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19 January 2024

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Dear Cameron

## **Birriwa Solar and Battery Project (SSD-29508870) – Feedback on the Amendment Submissions Report (Dec 2023)**

### **1. Introduction**

Warrumbungle Shire Council ('WSC') thanks the Department of Planning, Housing and Infrastructure (DPHI) for consulting with it on the Birriwa Solar Farm Amendment Report dated December 2023, and offers the comments herein.

It is noted the Birriwa Solar and Battery Project ('Project') will have a solar component with an indicative capacity of 600 megawatts (MW) and a battery energy storage system (BESS) of up to 600 MW for a two hour duration (1,200 MWh).

The site for the Project is within the Mid Western LGA, immediately south of the Warrumbungle LGA boundary. In part, the Developer will be relying on a WSC-maintained road for access by light and heavy vehicles; namely that section of Barneys Reef Road between the Castlereagh Highway and the Mid Western LGA boundary.

This road is a critical transport route for the Project and the likely impacts on WSC's asset across the life of the project (including construction, any refurbishment and decommissioning) are substantial and will require mitigation works on public land, careful management commitments and compensatory measures for Council.

DPHI will have noted that WSC has in the past lodged an objection to the Project. WSC maintains its objection for the following reasons:

- a) Concern that the applicable section of Barneys Reef Road between the Castlereagh Highway and the Mid Western LGA boundary may not appropriately conditioned to safeguard the value of the road asset now and into the future; and
- b) CWO REZ-related environmental, social and economic cumulative impacts have not been adequately addressed. The latest documentation contains generally vague and ill-defined information regarding how such wide-ranging impacts will be managed.

However, if, despite WSC's objection, the DPHI / Independent Planning Commission ('IPC') is of the view that the SSD application is to be approved, WSC requests the infrastructure - related Conditions of Consent listed in **Attachment 1** be adopted to mitigate and manage the likely adverse impacts of the development.

The rationale for said conditions is to ensure the project proceeds in a way that is consistent with WSC's requirements and that environmental, social and economic costs for the whole of the construction, operation, refurbishment and decommissioning phases are fully offset by benefits provided to residents and ratepayers.

## **2. Cumulative Impacts**

The Developer's latest documentation identifies that as the infrastructure planner for the CWO REZ, EnergyCo is responsible for co-ordinating private sector investment from solar, wind and storage projects as well as planning new transmission infrastructure in the REZ. Including addressing the cumulative impacts of the REZ infrastructure as a whole.

However, the Project's Amendment Report seems to suggest that on this topic the extent of the effort to date has been limited to 'investigations' or 'studies' on such matters as:

- a) Traffic and road upgrades and maintenance across the life of a project;
- b) Housing and accommodation;
- c) Community services - including healthcare, emergency services, education and recreational services;
- d) Industry education and training;
- e) Water, sand and gravel supply;
- f) Waste and circular economy;
- g) Telecommunications; and
- h) Bushfire management.

This confirms the view of WSC and is the primary reason why it has objected to some of the SSD projects.

## **3. Planning Agreement**

WSC is pleased to note that the Developer has agreed in principle to a Planning Agreement with Mid-Western Regional Council, commencing at construction of the project through the end of the project life. The monetary payments will be equivalent to 1.5% of the project's capital investment value for the purpose of delivering and facilitating community projects and infrastructure.



#### **4. Water Supply**

It is understood from the Amendment Report that:

- a) some 218 ML of water will be required over the 28-month construction phase. Approximately 15 water trucks with a capacity of 20,000 L would be required to deliver this water per day;
- b) some 225 ML of water is required over a 30 year operational life; and
- c) some 45.6 ML of water per year is required for the accommodation facility (assuming full capacity, i.e. 500 people).

It is most concerning that at this point in time it is unclear where this water is to be sourced. WSC considers this to be unacceptable and urges DPHI to require the Developer to provide clear definition as to how and where water is to be sourced.

#### **5. Gravel/Sand Supply**

The Amendment Report states that 'the source of construction material (including gravel) will be confirmed during detailed design'.

WSC considers it unacceptable from a project description and impact assessment perspective for the Developer to simply defer such a critical matter to the detailed design stage. How can the impacts of an SSD project be adequately assessed and conditioned if it is unknown where the material is being sourced? And how can the heavy vehicle impacts be confidently assessed when the roads to be used, the distances hauled, etc are left unknown?

WSC urges DPHI to require the Developer to provide clear definition as to how and where gravel, aggregate and cement is to be sourced.

#### **6. Temporary Worker Accommodation**

It is noted the peak capacity of the accommodation facility will be 500 construction workers and that some 10% or around 50 workers will be locals who travel to the site daily by car (with no car-pooling or use of shuttle buses).

WSC considers that assuming 10% of workers will be locals is overly optimistic and that 2% might be a more reasonable expectation. This in turn will have an impact on other areas of consideration e.g. roads.

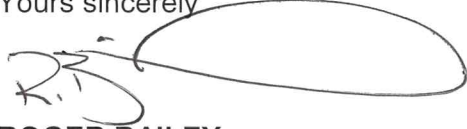
#### **7. Conclusion**

WSC looks forward to continuing to engage with the Proponent and DPHI to address the matters articulated herein. WSC is seeking clear, definitive and explicit actions which will be committed to prior to and during construction and operation, refurbishment, and decommissioning. The lack of adequate attention by the NSW Government to assessing and mitigating adverse cumulative impacts, especially social ones, remains a key concern.

To conclude, if, despite WSC's objection to the project for the reasons outlined, the DPHI/IPC is of a mind to grant consent then WSC requests that robust and transparent consent conditions be adopted that comprehensively address the issues raised. WSC has included herein draft infrastructure consent conditions that, if adopted, would go some way to alleviating its concerns relating to roads and traffic.

If you have any queries, please don't hesitate to contact the undersigned.

Yours sincerely

A handwritten signature in black ink, consisting of a stylized 'R' and 'B' followed by a large, horizontal oval flourish.

**ROGER BAILEY**  
**GENERAL MANAGER**

**ATTACHMENT 1**  
**Birriwa Solar Farm: Response to Submissions and Amendment Report**  
**Warrumbungle Shire Council Recommended Consent Conditions**  
**15 January 2024**

1. **Light vehicle estimation:** For roads which are to be kept in unsealed condition used by project traffic, any pavement and wearing course shall be designed and upgraded to cater for all project movements for the life of the development, with the design to be approved by Council informed by a comprehensive forecast of workforce vehicle movements.
2. **No cost to Council:** All works required under the Consent Conditions listed herein are to avoid any environmental, social or economic cost to Council, its residents and ratepayers, except to the extent agreed otherwise in a Deed, Planning Agreement or other legal agreement.
3. **Standards:** All public works and public land impacted, or to be constructed by the consent holder and dedicated to Council, shall be designed, constructed and maintained in accordance with the relevant Austroads and Council's adopted standards current at the time of application for each detailed design approval (e.g. under the Roads Act).
4. **Approved Council road routes:**
  - a) All project traffic across the construction, operational, refurbishment and decommissioning phases shall only be permitted to use the following WSC-managed road between the Golden Highway and the project site, unless with the prior written agreement of Council, or in the event of a road closure by authorities which prevents use of this route, or a temporary emergency:
    - Barneys Reef Road between the Castlereagh Highway and MWRC boundary. For the avoidance of doubt, vehicle access shall be prohibited along the WSC-managed section of Merotherie Road (other than in the above exceptional circumstances), consistent with the December 2023 Amendment Report.
  - b) If, during the life of the Project, WSC has evidence of Project-related traffic volumes or vehicle types on the approved travel routes exceeding the levels proposed in the Development Consent, or of Development-related traffic on any other roads not named in the Development Consent, the Developer agrees to use all reasonable endeavours to reach a negotiated settlement with WSC to provide additional funds for road repair, maintenance or upgrade works as deemed necessary by the roads authority.
5. **Route compliance:** The consent holder shall take all steps necessary to ensure and demonstrate compliance with the various road-related conditions, including, if required and to the satisfaction of Council, active management measures such as technology-based monitoring of individual vehicles across the supply chain with GPS and geofences, physical works and signage to restrict movements (subject to Roads Act approval), active surveillance, incentivisation and disciplinary actions.
6. **Material export:** Site-won quarried, or earthworks materials shall not be transported using public roads outside the project site from which they are obtained, unless such development has prior written approval from Council.
7. **Water supply and sewage:** Prior to the haulage of water and waste the consent holder shall agree to pay the required fees and charges as required by the relevant Council. Trucking of water and sewage shall only be undertaken to/from town or village network offtake or discharge points which are approved in writing by Council, and subject to any requirements or powers of Council under the Water Management Act.



Council at its discretion may refuse to provide water (both potable and non-potable) or accept wastewater at its facilities.

- 8. Defects Liability and Maintenance Period (DLMP):** For any infrastructure asset constructed or modified under this consent which is to be dedicated as an asset of the Council, the consent holder shall have a 24-month DLMP obligation commencing from the date the works are deemed 'practically complete' by Council's inspector.

During the DLMP the consent holder is responsible for repair of any defects and maintenance of the asset in accordance with manufacturer's recommendations and any asset management plan, at no cost to Council.

- 9. Bond securities:** In accordance with its adopted policies and Roads Act approval conditions, Council will, at its discretion, require the consent holder to lodge refundable bond securities to guarantee the consent holder's performance of any of the following:
- Outstanding or incomplete works;
  - Defect liability and/or maintenance obligations;
  - Vegetation or environmental management obligations; and
  - Obligations under a Planning Agreement or Deed.

- 10. Asset documentation:** For infrastructure assets dedicated to Council, the consent holder is to provide electronic copies of the relevant manufacturer's operation and maintenance documentation, inspection and test results, conformance surveys, non-conformance reports, a financial values asset return, and Works-As-Executed (WAE) drawings to Council's satisfaction.

WAE information is to be recorded on the original design drawings (so far as is practicable) using red line markups in native computer aided design file format and plotted or scanned to portable document format.

- 11. No easements over Council roads:** Easements or rights in title shall not be created to burden any public dedicated road reserves for which Council is or will become the roads authority, unless with Council's prior consent in writing.

- 12. Flooding:** The project works shall not result in any adverse stormwater or flooding impacts or water flow behaviour in relation to any of Council's assets (including roads) or land, for all design storm events up to and including the 1% Annual Exceedance Probability, in accordance with the adoption of the very latest climate change models and the Australian Rainfall and Runoff manual.

If adverse impacts arise, the consent holder shall design and construct improvements to the assets or land to flood-proof or achieve 'no worse than existing' serviceability and performance of that asset, to the written satisfaction of Council.

- 13. Solid and Liquid Wastes:** Solid and liquid wastes shall only be disposed at approved / licenced waste facilities. Council shall not be required to accept any wastes from the development at its facilities. If extenuating/emergency situations arise then Council may charge for disposal in accordance with its approved policies for developer contributions, user access charges and/or waste levies.

- 14. Access and servicing:** the access licences or easements granted in favour of the project shall be maintained by the consent holder for the life of the development (including decommissioning), and shall not be sold off in separate parts, so that the project remains a unitary development and no part of the project becomes alienated from the approved access roads or services alignments.

## 15. Prior to and During Construction, Refurbishment and Decommissioning Phases

- a) **Haulage estimation:** Public road pavement designs under the Roads Act, or cash contributions under a relevant legal agreement, are to be supported by a comprehensive manifest of all materials to be hauled along Council roads, to the satisfaction of Council. The manifest and pavement design calculations shall include (but may not be limited to): breakdown of whole-project materials classes and quantities, likely truck axle and maximum load configurations, average (per load) and total cumulative Equivalent Standard Axles, average km haulage distance by category of road, and background traffic volumes to be added including the number of background heavy vehicles.
- b) **Roads condition assessment:** The consent holder shall undertake comprehensive condition assessment reports to Council's satisfaction, for all its infrastructure assets along the identified Council-managed commuter and haulage routes, prior to the consent holder commencing significant activity along that route in the construction or future refurbishment or decommissioning phases, and again within four months after the conclusion of construction, refurbishment or decommissioning.
- c) **Road Safety Audit (RSA):** Prior to Roads Act approvals, the developer must provide an RSA prepared by an independent accredited RSA auditor for all the designated WSC-managed commuter and haulage roads, considering the construction, operation, refurbishment and decommissioning stages of the project. Any specific hazards or infrastructure treatments identified may be required to be included in the scope of works, depending on the risk assessment and to the satisfaction of Council.
- d) **Road geometric and functional upgrades prior to construction:** Prior to the construction stage milestones given in Schedule 1A (Roadworks Staging) of this Attachment, the consent holder shall achieve practical completion of the public road upgrades specified by Council in Schedule 1B (Upgrade Standards), for the whole of the designated haulage and commuter routes providing access to that stage or cluster. (Refer to Schedules 1A and 1B at the end of this document.)
- e) **Maintain roads during construction:** The consent holder shall maintain the WSC-managed public roads comprising the designated haulage and commuter routes for the entire duration from commencement of the construction, until completion of the Defects and Maintenance Liability Period (**DLMP**), to Council's satisfaction.
- f) Maintenance shall include regular patrols, grading (for unsealed roads) and rectification of any apparent hazards, failures or defects within a reasonable timeframe, to provide for safe and serviceable travel by all road users to a standard no worse than in the pre-development scenario. Rectification methods for significant or non-standard issues shall first be notified to and approved by Council before said work is undertaken.
- g) As part of any Roads Act approval Council may order the consent holder to take action, or (with sufficient notice to the consent holder except in emergencies) Council may undertake the work and recover the costs from the consent holder.
- h) Note the developer and Council may negotiate payments to Council under a VPA in lieu of performance of this condition (*but subject to other conditions including Condition a) Haulage estimation*).



- i) **Renew road pavements by end of construction phase:** Prior to commissioning the project or any sub-stage or cluster, designs for renewal of all WSC-managed road pavements providing access to that stage in accordance with this condition shall require approval by Council under the Roads Act, to ensure road works can be completed without delay following commissioning.
- j) Within 12 months of commissioning any stage or cluster and prior to Council refunding applicable bond securities, the developer shall overlay, reconstruct or rehabilitate the pavement to renew the full design life lost due to construction traffic (using Austroads methods for Equivalent Standard Axles, **ESA**), and offset the future likely estimated design life that will be lost due to operational and decommissioning traffic, or provide at least the minimum design ESA values below (whichever method results in the higher design life), for the full length of the designated WSC-managed public haulage routes that provide access to that cluster or stage:
  - **Barneys Reef Road:**  $1 \times 10^6$  ESA (or such lesser design value supported by a comprehensive project whole-of-life manifest if approved by Council).
- k) If subsequent construction stages have commenced or are soon to commence, and construction traffic is or will be using that road segment, Council may (at its discretion) agree in writing to defer the reconstruction of that road segment until completion of the subsequent stage(s), in recognition that reconstructing the road after project construction traffic has concluded may be desirable in order to maximise long term pavement life.
- l) The developer and Council may negotiate payments to Council under a VPA in lieu of performance of this condition (but subject to other conditions including Condition a) *Haulage estimation*).

**16. Vehicle management:** The construction, refurbishment and decommissioning Traffic Management Plans (CTMP) must minimise delays and temporary traffic impacts along WSC-managed roads in connection with transport of Over Size Over Mass (OSOM) loads, so far as is reasonably practicable, through the use of a combination of measures such as (but not limited to):

- a) Public notification along affected roads, with advance notice given in the local media and by signage posted along the route;
- b) Use of night or off-peak transport periods;
- c) Platooning of multiple OSOM loads at the same time;
- d) Selection of lay-by areas for OSOM loads at regular distances so that the duration of each traffic stoppage on single-carriageway roads is minimised;
- e) Other measures identified in consultation with Council. The draft CTMP must be submitted to Council for review at least three months prior to the planned movement of heavy and oversized vehicles. The CTMP must be approved by Council before any movement of heavy or oversized vehicles.
- f) As part of the CTMP measures, the consent holder shall maximise the use of buses and minibuses between accommodation centres, project sites and towns, and shall ensure car-pooling quotas are developed and enforced, to ensure that project private vehicle-kilometres are minimised. Any proposed park and ride stops in the Council area, and associated management measures or works, shall be to the satisfaction of Council.
- g) Project bus planning shall also provide for regular workforce access to town services and amenities while minimising negative social impacts on surrounding communities. The Plans must also mitigate and minimise the impacts of development traffic on school bus routes during their operating times, and on stock and crop haul routes during high-traffic seasons.



**17. Decommissioning:** As part of decommissioning the project, all the following shall be completed by the consent holder (if decommissioning a part of the project or cluster, then these requirements shall apply to that part):

- a) Remove all structures to ground surface level, and transport all components offsite to approved waste disposal, processing or reuse sites.
- b) Remove all private structures and services that cross or traverse along or encroach into WSC-managed public dedicated road reserves, including all subsurface cables and plant (but pits and conduits may be retained with Council approval).
- c) Extinguish any easements (if applicable) which burden public land or dedicated roads in favour of the project.
- d) Reinststate and make good public land after removal of structures to no worse than its pre-development condition.
- e) Repair all defects in public land or infrastructure that arose from the decommissioning activities, within 24 months of completion and prior to refund of bond securities held by Council.

### Schedule 1A. WSC Roadworks Staging

<p>1. Subject to Council's prior approval, project early works can commence before public road upgrade works are deemed practically complete and include (without limitation):</p> <ol style="list-style-type: none"> <li>a) Pre-construction minor works as defined in the consent (for example investigations, minor vegetation removal, site access, fencing and environmental activities),</li> <li>b) Heavy haulage required to complete the public road upgrades, and</li> <li>c) Any other works which Council agrees to on a temporary basis, for example under a Traffic Management Plan.</li> </ol>
<p>2. Generally otherwise, significant haulage of earthen or quarry products, over dimensional components, structural or foundation components or other bulk materials is not to occur on a designated WSC-managed roads until the public road upgrades specified in Schedule 1B below along that segment are deemed practically complete.</p>
<p>3. Temporary concession for speed zone reductions: despite the above requirements, and subject to Council's prior approval, bulk haulage can commence before the relevant public road segment upgrades are practically completed, provided all of the following matters are met:</p> <ol style="list-style-type: none"> <li>a) The relevant road works on that segment are substantially commenced and are proceeding well, and</li> <li>b) A temporary traffic management plan which will acceptably reduce speeds and other hazards along the segment has been approved by Council, and</li> <li>c) The road works on that segment shall be practically completed, and the standard traffic conditions restored, within six months of commencement on that segment (unless otherwise agreed where a specific construction element requires additional program).</li> </ol>
<p>4. If the works no longer comply with these requirements (e.g. at expiry of six months) and if Council so directs under the Roads Act approvals, bulk haulage on that particular road segment for private roads and turbines must temporarily halt until the relevant road segment upgrades are deemed practically complete.</p>

### Schedule 1B. WSC Upgrade Standards

#### Notes to this Schedule:

- a. All works require **detailed design approval** first be obtained from Council under Sections 87, 115 and 138 of the *Roads Act 1993* and other laws.

<p>b. Council consent must be obtained before <b>existing or required bitumen seals</b> may be interfered with, altered or temporarily removed or omitted during the construction phase. Consent may or may not be granted at Council's discretion, and subject to all of the following:</p> <ul style="list-style-type: none"> <li>i. Adequate community consultation and notification has occurred,</li> <li>ii. The impacts on local residents and their private access to property, and broader community impacts, are deemed by Council to be acceptable, are of limited duration and are adequately mitigated, and</li> <li>iii. The roads are restored to the pre-existing or better condition with the widths referenced in this Schedule, before the project construction phase is concluded.</li> </ul>
<p>c. <b>The works shall not reduce the standard</b> of pre-existing Council road infrastructure (e.g. carriageway or seal width), unless with prior written agreement from Council in each individual case.</p>
<p>d. <b>Council may agree to reduce or waive</b> any of these requirements by giving notice in writing.</p>
<p>e. <b>Ancillary public works</b> arising from developer works may be required to meet current standards at the developer's cost including (but not limited to) vegetation clearing, drainage channels, culverts, batter slopes and retaining structures, delineation (line markings and signage), utility and pole relocations and road reserve widening land acquisition.</p> <p>Carriageway / route standard treatments must be as per relevant specifications and guides including the Austroads Guide to Road Design (AGRD03 in particular), ARRB Unsealed Roads Best Practice Guide, Council specifications, TfNSW and RMS specifications and supplements (where adopted by Council), temporary average construction and decommissioning phase volumes and residual operational volumes over the life of the project.</p>
<p><b>Upgrades Required:</b></p>
<p>1. <b>Staging areas for OSOM vehicles:</b> if required as part of the approved CTMP, designate or provide regular staging areas for OSOM vehicles to hold outside of the road carriageway and form into platoons, to minimise delays. Council approval for the use of existing road layover areas is not required, except to the extent traffic management measures or physical works are proposed.</p>
<p>2. <b>OSOM swept path encroachments / obstacles:</b> OSOM swept path studies are to be provided for all WSC-managed road segments. Vegetation clearing or pruning, widening cuttings, and providing hardstands under wheel paths are permissible subject to Council's prior approval. Windrows and/or other temporary or permanent but removable barriers shall be installed to prevent public road users performing unsafe or undesirable movements or behaviours at areas where road facilities are widened or obstacles cleared.</p> <p>Council shall not be required to maintain these facilities as fit for the purpose of accommodating OSOM movements for the life of the development. They remain the responsibility of the consent holder to maintain, remove and reinstate after any OSOM movements, at its cost. Traffic management plans and design changes shall require Roads Act approval from Council.</p>
<p>3. <b>Structures generally:</b> The consent holder shall inspect, report and upgrade all WSC-managed bridges, major and minor culverts, causeways and grids to accommodate all OSOM, and Higher Mass Limits (HML) truck combinations up to and including 26m B-doubles, to the prior written satisfaction of Council.</p>
<p>4. <b>Route standard for Barneys Reef Road</b> (between Castlereagh Hwy intersection and Mid Western Regional Council boundary).</p>



**Prior to commencing construction** (other than in the temporary scenarios described in Staging Schedule 1A above) the consent holder shall:

- provide a two-coat bitumen seal and meet minimum 7.2m sealed width plus at least 1.0m unsealed shoulders each side.
- Widen seal on curves to accommodate 26m B-double and OSOM swept paths.
- Mark centre and edge lines and install any make-up guideposts to meet TfNSW delineation specifications.

*(Austroads AGRD03 Table 4.5 sealed local road with average 150-500 vpd)*

Note: Council in its sole discretion may agree for the carriageway to remain unsealed during construction, with full final sealing at the end of construction, subject to any Council requirements and consultation in accordance with this Schedule 1B Note (b) *(existing or required bitumen seals)*.

**Prior to commissioning the project** complete a full width full depth pavement renewal in accordance with Condition i) *(Renew pavements by end of construction phase)* above.

END

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