# 3 August 2023

Director-Energy Assessments
Development Assessment
Department of Planning and Environment
Locked Bag 5022
PARRAMATTA NSW 2124

**Dear Director** 

#### OBJECTION TO APPLICATION NO. SSD-8911 BY SUNDOWN SOLAR PTY LTD

### Overview

As the owner of the property most significantly adversely affected by the proposal, I object in the strongest possible terms to the current proposed development of a 360MW solar farm, battery energy storage and grid connection at Sturmans Road Spring Mountain by Sundown Solar Pty Ltd (the "applicant"), application no. SSD-8911 (the "proposed development").

My property is a 693ha (1715 acre) property located along Spring Mountain Road. My husband and I have owned this farming operation since 1969. My husband has been increasingly unwell for some years and required constant care.

Our property is zoned for primary production. We have been farming and grazing this country for 54 years. The grazing operations are my only means of support. I am currently running cattle and sheep.

My home is the dwelling described as R15 on various maps in the Environmental Impact Statement ("EIS") for the proposed development. R15 borders and is immediately adjacent to the project area for the proposed development. The site of the proposed development is, at its closest point, less than 2 kilometres from my home. My home is situated approximately 45 metres from Spring Mountain Road. My vegetable garden is approximately 4 metres from Spring Mountain Road at its closest point. The proposed access by the applicant to the proposed development is via Spring Mountain Road and Sturmans Road. My property is intersected by both these local roads.

Spring Mountain Road and Sturmans Road are currently 4-metre-wide unsealed roads. They are both no through roads. Having lived at R15 for 54 years, I can say that on average, approximately 16 vehicles per day drive past my home on Spring Mountain Road. These are mostly neighbours going to and from their homes. I use this road to travel to and from Inverell and Glen Innes. I use both Spring Mountain Road and Sturmans Road as a motorist and pedestrian to travel around areas of the property. Both roads are critical for me to move my stock from one paddock to another, including to and from the stockyard in the paddock next to my home.

In summary, I object to the application on the following grounds:

- Health and safety
- Noise and vibration
- Loss of amenity
- Adverse business impacts and financial loss
- Cumulative impacts
- Use of public access roads

## **HEALTH AND SAFETY**

### Traffic

The EIS refers to a proposal by the applicant to widen Spring Mountain Road and Sturmans Road to a width of 8.76 metres and for the roads to be compacted and gravelled. This is a breach of the Austroads design standard for rural roads. Appendix I to the EIS

(Traffic Impact Statement) Table 3.6 states that the Austroads design standard for traffic of 150-500 vehicles is a 7.2 metre wide sealed road.

At paragraph 3.4.1 the EIS states that the purpose of widening these roads is to accommodate 26-metre B-double trucks. Table 6.37 at page 182 of the EIS states that the daily baseline and development traffic volume is expected to be 478 vehicles per day on Spring Mountain Road. The construction phase, during which there will be the heaviest traffic volumes, is expected to last for 21 months: see paragraph 6.6.3 of the EIS.

As well as the frequent movement of heavy trucks, there would also be heavy traffic due to construction and operating workers travelling to and from the proposed development. According to paragraph ES.5.6 of the EIS, construction works are scheduled to occur from 7 am to 6 pm Monday to Friday and from 8 am to 6 pm on Saturday. There would be a peak construction workforce of about 400 people (Appendix H, paragraph 2.1.1). Peak project construction workforce traffic is predicted to consist of 14 shuttle buses and 100 light vehicles each day (Appendix I, table 5.1). If workers are required to start work at 7 am and finish at 6 pm, it can be expected that this traffic will commence past my home from about 6.30 am and will continue until about 6.30 pm each day. This extends the true period of traffic movement by about 1 hour each day beyond the assumptions in the EIS.

Other assumptions used in the EIS (e.g. in Appendix H, Noise and Vibration Impact Assessment) include that vehicular traffic associated with the proposed development will travel along Spring Mountain Road and Sturmans Road at the default speed limit of 100 kmh.

This huge volume of heavy vehicle traffic travelling at high speeds and carrying hazardous materials greatly increases the risk of accidents and will expose me and other local residents to dangers to our safety as motorists, pedestrians and as graziers mustering stock along these roads. Local residents, some elderly, have no option but to use Spring Mountain Road and Sturmans Road to purchase supplies and access services from Inverell and Glen Innes.

Even if the applicant complied with the Austroads design standard and sealed Spring Mountain and Sturmans Road, that would not alleviate most of the extreme adverse impacts to health and safety which I, other local residents and our stock and farm animals would suffer from the use of these roads as access, most particularly the risks to our health and safety from the huge volume of traffic, including by heavy trucks.

I am concerned about the risks to my health from the stress of living so close to these extreme traffic movements along the proposed access roads.

Despite these obvious safety and health risks and the profound adverse impact on local residents from this increased traffic, the EIS contains no risk assessment of the impact of this increased traffic on Spring Mountain Road and Sturmans Road. Appendix I (Traffic Impact Assessment) paragraph 4.1 and Table 4.1 asserts that this risk assessment is contained in paragraph 6.4 of Appendix I. However, paragraph 6.4 does not address the risks of using these access roads at all.

#### Dust

Another safety implication is the dust which would be generated from the use of Spring Mountain Road and Sturmans Road from such frequent heavy traffic so close to my home. Paragraph 6.11.4 of the EIS at page 225 refers to "reduced rural amenity" due to dust and asserts that "dust generation will be mitigated using standard construction techniques such as the use of water carts and screens". It is not just a matter of loss of amenity, serious though that is. Increased levels of dust due to the heavy traffic on Spring Mountain Road and Sturmans Road will be dangerous to

my health and the health of my stock and farm animals. The use of water carts and screens will plainly not eliminate the adverse health effects of dust on these public access roads.

Appendix J to the EIS at paragraph ES3 states that during the construction phase of 21 months, it has been estimated that 75 megalitres of water is required, principally for water carts to reduce dust. This seems a relatively small amount of water to ameliorate the effects of dust over the two proposed access roads for such a long period. The distance from the intersection of the Gwydir Highway to the closest access to the proposed development on Sturmans Road is 10.23 kilometres. So far as I can tell, nowhere in the EIS is the basis for the calculation of 75 megalitres provided.

The EIS does not appear to address at all the adverse health impacts to people and stock due to dust and certainly has not attempted to measure these risks. For example, in relation to stock, it is well known that stress and dust cause Bovine respiratory disease (<a href="https://www.mla.com.au/research-and-development/animal-health-welfare-and-biosecurity/diseases/infectious/bovine-respiratory-disease">https://www.mla.com.au/research-and-development/animal-health-welfare-and-biosecurity/diseases/infectious/bovine-respiratory-disease</a>). However, there is not a word addressing this critical issue in the EIS.

In short, the use of Spring Mountain Road and Sturmans Road as access roads to the proposed development is wholly unsuitable and approving the proposed development would endanger the lives and well-being of residents and their stock and farm animals.

# **NOISE AND VIBRATION**

### Noise

My farm is an extremely quiet rural environment. To use the language of the Noise Policy for Industry 2017, my farm is an area with an acoustical environment that is dominated by natural sounds, having little or no traffic noise and generally characterised by low background noise levels.

Table 6.26 at pages 162-163 of the EIS assesses the noise impact of the construction phase of the proposed development at 21 sites, including my home at R15. My home is the worst affected by construction noise of all the sites, with predicted construction noise levels of 66dB in Stage 1 of construction and 67 dB in Stage 2 of construction. Both of these levels do not comply with Noise Management Levels set by the Interim Construction Noise Guideline. These breaches of the Guideline are said to be due to the upgrade of the access roads for heavy trucks and machinery.

Using assumptions including that the existing traffic movements on Spring Mountain Road and Sturmans Road are "less than 50" movements per day (it is, in fact, currently only about 16 movements) and that project traffic would travel along these roads at the speed limit of 100 kilometres per hour, the EIS at Appendix H predicts traffic noise due to construction to increase from 39 dB at present to 50 dB on Spring Mountain Road and from 20 dB at present to 30 dB on Sturmans Road. These are significant increases and it is unclear to me whether these assumptions are appropriate and what the impact of more realistic assumptions would be on the predicted noise levels.

Table 7.3 of Appendix H to the EIS states that my residence and one other location will suffer "highly intrusive noise".

## Vibration

My home and another residence are the worst affected sites assessed in the EIS for adverse impacts from vibration. At paragraph 6.6.3 on page 164, the EIS states that vibration levels at my home (R15) and a neighbouring home (R14) during Stage 1 of construction "may exceed the levels for human comfort if the size of the vibrator roller used to construct the access road is greater than six tonnes".

Appendix H to the EIS (Noise and Vibration Impact Assessment) at Table 5.2 on pages 26 identifies that 5 vibratory rollers over 18 tonnes will be used during Stage 1 and Stage 2 of construction (a predicted period of 17 months). This means that the level of vibration during construction will be intolerable for me.

The mitigation measures suggested in paragraph 7.3 of Appendix H (notification, verification (i.e. measurement) and respite offers ) are cosmetic and will not eliminate the adverse impacts of vibration if the current access roads for the proposed development are approved.

## Generally

Noise and vibration assessments in the EIS are based on proximity to residences. The border of my property adjoins the project area for the proposed development. The EIS does not acknowledge potentially sensitive land uses of neighbouring properties. Typically, farmers and graziers such as myself may spend large amounts of their working time in their paddocks, including those adjacent to the site. Noise and vibration impacts on me and my stock when in neighbouring paddocks are not considered by the EIS.

## **LOSS OF AMENITY**

The loss of amenity for me from the proposed development, and in particular from the use of Spring Mountain Road and Sturmans Road as access roads, will be profound. It involves no overstatement to say that it will destroy my quality of life on the farm and in my home.

The farm (R15) is zoned RU1 Primary Production within the Inverell Local Environmental Plan 2012 (Inverell LEP). The objectives of this zone as stated by the Inverell LEP are:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.

In relation to my farm, each of these objectives will be thwarted by the proposed development, and in particular by the use of the public access roads to the proposed development.

Instead of quiet country laneways (which are no through roads) intersecting my property being used by me and a handful of neighbours, during the construction phase, Spring Mountain Road and Sturmans Road would be used by many hundreds of vehicles per day, including hundreds of daily movements of 26-metre B-double trucks. This traffic would commence from very early in the morning until evening six days a week just a few metres from my home and over the whole of the property.

It is obvious that the proposed development would fundamentally adversely affect my life both personally and as a farmer and grazier who has lived at this farm for more or less the whole of my adult life.

## ADVERSE BUSINESS IMPACTS AND FINANCIAL LOSS

# **Mustering livestock**

The huge volume of heavy vehicle traffic travelling at high speeds and carrying hazardous materials along the proposed access roads of Spring Mountain Road and Sturmans Road will make these roads impossibly unsafe to use as a means of mustering my stock.

Spring Mountain and Sturmans Roads form essential arterial routes for the safe and effective movement of livestock across paddocks on the property. This has been the case since I commenced farming here in 1969. The negative impact on the day-to-day operations and overall viability of the business cannot be overstated. The implications are significant to the

extent that I will not be able to get stock back to the stockyards in order to undertake regular and critical animal husbandry activities. My livestock are the financial lifeblood of my operation and the ongoing prosperity of my business will be put at significant risk.

## Impact on health of livestock

I am concerned about the health impacts on my stock from the stress of noise, dust, vibration and traffic due to the use of the two proposed access roads for the proposed development. These impacts are well documented: see <a href="https://www.dairyglobal.net/health-and-nutrition/health/effects-of-noise-on-cattle-performance/">https://www.dairyglobal.net/health-and-nutrition/health/effects-of-noise-on-cattle-performance/</a>

The paddocks nearest to my home are used as birth-to-weaning paddocks to ensure I and my staff can closely monitor young livestock. I am particularly concerned that the stress due to noise, dust, vibration and heavy traffic from large trucks will increase the mortality rate of young livestock.

#### Risk of fire

Appendix L to the EIS (Bushfire Impact assessment) states that the proposed development is on land identified as bushfire prone. It also confirms that the region has experienced an average of 170 bushfires per year with an average of 5 major bushfires a year. However, Appendix K to the EIS (Preliminary Hazard Analysis) contains a completely superficial analysis of the consequences of fire from the proposed development to neighbouring properties. Table 5.4 identifies fire hazards due to electrical conversion systems, the battery energy storage system, substation fire and bushfire but in each case in relation to the consequences of fire, makes the facile statement that "as there is a large separation distance ... to the nearest non-project related residential dwelling, the effects are not expected to have an off-site impact".

My property immediately borders the project area, and my home is less than 2 kilometres from the proposed development at its closest point. During my 54 years at the farm, many threatening bushfire events have occurred. The likelihood of a fire having a devastating consequence for me, my stock, animals and vegetation is entirely foreseeable yet has been completely dismissed in the EIS.

## Increased insurance premiums and other direct costs

Nowhere in the EIS is there any statement by the applicant that it will cover the additional insurance costs which I would be likely to incur as an adjoining landowner due to the proximity and risk of the proposed development. Nor is there any statement by the applicant that it will indemnify me for any losses I may suffer from fire or other hazards caused by the proposed development or costs I may incur from forced land use practice changes.

In the NSW Agriculture Commissioner's Report dated 8 November 2022 entitled "Renewable energy generation and agriculture in NSW's rural landscape and economy- growth sectors on a complementary path" the following findings and recommendations are made at page 73:

"Landholders neighbouring renewable energy developments should not be adversely affected by increased insurance costs or forced land use practice changes which have commercial costs. Project applicants and these landowners should reach agreements to ensure this principle is implemented.

Rural fire services are aware that fires on or near large-scale solar energy facilities present tactical challenges; while these are similar to those seen with existing transmission infrastructure, state and national fire organisations are developing research programs, guidance material and operational procedures to identify and manage local conditions and site-specific risks."

## **CUMULATIVE IMPACTS**

Each of the impacts set out above, health and safety, noise and vibration, loss of amenity and business impacts and financial considered separately, are highly adverse to me both personally and as a farmer and grazier. However, these impacts ought not merely be considered separately. I will suffer all of these adverse impacts cumulatively. Considered cumulatively, those adverse impacts are profound.

## **USE OF PUBLIC ACCESS ROADS**

Many of the more extreme adverse consequences of the proposed development would be avoided if Spring Mountain Road and Sturmans Road, which are public roads, were not used as access roads for the proposed development.

Yet the EIS itself identifies an alternative option which is a shorter and more direct route to the proposed development, which does not pass by any homes and which would avoid many of the adverse consequences to local residents and their primary production enterprises.

Moreover, the reasons why the applicant has stated in the EIS why it has chosen to prefer the extensive disruption which would be caused by using the public roads over this more direct alternative route do not withstand critical scrutiny.

The shorter and more direct route to the proposed development is a private road west of Spring Mountain Road identified on the maps between pages 82 and 94 of the EIS. There are no homes near the route of that road. Indeed, Appendix L (Bushfire Impact Assessment) at paragraph 3.5.1 refers to this road as an existing rural access road and recommends that "right of way access should be retained for emergency management for the solar farm". In other the use of this alternative road is required in any event for the purposes of the proposed development.

There is a reference to "private land access constraints" at page 19 of the EIS but the only elaboration of the consideration of the alternative route is at pages 21 and 80 of the EIS.

At page 21 of the EIS, the following statement is made in Table 2.3: "Two site access options were considered, namely:

- a private road from Gwydir Highway to the north of the site
- Spring Mountain Road and Sturmans Road.

The private road option was found not to be feasible as it would have required construction of a new highway intersection and would have potentially resulted in a greater amount of high biodiversity value vegetation being cleared in comparison to the selected access route. The proposed access road was selected as it only requires minor upgrades to the existing Gwydir Highway/Spring Mountain Road intersection. The upgrade will result in improved safety for users of the highway. Similarly, the upgrade of Spring Mountain Road and Sturmans Road will improve public safety and accessibility for residents using that route."

A somewhat different slant on the options is stated on page 80 in Table 6.6 as follows: "Two access road options were considered at early design phase:

- Spring Mountain/Sturmans Road
- an alternate route via a private road west of Spring Mountain Road.

The Spring Mountain Road/Sturmans Road option was selected over the alternative private road access for several reasons, including:

- less disturbance required to upgrade Spring Mountain Road/Sturmans Road
- avoidance of better-quality roadside grassland vegetation
- avoidance of over 62 Bluegrass plants and 1098 Austral Toadflax plants occurring along the private access road.

That is, the access route option selected requires "less road upgrades and supports fewer threatened flora records in roadside vegetation."

Neither of these sections of the EIS contain any real analysis of the options. They merely assert conclusions based on two asserted factors:

- 1. A lower cost to the applicant in upgrading the intersection of Gwydir Highway with Spring Mountain Road instead of the intersection of Gwydir Highway with the private road; and
- 2. less impact on vegetation in using Spring Mountain Road and Sturmans Road.

Neither of these reasons make using the private road not "feasible" as asserted on page 21 of the EIS. Indeed, the road is not only "feasible", it is recommended as essential in Appendix L of the EIS for emergency management.

In relation to the upgrade to the intersection, if the intersection to the private road does involve more cost (the amount of which is not stated, let alone explained), that cost to the applicant is clearly outweighed by the major impacts to the health and safety of local residents due to high volume heavy vehicle traffic, noise, vibration and dust. The human costs and the fragmentation of the primary production businesses of residents must count for more than some unstated additional financial cost to the applicant.

In terms of impact on vegetation, there would be negative impacts to vegetation due to the proposed widening of the public access roads from 4 metres to 8.7 metres over a distance of 10.23 kilometres (see Appendix I at paragraphs 3.3 and 3.4). The direct and indirect impacts on vegetation and biodiversity of the project as a whole are not insubstantial in any event. They are set out in section 6.1.4 of the EIS at page 95. Even if there were greater impacts on vegetation from using the private road, again, this is clearly outweighed by the human costs and the costs to the livelihood of residents from the proposed use of these access roads. To suggest, as the EIS does at page 21 that the "upgrade" of the public access roads and the associated increased construction traffic of hundreds of vehicles including heavy-duty trucks, six days a week will improve public safety is obviously false.

The private road is only 4 kilometres from the Gwydir Highway to the site of the proposed development, whereas the distance is more than 10 kilometres using Spring Mountain Road and Sturmans Road. It would clearly be far more efficient for the applicant to use this private road for access, not only in the event of an emergency, but because it would considerably minimise the adverse impacts to the community.

In any event, there is no reason to conclude that the access road options are binary and that it is only a choice between using the public roads Spring Mountain Road and Sturmans Road on the one hand and the private access road referred to in the EIS on the other hand. If, for whatever reason, the alternative access road referred to in the EIS is considered unsuitable, then the applicant should be required to consider and put forward other alternative access proposals which do not involve massive dislocation and fragmentation to local residents and their businesses.

# **CONCLUSION**

For all of the above reasons, I believe it is clear that the proposed development will have extremely severe adverse impacts on me and that of my farming operation. I believe that if the proposed development in its current form proceeds it will make the rest of my life unbearable. It will destroy my life's work.

Application No. SSD -8911 in its current form, involving the use of Spring Mountain Road and Sturmans Road, should be rejected. Access to the proposed development should not be permitted to be via Spring Mountain Road and Sturmans Road. Many of the most severe adverse effects would be avoided if there was alternative access to the proposed development. This could be via the private road west of Spring Mountain Road referred to in the EIS. Alternatively, the applicant should be required to put forward another access route to the proposed development which does not have the profound adverse effects on my home and farming operation and other neighbouring properties in Spring Mountain which the proposed development in its current form creates.