

Department of Planning, Housing and Infrastructure (DPHI)
C/- Major Projects Portal

Attention: Kirsty Vogel

Sundown Solar Farm – SSD8911 – Inverell Shire

Dear Ms Vogel,

I refer to your request for advice regarding the Sundown Solar Farm's Response to Submissions (RTS) dated 30 June 2025.

Agriculture plays a vital role in supporting state, regional, and local economies, as well as strengthening the social bonds and character of rural communities. The NSW Department of Primary Industries and Regional Development, Agriculture and Biosecurity (the Department) collaborates and partners with our stakeholders to protect and enhance the productive and sustainable use and resilience of agricultural resources and the environment.

The Department's advice is guided by section 4.15(1) of the *Environmental Planning and Assessment Act 1979* (EP&A Act), which requires a consent authority to evaluate a project's potential environmental, social, and economic impacts, as well as the public interest. Sections 1.3(a) and (b) of the EP&A Act emphasise facilitating ecologically sustainable development in land use decision-making and promoting responsible resource management that benefits present and future generations.

We understand that the NSW Independent Planning Commission (IPC) will act as the consent authority for the project under section 4.5(a) of the EP&A Act, due to the receipt of over 50 submissions objecting to the project, according to section 2.7 of the State Environmental Planning Policy (Planning Systems) 2021.

The Department's response (OUT23/11893) to the Environmental Impact Statement (EIS) review, dated 2 August 2023, requested additional information. This additional information has been reviewed, and the following concerns and comments are provided.

1. Land Use Conflict Risk Assessment (LUCRA)

It is considered that the LUCRA generally addresses the project's risks and includes appropriate mitigation measures. It is noted, however, that no seasonal activities have been discussed. This will require consideration as part of continued dialogue with relevant landowners. Potential risks to stock movement along roads due to increased traffic have been addressed through consultation

with relevant landowners, and associated mitigation measures have been applied. Reference is made to the potential widening of Spring Mountain Road at the Gwydir Highway intersection, depending on the final design of the cadastral alignment and that there may be a small intrusion into a Travelling Stock Reserve (TSR) (Crown reserve 67474, Lot 7301 DP 1165765). NSW Local Land Services should be consulted on any impacts associated with TSRs.

The Department is concerned that the risk associated with the removal of agricultural land is likely underestimated, given the land's quality and its importance for livestock and cereal production within the broader landscape.

2. Level 3 – detailed agricultural impact assessment consistent with the requirements of the Large-Scale Solar Energy Guideline (LSSEG) 2022.

This has been addressed in Appendix D Soil, Land and Agriculture Assessment (SLAA).

The SLAA outlines the agricultural significance of the Inverell LGA, identifying grazing and cropping as dominant land uses, with beef cattle as the primary industry. The subject site is currently used for beef cattle and cropping and comprises LSC Classes 2, 3, 4, and 6, with over 50% of the disturbance area classified as Class 3. It has high Estimated Inherent Soil Fertility (EISF), is mapped as Biophysical Strategic Agricultural Land (BSAL), and appears on the draft State Significant Agricultural Land (SSAL) map, indicating its value as a high-quality agricultural resource.

Two methodologies are used to estimate the site's agricultural value. The first, based on DPI cattle enterprise options, estimates a gross margin of \$811,119.60 for the project area and \$236,722 for the disturbance footprint. The second, using ABS data for the Inverell Local Government Area (LGA), estimates a gross value of \$658,656 for the project area and \$190,319 for the disturbance footprint. However, the ABS-based method generalises land quality from across the LGA without accounting for productivity differences. The estimate uses 'grazing land' (399,962ha), which is derived from two categories: 'improved pastures' (170,490ha) and 'other land' (229,472ha). This undermines the accuracy and credibility of the valuation due to the high quality of the subject site. A more robust approach would differentiate land types and incorporate historical enterprise income to reflect actual land capability and economic performance for the agricultural land being removed.

The SLAA concludes that agricultural impacts are negligible due to the proposed implementation of agrisolar (sheep grazing) during the operational phase. While a framework for agrisolar is included, there is no mention of infrastructure to support sheep husbandry, such as stockyards or shearing facilities, despite the site currently operating as a cattle enterprise.

The Department is concerned that without a clear and feasible plan for agrisolar, including the assurance of compatible solar infrastructure design, the assumption that agrisolar will offset the economic loss is speculative. If agrisolar is not effectively implemented, the current agricultural economic value will be lost.

3. A soil survey and Land and Soil Capability Assessment Scheme (LSC) (Second Approximation) Class verification consistent with the requirements of Appendix A of the LSSEG 2022, specifically with regard to inspection density.

The soil verification provided 30 test sites for analysis. The soil verification has determined that the disturbance footprint comprises soil types Vertosols and Dermosols, and includes LSC Classes 2, 3, 4, and 6 land. Class 3 land occupies over 50% of the development.

It is noted that a design revision has reduced the development footprint from approximately 651ha to approximately 525ha, and the overall disturbance footprint from approximately 729ha to approximately 612ha. The reduction was primarily aimed at reducing biodiversity impacts and preserving habitats, without considering the avoidance of LSC Class 2 and 3 land.

The Department is concerned that impacts on productive land have not been avoided as per the LSSEG, which states that once the agricultural quality and capability of the land are determined, the results should be used to design the project layout, thereby avoiding impacts on productive land.

4. An assessment of the cumulative impact of the proposed development and other large-scale renewable energy developments on land mapped as LSC Classes 2 to 4 in the LGA and the region.

The SLAA identifies three operational renewable projects, with another three approved but not yet operational. It is estimated that a cumulative 3,000ha across the Inverell and Glen Innes Severn Local Government Areas (LGA) of project disturbance footprints will occur on Class 3 land. The SLAA has determined that this represents 0.4% of the total agricultural land (798,166ha) in the Inverell and Glen Innes Severn LGAs.

The Department is concerned that this may not provide an accurate or meaningful comparison as it aggregates land of varying quality and productivity.

To ensure a meaningful and precise comparison, it is essential to clarify what qualifies as 'agricultural land' in this context. More importantly, land classified as LSC Class 3 should be compared with other LSC Class 3 land within a land zone that permits agriculture. For example, Inverell & Glen Innes Severn LGAs have a combined 239,919ha (approx.) of Class 3 land in a land zone that permits agriculture, and 3,000ha of Class 3 would represent 1.25%. Without this level of granularity, the cumulative impact analysis risks underrepresenting the strategic value of the land affected, and the data may obscure the actual value and significance of the land in question.

Proposed Conditions of Consent

Should the project be approved, the following should be included in the conditions of consent.

1. Solar panel construction and installation must be undertaken, as outlined in the EIS, to ensure that sheep grazing can proceed effectively.
2. The preparation of a Grazing Management Plan in consultation with NSW Local Land Services to detail appropriate grazing practices such as stocking rates, groundcover management and biosecurity arrangements. The plan should also include a reference to infrastructure needs.
3. The preparation of a Decommissioning and Rehabilitation Plan, which details the measures required to return the site to its pre-development condition or better, enabling agricultural operations to be undertaken.
4. Upon decommissioning, all below-ground infrastructure to a depth of 500 mm must be removed, and the development must be disconnected from the electricity network.

5. The preparation and implementation of a Biosecurity Management Plan is required, focusing on pedestrian, materials, equipment and vehicle movements during construction and operation, which may affect the distribution of weeds, pests and animal diseases and therefore potentially impact agricultural productivity at the site and locality. The Department recommends that the Biosecurity Risk Management in Land Use Planning and Development Guide be referred to the proponent for further information.

Should you require clarification on any information provided, please contact Lilian Parker, A/Manager Agricultural Land Use Planning, on 0412 424 397 or by email at landuse.ag@dpird.nsw.gov.au.

Sincerely

L Parker

Lilian Parker
A/Manager, Agricultural Land Use Planning
Agriculture & Biosecurity

Esigned 18-7-2025