or adjacent to the proposed action area.

I noted that the Significant Impact Guidelines 1.1 state that an action is likely to have a significant impact on migratory species if there is a real chance or possibility that it will:

- substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat for a migratory species
- result in an invasive species that is harmful to the migratory species becoming established in an area of important habitat for the migratory species
- seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species.

I noted that there was one record of a double-banded plover (*Charadrius bicinctus*; Migratory, Marine) within the proposed action area. However, based on information available to me, such as information contained in the SPRAT database, referral documentation, and publicly available databases, I considered that significant impacts were unlikely. This is because:

- a) no important habitat occurs within, or downstream from, the proposed action area
- b) it is unlikely that the proposed action would significantly affect the migratory pathways of the double-banded plover, including through lake effects, because due to the distance between the project area and coastal flyways (approximately 50 km based on species records) it is unlikely that an ecologically significant proportion of the population would occur within the proposed action area.

I also noted that Osprey (*Pandion haliaetus*) were identified in the PMST report as having habitat known to occur within 10 km of the proposed action area, and that the species is known to occasionally range along inland rivers. However, based on information contained in the SPRAT database and the referral documentation, I considered that:

- a) no important habitat occurs within, or downstream from, the proposed action area
- b) it is unlikely that the proposed action would significantly affect the ospreys' migratory pathways, including through water quality degradation or lake effects, because it is unlikely



	<p>that an ecologically significant proportion of the population would occur within the proposed action area.</p> <p>For these reasons, I decided that sections 20 and 20A are not controlling provisions for the proposed action.</p>
<b>Nuclear action (s21 &amp; s22A)</b>	<p>The proposed action does not meet the definition of a nuclear action as defined in the EPBC Act.</p> <p>For this reason, I decided that sections 21 and 22A are not controlling provisions for the proposed action.</p>
<b>Commonwealth marine environment (s23 &amp; s24A)</b>	<p>The proposed action is not being taken in a Commonwealth marine area. Further, given the information contained in the referral documentation, the nature and scale of the proposed action and its potential impacts, and the distance to a Commonwealth marine area, the proposed action is unlikely to have a significant impact on the environment in a Commonwealth marine area.</p> <p>For these reasons I decided that sections 23 and 24A are not controlling provisions for the proposed action.</p>
<b>A water resource, in relation to unconventional gas development and large coal mining development (s24D &amp; s24E)</b>	<p>The proposed action does not involve an unconventional gas development or a large coal mining development.</p> <p>For this reason, I decided that sections 24D and 24E are not controlling provisions for the proposed action.</p>
<b>Commonwealth land (s26 &amp; s27A)</b>	<p>The proposed action is not being taken on Commonwealth land.</p> <p>Further, given the information contained in the referral documentation, the nature and scale of the proposed action and its potential impacts, and the distance to Commonwealth land, the proposed action is unlikely to have a significant impact to the environment on Commonwealth land.</p> <p>For these reasons I decided that sections 26 and 27A are not controlling provisions for the proposed action.</p>
<b>Commonwealth Heritage places overseas (s27B &amp; s27C)</b>	<p>The proposed action is not being taken overseas.</p> <p>For this reason, I decided that sections 27B and 27C are not controlling provisions for the proposed action.</p>

<b>Commonwealth action (s28)</b>	<p>The person proposing to take the action is not a Commonwealth agency.</p> <p>For this reason, I decided that section 28 is not a controlling provision for the proposed action.</p>
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## Other matters for decision-making

### Significant impact guidelines

86) I considered the information in the referral against the Significant Impact Guidelines 1.1. The Significant Impact Guidelines 1.1 is a policy document that provides guidance on determining whether an action is likely to have significant impacts on a matter protected by a provision of the EPBC Act, not a legal instrument. However, I considered the factors identified in the Significant Impact Guidelines 1.1 were appropriate in assessing the significance of impacts of the proposed action.

### Precautionary principle

87) In making my decision under section 75(1), I am required to take account of the precautionary principle under section 391 of the EPBC Act, to the extent I can do so consistently with the other provisions of the EPBC Act. The precautionary principle is that a lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage.

88) I took account of the precautionary principle by considering whether there are threats of serious or irreversible environmental damage with respect to the matters protected by the EPBC Act and whether they will or are likely to be, significantly impacted by the proposed action, and whether there is a lack of scientific certainty.

89) The department considered, and I agreed, that there is a threat of serious or irreversible damage as a result of the proposed action on the following protected matters:

- a) listed threatened species and communities (section 18 & section 18A)
- b) world heritage values of a declared World Heritage property (section 12 & section 15A)
- c) national heritage values of a National Heritage place (section 15B & section 15C)
- d) the environment in the Great Barrier Reef Marine Park (section 24B & section 24C)

90) The department considered, and I agreed, that there is a lack of scientific certainty provided in the referral documentation regarding impacts to Listed threatened species and ecological communities, the GBRWHA, the GBRHNP, and the GBRMP. The department considered, and I agreed, that this uncertainty arose from:

- a) the use of habitat definitions and survey methods that do not align with departmental documents
  - b) mapping that does not adequately display the distribution of listed threatened species and ecological communities habitat
  - c) lack of information regarding decommissioning, rehabilitation, and offsets and how this might interact with MNES
  - d) the inclusion of a conceptual erosion and sedimentation plan that does not provide adequate assurance that downstream water quality impacts can be mitigated and managed effectively
  - e) inaccuracies and inconsistencies within the documentation regarding the project's distance from the GBRWHA, GBRNHP, and GBRMP.
- 91) In relation to the other matters of national environmental significance, the department considered, and I agreed, that there is sufficient evidence available to conclude that there is no way in which the proposed action would conceivably contribute to threats of serious or irreversible damage to these matters.
- 92) The department recommended, and I agreed, that where there is uncertainty about the potential for the proposed action to contribute to threats of serious or irreversible damage to matters of national environmental significance, further assessment is recommended before making a decision whether or not to approve the action.

#### **Bioregional Plans**

- 93) In accordance with section 176(5), I am required to have regard to a bioregional plan in making any decision under the EPBC Act to which the plan is relevant.
- a) I noted that there were no bioregional plans relevant to the location of the proposed action that I was required to have regard to.

#### **Assessment Approach**

- 94) In deciding that an action is a controlled action, I am also required to decide on the approach for assessment in accordance with section 87 of the EPBC Act.
- 95) Having regard to the matters relevant to my decision and the information before me as described above, I agreed with the department's recommendation that the proposed action should be assessed by public environment report under Part 8 of the EPBC Act. In making this decision I considered:
- a) the number of matters likely to be impacted;
  - b) the scale of the disturbance footprint;

- c) the complexity of potential impacts from the action;
- d) the lack of details regarding avoidance, mitigation, management, and offset measures for impacts to protected matters; and
- e) the degree of public interest in the action.

96) In making my decision I also took into consideration the matters outlined in section 87(3) of the EPBC Act, summarised in the table below.


<b>Matter to be considered</b>	<b>Comment</b>
Information relating to the action given to the Minister in the referral of the proposal to take the action – s87(3)(a)	<p>In making my decision, I considered the information contained in the referral. The department noted, and I agreed that the referral information did not contain management plans relating to decommissioning, rehabilitation, or offsets.</p> <ul style="list-style-type: none"> <li>• The referral stated that decommissioning will occur after 100 years of operation, and that land should be returned to at least prior condition.</li> <li>• The referral information did not contain a discussion about whether offsets were necessary in accordance with the department's Offsets Policy 2012.</li> </ul>
Any other information about the impacts of the action considered relevant (including information in a report on the impacts of the action under a policy, plan or program under which the action is to be taken that was given to the Minister under an agreement under Part 10) - s87(3)(b)	<p>I considered the information about the impacts of the action as contained in the decision brief.</p> <p>I noted that there are no strategic assessments relevant to the proposed action.</p>
Any comments received from a State or Territory minister relevant to deciding the appropriate assessment approach – s87(3)(c)	<p>I noted the comment received in response to an invitation under s74(2) for this proposal, from DESI, as discussed above. I noted that this response confirms that the proposed action will not be suitable for assessment by accredited assessment.</p>
Guidelines (if any) published under s87(6), and matters (if any) prescribed in the regulations – s87(3)(d) and (e)	<p>I noted that no guidelines have been made and no regulations have been prescribed.</p>

97) Therefore, I decided that assessment by public environment report, under Part 8 of the EPBC Act, was the most appropriate and effective method of assessment for the proposed action.

## Conclusion

98) For the reasons given above, on 16 July 2024, I decided that:

- a) the proposed action is a controlled action and that the applicable controlling provisions are sections 18 and 18A (listed threatened species and communities), sections 12 and 15A (World Heritage properties), sections 15B and 15C (National Heritage places), and sections 24B and 24C (Great Barrier Reef Marine Park); and
- b) The relevant impacts of the proposed action are to be assessed by public environment report under Part 8 of the EPBC Act

name and position	George Morris Acting Branch Head (at the time of the relevant decisions) Environment Assessment QLD Nature Positive Regulation Division
signature	
date of decision	04 September 2024

## Annexure A – Relevant Legislation

### Section 67 of the EPBC Act provides:

#### *What is a controlled action?*

An action that a person proposes to take is a controlled action if the taking of the action by the person without approval under Part 9 for the purposes of a provision of Part 3 would be (or would, but for section 25AA or 28AB) prohibited by the provision. The provision is a controlling provision for the action.

### Section 68 of the EPBC Act relevantly provides:

- 1) A person proposing to take an action that the person thinks may be or is a controlled action must refer the proposal to the Minister for the Minister's decision whether or not the action is a controlled action.
- 2) A person proposing to take an action that the person thinks is not a controlled action may refer the proposal to the Minister for the Minister's decision whether or not the action is a controlled action.

[...]

### Section 74 of the EPBC Act relevantly provides:

#### *Inviting other Commonwealth Ministers to provide information*

- 1) As soon as practicable after receiving a referral of a proposal to take an action, the Environment Minister must:
  - a) inform any other Minister whom the Environment Minister believes has administrative responsibilities relating to the proposal; and
  - b) invite each other Minister informed to give the Environment Minister within 10 business days information that relates to the proposed action and is relevant to deciding whether or not the proposed action is a controlled action.

#### *Inviting comments from appropriate State or Territory Minister*

- 2) As soon as practicable after receiving, from the person proposing to take an action or from a Commonwealth agency, a referral of a proposal to take an action in a State or self-governing Territory, the Environment Minister must, if he or she thinks the action may have an impact on a matter protected by a provision of Division 1 of Part 3 (about matters of national environmental significance):
  - a) inform the appropriate Minister of the State or Territory; and
  - b) invite that Minister to give the Environment Minister within 10 business days:

Department of Climate Change, Energy, the Environment and Water

- i) comments on whether the proposed action is a controlled action; and
- ii) information relevant to deciding which approach would be appropriate to assess the relevant impacts of the action (including if the action could be assessed under a bilateral agreement).

*Inviting public comment*

- 3) As soon as practicable after receiving a referral of a proposal to take an action, the Environment Minister must cause to be published on the Internet:
  - a) the referral; and
  - b) an invitation for anyone to give the Minister comments within 10 business days (measured in Canberra) on whether the action is a controlled action.

Section 75 of the EPBC Act relevantly provides:

*Is the action a controlled action?*

- 1) The Minister must decide:
  - a) whether the action that is the subject of a proposal referred to the Minister is a controlled action; and
  - b) which provisions of Part 3 (if any) are controlling provisions for the action.

1AA) To avoid doubt, the Minister is not permitted to make a decision under subsection (1) in relation to an action that was the subject of a referral that was not accepted under subsection 74A(1).

*Minister must consider public comment*

1A) In making a decision under subsection (1) about the action, the Minister must consider the comments (if any) received:

- a) in response to the invitation under subsection 74(3) for anyone to give the Minister comments on whether the action is a controlled action; and
- b) within the period specified in the invitation.

*Considerations in decision*

- 2) If, when the Minister makes a decision under subsection (1), it is relevant for the Minister to consider the impacts of an action:
  - a) the Minister must consider all adverse impacts (if any) the action:
    - i) has or will have; or

- ii) is likely to have; on the matter protected by each provision of Part 3; and
- b) must not consider any beneficial impacts the action:
  - i) has or will have; or
  - ii) is likely to have; on the matter protected by each provision of Part 3.

*[...] Timing of decision and designation*

- 5) The Minister must make the decisions under subsection (1) and, if applicable, the designation under subsection (3), within 20 business days after the Minister receives the referral of the proposal to take the action.

Section 77A relevantly provides:

- 1) If, in deciding whether the action is a controlled action or not, the Minister has made a decision (the component decision) that a particular provision of Part 3 is not a controlling provision for the action because the Minister believes it will be taken in a particular manner, the notice, to be provided under section 77, must set out the component decision, identifying the provision and the manner.

1A) For the purposes of subsection (1), it does not matter whether or not the Minister believes that the action will be taken in accordance with:

- c) an accredited management arrangement or an accredited authorisation process for the purposes of a declaration under section 33; or
- d) a bioregional plan to which a declaration made under section 37A relates; or
- e) a bilaterally accredited management arrangement or a bilaterally accredited authorisation process for the purposes of a bilateral agreement. [End Legislation section]

Section 87 of the EPBC Act relevantly provides:

*Minister must choose one assessment approach*

- 1) The Minister must decide which one of the following approaches must be used for assessment of the relevant impacts of an action that the Minister has decided is a controlled action:
  - a) assessment on preliminary documentation under Division 4.

*Considerations in making choice*

- 3) In making the decision, the Minister must consider:
  - a) information relating to the action given to the Minister in the referral of the proposal to take action; and



- b) any other information available to the Minister about the relevant impacts of the action that the Minister considers relevant (including information in a report on the impacts of actions under a policy, plan or program under which the action is to be taken that was given to the Minister under an agreement under Part 10 (about strategic assessments)); and
- c) any relevant information received in response to an invitation under subparagraph 74(2)(b)(ii); and
- d) the matters (if any) prescribed by the regulations; and
- e) the guidelines (if any) published under subsection (6).

Section 391 of the EPBC Act relevantly provides:

*Taking account of the precautionary principle*

- 4) The minister must take account of the precautionary principle in making a decision listed in the table in subsection (3), to the extent he or she can do so consistently with the other provisions of the Act.

*Precautionary principle*

- 5) The **precautionary principle** is that lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage.

*Decisions in which precautionary principle must be considered*

- 6) The decisions are:

Decisions in which precautionary principle must be considered		
Item	Section decision is made under	Nature of decision
1	75	whether an action is a controlled action

## Annexure B

The following documents were included as attachments to the EPBC 2023/09752 referral and assessment approach decision brief for my consideration as delegate. Please note that the attachment numbers correspond to the numbering from the referral decision briefing package.

**Referral Decision Notice** (for my signature if I agreed with the recommendations)

**Letters to the proponent & Ministers** (for my signature if I agreed with the recommendations):

B1: Letter to Proponent

B2: Letter to Minister for Indigenous Australians

B3: Letter to Minister for Climate Change and Energy

B4: B4: Letter to DESI

### **Referral Documentation**

C1: Referral

C2: Project Layout Map

C3: 1 ESG Report 2022

C4: 2 Upper Calliope Solar Farm Matters of National Environmental Significance Report

C5: 2a UCSF MNES Report

C6: 2b UCSF MNES Report

C7: 3a Upper Calliope Solar Farm Flood Impact Assessment and Sediment Management Plan

C8: 3b UCSF FIA and SMP

C9: 3c UCSF FIA and SMP

C10: 3d UCSF FIA and SMP

C11: 3e UCSF FIA and SMP

C12: C12: 4 Concept Erosion Sediment Control Plan

### **Public comments**

### **Referral comments from DESI**

### **Supporting Documentation**

F1: 10km Protected Matters Search Tool Report (2 July 2024)

F2: A review of koala habitat assessment criteria and methods

F3: Conservation Advice for *Petauroides volans* (greater glider (southern and central))

- F4: Conservation Advice for *Phascolarctos cinereus* (Koala) combined populations of Queensland, New South Wales and the Australian Capital Territory
- F5: National Recovery Plan for *Phascolarctos cinereus* (Koala) combined populations of Queensland, New South Wales and the Australian Capital Territory
- F6: *Environment Protection and Biodiversity Conservation Act 1999* Environmental Offsets Policy 2012
- F7: Matters of National Environmental Significance Significant Impact Guidelines 1.1
- F8: Guide to greater glider habitat in Queensland 2022, Queensland Department of Environment and Science
- F9: Reef 2050 Water Quality Improvement Plan 2017-2022
- F10: Reef 2050 Long term Sustainability Plan 2021-2025
- F11: Fitzroy Region Calliope catchment water quality targets
- F12: Referral guidelines for the outstanding values of the GBRWHA

**Fee schedule** (with justifications)

**Fee schedule** (without justifications)