

13th December 2018

Dr. Tom Hatton
Chairman, EPA
The Atrium Level 4
168 St. Georges Terrace
Perth, WA 6000

Your ref: CMS17523 DWERA-000996

Dear Dr. Hatton,

Re: Asian RE Hub – Assessment No. 2140

Further to our recent correspondence, I would like to confirm that we are submitting a Section 43a with regards to the Asian RE Hub. With regards to this, and after discussion with senior EPA Services officers, Garth Humphreys from Biota will forward a revised Section 43a application shortly.

I thank you in advance for your time and consideration. Please do hesitate to contact myself or Garth if you or your team require further information.

Best Regards,



Alexander Tancock



13 December 2018

Kaylene Carter
Senior Environmental Officer
EPA Services
Department of Water and Environmental Regulation
168 St Georges Terrace
Perth, Western Australia 6000
(via email)

Dear Kaylene,

Section 43A Changes to Proposal During Assessment – Asian Renewable Energy Hub

Further to our recent discussions, we provide supporting information to the proponent's request for changes during assessment to the above proposal under Section 43A of the *Environmental Protection Act 1986*.

As you are aware, the proponent now intends to proceed with the scope of the proposal effectively equivalent to that presented to the Environmental Protection Authority (EPA) Board at the time of their consideration of the Environmental Scoping Document (ESD) for the assessment. The draft ESD, which incorporated the scope of the changed proposal, had previously been the subject of review by other relevant agencies, in addition to consultation with the Commonwealth in regard to the *Environment Protection and Biodiversity Conservation Act 1999*. After modification of the draft ESD, the EPA subsequently formally endorsed the ESD for the requirements of the *Environmental Protection Act 1986*, with a proposal description effectively equivalent to that which is the subject of this Section 43A. The balance of this letter supplies you with the information needed for the EPA to assess the proponent's request for changes during assessment and enable the continuation of the current assessment.

The key consideration of Section 43A of the *Environmental Protection Act 1986* relates to whether the changes to the proposal significantly increase an impact. The context of this comparison is between the impacts of the proposal as original referred to the EPA, and the proposal that will be documented in the Environmental Review Document (ERD) for the same assessment. In assessing this, the following considerations were reviewed:

- a) Values, sensitivity and the quality of the environment that is likely to be impacted;
- b) Extent (intensity, duration, magnitude and geographic footprint) of the likely impacts;
- c) Consequence of the likely impacts (or change);
- d) Resilience of the environment to cope with the impacts or change;
- e) Cumulative impacts with other projects;
- f) Connections and interactions between parts of the environment to inform holistic view of impacts of the whole environment;

- g) Level of confidence in the prediction of impacts and the success of proposed mitigation; and
- h) Public interest about the likely effect of the proposal, if implemented, on the environment, and public information that informs the EPA's assessment.

We have structured this application under Section 43A as suggested by you, addressing:

1. The changes to the proposal requested (reasoning and final table);
2. An assessment of the impact of the proposed change to each preliminary key environmental factor, including why the change is unlikely to significantly increase any impact that the proposal may have on the environment;
3. relevant figures; and
4. consultation that has occurred.

1. Changes to the proposal

The site selected for the proposal and the development envelope for the proposal have remained unchanged since the submission of the ESD.

The changes to the proposal conceptual design have been driven by the planned increase in the project's power generation, which is a function of the recent shift in focus of the project to supply renewable power to the Pilbara. This entails an increase in the number of cables exporting power (from two to four), an increase in the number of wind turbines but a decrease in their dimensions, and an increased number of solar panel arrays and associated electrical infrastructure, which has increased the clearing footprint for the project as set out in Table 1 below. Other supporting electrical infrastructure has increased somewhat with the increased renewable power output of the project. Finally, with the refinement of the project design, it has also become clear that the proponent's original intent to co-locate all access tracks was not achievable for engineering reasons and the distribution network would require its own access track. In contrast, it was recognised that some components of the project footprint spatially overlap and were therefore being double-counted in clearing figures (e.g. considering site access track clearing independent of turbine hardstand, when in fact the track footprint will overlay each hardstand). The rationalisation of these refinements, and the overall change to the proposal scope, are reflected in the increased clearing Table 1.

Table 1: Proposed extent of physical and operational elements of the changed proposal in the ERD compared to that at time of referral (approved ESD figures provided for context).

Element	Referral	ESD	ERD	Change
Wind turbine hardstand	440 ha	882 ha	522 ha	82 ha
PV solar arrays and electrical infrastructure	4,800 ha	7,800 ha	6,651 ha	1,851 ha
Converter station	18 ha	16 ha	23 ha	5 ha
Onshore transmission cable pylons	-	32 ha	157 ha	157 ha
Onshore distribution cable	112 ha	320 ha	1,612 ha	1,500 ha
Site tracks	1,800 ha	2,550 ha	2,303 ha	503 ha
Substations	100 ha	104 ha	357 ha	257 ha
Warehouse and accommodation	100 ha	50 ha	337 ha	237 ha
Total !:	7,370 ha	11,754 ha	11,962 ha	11,962 ha

In addition, the proposal has now been refined to a change in temporary disturbance to the seabed of 15.3 ha during offshore transmission cable installation (3 ha at the time of referral), and onshore elements that previously required permanent clearing, will now be temporary only and immediately rehabilitated (burial of the last section of transmission cable corridor near the coast, and temporary construction laydown areas; totalling 613 ha).

2. Assessment of the impact of the changes to preliminary key environmental factors

As no new physical or operational elements have been added to the proposal with these changes, and the overall location and development envelope have remained unchanged, there are no new preliminary key environmental factors and these remain the same as considered by EPA at the time of referral.

The preliminary key environmental factors for the environmental review then remain as:

- Benthic Communities and Habitat;
- Marine Environmental Quality;
- Marine Fauna;
- Flora and Vegetation;
- Terrestrial Fauna; and
- Social Surroundings.

An assessment of the impact of the change to the proposal to each preliminary key environmental factor is provided below.

Benthic Communities and Habitat, Marine Environmental Quality and Marine Fauna

We have grouped these marine factors in providing this supporting information, as the change to the proposal is very similar for all three. The only change that affects the marine environment is changing from two export cables to four. While this represents a change to the elements of the proposal, we do not consider it to represent a significant increase in impacts as:

- the location at which the cable corridor will cross Eighty Mile Beach and the Eighty Mile Beach Marine Park remains unchanged (significance criterion (a) of Section 1);
- the offshore cable corridor portion of the development envelope follows the same alignment as originally referred and remains within the extent of benthic habitat surveys undertaken for the proposal (significance criterion (a));
- the direct impact on the seabed will only increase slightly with the increased number of cables (by 12.3 ha from that at referral) but the nature of the cables themselves and the installation methods to be used remains the same (significance criterion (b));
- all of the habitat within the 12.3 ha of increased project footprint is bioturbated bare sand, and does not represent a significant BCH or important habitat to marine fauna (significance criteria (a), (b) and (c)); and
- the primary management and mitigation of impacts, particularly the timing of the works to avoid peak marine turtle and migratory shorebird activity periods, and the burial of the cables to mitigate heat dissipation and EMF generation, remains the same and will be equally effective (significance criterion (g)).

Flora and Vegetation

The extent of clearing required for the project footprint has increased by 4,592 ha from that presented at the time of referral (Table 1). The findings of the flora and vegetation survey for the proposal are that the vegetation types within the development envelope are all relatively widespread and there are no threatened ecological communities present. Our assessment of the change to the proposal in respect of flora and vegetation is that:

- no new or different vegetation types will be affected by the increase in area of the project footprint compared to the conceptual design at the time of referral (significance criterion (a));
- the vegetation types that will be impacted by the changed clearing extent are very widespread and very well represented within the development envelope and the wider locality, as was the case with the originally referred proposal (significance criteria (a) to (d));
- the increase of 4,592 ha represents an increase in proportionate clearing of the development envelope of a further 0.69%, which we do not consider to be significant in the geographic and biological context of the site in question (significance criteria (a) to (d));

- the increase in the project footprint area does not impact on any Threatened flora or MNES flora species (significance criteria (a) and (c));
- the revised conceptual design will still include provision for the modification of individual turbine locations to avoid threatened flora populations (significance criterion (g)); and
- the management measures for the proposal will be equally effective in mitigating impacts on flora and vegetation during construction, and the proposed fire management strategy will still benefit flora and vegetation values across the broader landscape relative to the current unmanaged and too frequent fire regime (significance criterion (g)).

Terrestrial Fauna

Similar to the considerations above for the Flora and Vegetation factor, the clearing of fauna habitat has increased by 4,592 ha from that presented at the time of referral (Table 1), but this only represents a 0.69% increase by area. This is within a development envelope that contains very extensive representation of what are effectively the same and limited range of habitats that are repeated across the landscape. Key habitats of conservation significance will still be avoided by the project conceptual design. Our assessment of the change to the proposal in respect of terrestrial fauna is that:

- no new or different habitat types will be affected by the increase in area of the project footprint compared to the conceptual design at the time of referral (significance criterion (a));
- the two habitat types that will be impacted by the changed clearing extent (Shrub and spinifex on sandplain, and Inland dunes) are very widespread and will remain very well represented within the development envelope and the wider locality (the changed proposal will result in the retention of approximately 98% of the extents of both habitats within the development envelope alone – a total area of 629,272 ha of habitat) (significance criteria (a) to (d));
- no areas where Black-footed Rock Wallaby or Bilby (the two key fauna species of conservation significance in the development envelope) were recorded will be affected by the increased footprint;
- the revised conceptual design will still include provision for the modification of individual turbine locations and road alignment to avoid threatened fauna that are strongly linked to particular landscape features where these do exist (e.g. Black-flanked Rock Wallaby rock piles) (significance criteria (a) and (c));
- the changes to the proposal do not result in any decrease in separation distance between the development envelope and the Eight Mile Beach and Mandora Marsh Ramsar site, or any new or different impacts on its ecological character (significance criteria (a) to (c)); and
- the management measures for the proposal will be equally effective in mitigating impacts on terrestrial fauna during construction, and the proposed fire management strategy will still benefit terrestrial fauna biodiversity values across the broader landscape relative to the current unmanaged and too frequent fire regime (significance criterion (g)).

Social Surroundings

The changes to the proposal include an increase in the number of wind turbines, which is the only element that could potentially result in any changed impact to social surroundings. However, the outputs of updated noise modelling and visual analysis indicate that there will be no additional or different impact on the nearest sensitive receivers as a result of the change (significance criteria (a), (b), (c) and (g)). This is largely a function of the separation distance between the development envelope boundary and the nearest sensitive receivers, with the changed conceptual design remaining entirely within the development envelope.

Assessment of Significance

As the overall character, concept, general configuration, mitigation measures and location of the proposal remains unchanged, the change does not introduce any new considerations in respect of cumulative impacts with other projects and it would appear unlikely the level of public interest would be significantly different from the time of referral (when relatively few submissions were received). Key stakeholders have also been consulted in regard to the proposal change (see Section 4).

Overall, giving due consideration to these significance criteria – and to the assessment against each individual factor provided on the preceding pages – we do not consider the change in the proposal will result in any significantly increased impacts relative to the proposal as originally referred.

3. Relevant figures

Provided as Attachment 1 and 2 to this correspondence.

4. Consultation that has occurred

The Pilbara Development Commission and the Department of Jobs, Tourism, Science and Innovation have been consulted regularly during the development of the proposal. The agencies are in fact major drivers for the change to the proposal and are well aware of the latest plans. They have encouraged the proponent to maximise the use of the development envelope to deliver the maximum benefits for Western Australia. They have also pushed the proponent to consider ways to maximise downstream possibilities in the Pilbara region, including the delivery of power for local users and new potential industries (such as hydrogen production). The Councils of East Pilbara and Broome have also recently been briefed on the proponent's intention to expand the proposal, as have the traditional owners with designated native title over the development envelope. The Department of Planning, Lands and Heritage and the Commonwealth Department of the Environment and Energy have also been briefed on the revised proposal. The media has publicly reported extensively on the proponent's plans to expand the project, and the proponent's website and social media feeds have also published the same information.

We confirm that surveys and other work required for the ESD that has been completed will fully address the extent of the changes to the proposal. No additional work is required as no new factors or physical elements have been introduced, and the changes to the proposal are limited to an expansion of the spatial extent of the conceptual design within an unchanged development envelope.

Please contact me should you require any further information at this time or if any supplementary documentation will be required for the EPA to finalise the Section 43A.

Yours sincerely,

Biota Environmental Sciences Pty Ltd

Garth Humphreys
Principal Ecologist / Director

- Attachment 1: Updated spatial GIS files of the proposal development envelope and conceptual design footprint (supplied under separate cover on 29/11/18)
- Attachment 2: Updated figure showing the proposal development envelope and revised conceptual design.

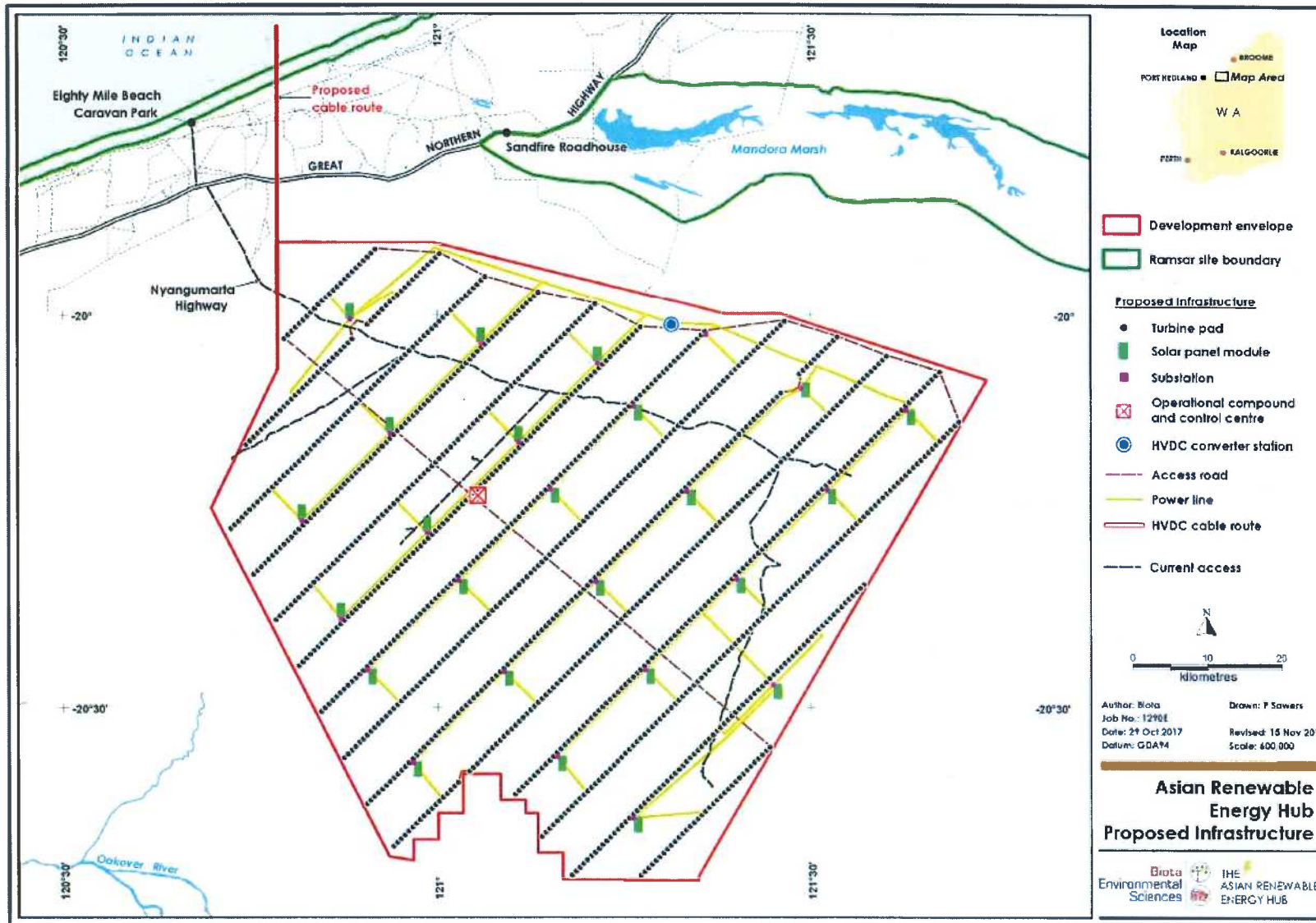


Figure 1 Development envelope and conceptual design at referral

