13 May 2020

Rob Beckett Environmental Assessment Officer Planning and Assessment Department of Planning, Industry & Environment GPO Box 39 Sydney NSW 2001



Rob.beckett@environment.nsw.gov.a u

Dear Rob

Re: 18-622 Walla Walla Solar Farm (SSD 9874) - Response to further BCD Submission

The purpose of this letter is to detail NGH's responses to the BCD letter to DPIE dated 23 April 2020, requests further clarification and detail within the Biodiversity Development Assessment Report (appended to this letter). Our responses to these requests are detailed overleaf.

Should you have any further questions or require any additional information, please feel free to contact myself or Mitch Palmer on (02) 8202 8342.

Yours sincerely,

Aleksei Atkin Acting Technical Lead - Ecology BAAS 17093 NGH

Issue 1 – Future Vegetation Integrity of Zone 4

The first issue raised by BCD in response to the updated BDAR is that further information is required to show:

An ecologically sound basis for justifying the reduction in ecosystem credits for PCT 76 Western Grey Box Woodland (derived grassland) in Zone 4, or revision of future vegetation integrity scores to 0.

Response

In order to ensure certainty for aspects of the project that require certainty of approval, the future vegetation integrity score of Zone 4 will be lowered to zero. However, NGH believe that adequate justification is provided within the BDAR and detailed further below that the diversity and cover of native groundcover species within solar farm developments will generate a future vegetation integrity score of >0.

A recent survey has been undertaken by NGH ecologists at a solar farm approved under the Framework for Biodiversity Assessment. Within vegetation zones that were assigned a PCT, in this case PCT 281 DNG and/or woodland, the groundcover along access tracks and under panels still have a strong highly abundant native component, particularly of C3 grasses such *Rytidosperma* spp, *Austrostipa scabra* and *Microlaena stipoides* but also C4 grasses such as *Bothriochloa macra*, *Sporobolus crebra*, *Chloris truncata* and *Dactyloctenium radulans*. *Wahlenbergia luteola* and *Calotis lappulacea* were also commonly present. *Trifolum* spp, *Modiola caroliana* were also present here as well as some exotic grasses but not as abundant as the pasture zones. Examples of these are shown in Photograph1 and Photograph 2 below.



Photograph 1 Predominantly native grasses between panel rows



Photograph 2 Native grasslands in laneways between panels

Red rumped Parrots *Psephotus haematonotus* and Grey-crowned Babblers *Pomatostomus temporalis temporalis* were observed foraging on grasslands fringing array areas, that was close to nearby remnant woodland vegetation

It is considered likely that C3 perennial grasses will persist regardless of shading and rainfall impacts, including species present within the vegetation zone such as *Rytidosperma auriculatum* in conjunction with sporadic occurrence of C4 perennial grasses such as *Chloris truncata* and *Cynodon dactylon* in rows and areas subject to more light. C3 grasses have a year-long growth periods, have lower light requirements, lower temperature requirements, higher moisture requirements and lower frost sensitivity. Therefore impacts for arrays would potentially be negligible outside of direct clearing. C4 grasses have generally warm season growth period only, have higher light requirements, higher temperature requirements and lower moisture requirements, therefore may be subject more readily to impacts from shading and rainfall runoff patterns resulting from the panels. Nonetheless, this therefore sustains a level of native grassland habitat for more "disturbance tolerant" species such as Raptors and some woodland birds, maintains or increases the level of genetic diversity within the grassland and surrounding patches, would increase the invertebrate load potentially providing suitable foraging habitat for microchiropteran bats, and indicates that a future integrity score of > 0 would be appropriate.

Where addressed

Section 3.4.1, Section 7.1.1, Section 10.1.1

Issue 2 – Assessment of APZ and Fence Impacts

The second issue raised by BCD in response to the updated BDAR is that further information is required to show:

Assessment of impacts to biodiversity and threatened species habitat from security fencing and associated 10 m APZ.

Response

Designs of fence lines, locations of screening plantings and their associated asset protection zones were originally designed as separate to the majority of the infrastructure within the proposal. As such, there was a discrepancy between the finalised development footprint and the extent of these areas. The development footprint has now been redesigned to include all areas of impact including screening plantings, fence lines and their construction footprints, and asset protection zones. Any impacts to vegetation within these areas have assumed a Future Integrity Score of 0.

Where addressed

Section 6.1.3 - All elements included on Figure 6 - 1, Chapter 7 and Chapter 10 - APZ and fence construction included in vegetation impact area calculations, Future Vegetation Integrity Score assumed to be 0, credits generated for impacts.

Issue 3 – Inclusion of all vegetation zones in BAM-C

The third issue raised by BCD in response to the updated BDAR is that further information is required to show:

Clarification about the discrepancy between the digital dataset showing impacted Zone 10 PCT 278 and the lack of Zone 120 in BAM-C.

Response

A separate case was prepared to assess the vegetation integrity scores of the unimpacted part of Zone 9 and the full extent of Zone 10, which was originally outside the development footprint entirely. This was mistakenly not submitted following previous comments. The recalculated development footprint (based on those areas identified in Issue 2 above) now includes impacts to all vegetation zones. As such, Zone 10 is now included in the BAM-C. Vegetation integrity scores for the complete vegetation zones within the development site were entered in BAM-C case 00013164/BAAS17109/18/00013165 – Revision 3, while vegetation integrity scores of impacted vegetation zones were entered in BAM-C case 00013164/BAAS17109/18/00013165 – Revision 4.

Where addressed

Section 3.4.3