

To: Director – Energy Assessments
Development Assessment
Department of Planning and Environment
Locked Bag 5022
Parramatta NSW 2124

Name of Project: Middlebrook Solar Farm

Application No: SSD-10455

STATEMENT OF OBJECTION

I am a close neighbour of the proposed Middlebrook Solar Farm, owning with my husband the property known as ‘Brooklyn’. Our property has residences at 1562 Marsden Park Road, Loomberah (Receptor number 15) which is occupied by our daughter and her partner, and 1450 Marsden Park Road, Loomberah (Receptor number 24) occupied by my husband and me. The 1562 address incorporates the full-time office of our daughter’s Legal and Conveyancing practice. Our daughter and her partner run a fully accredited and highly awarded Poll Dorset Sheep stud on ‘Brooklyn’, whilst my husband and I conduct a commercial cattle breeding operation on the property. We have owned the property since 2002 and during our period of ownership have invested heavily in capital and operational improvements and residential infrastructure.

I have read the Environmental Impact Statement (EIS) and have carefully analysed several of the appendices thereto, whilst I have called on experts to provide comments and suggestions on the balance of the EIS documentation. I have also over many months researched planning criteria, likely impacts of solar farms on local communities, and global cost/benefit analyses of renewable energy projects. With other members of my family, I have endeavoured to participate fully in the so-called “consultation” process undertaken by Total Eren. We have had detailed face-to-face consultations with NGH Pty Ltd representatives (Moir Landscape Architecture photographers and Lisa Hamilton). We have also had lengthy face-to-face meetings, phone conversations and email correspondence with Dr Sherry Mohajerani, Total Eren’s Senior Development Manager for the project.

I object to the proposed Middlebrook Solar Farm development for the below reasons.

1. (a) The EIS conclusions are arrived at against **a background of perceived altruism often delivered with a self-serving condescension which sees some unrealistic conclusions being reached**, particularly in relation to subjective issues.

There are obviously many levels at which the merits of a project can be viewed – neighbourhood, local, regional, state, national and global. There will inevitably be conflicts. It should not, however, simply be assumed that the “greater good” will always outweigh local interests.

There are many instances of EIS conclusions being justified by reference to political or planning goals with local interests being dismissed as of low significance, often with reference to a non-definitive guideline.

A recent US study: “House of the Rising Sun: The Effect of Utility-Scale Solar Arrays on Housing Prices” by Vasundhara Gaur and Corey Lang published this year in the journal of Energy Economics found that in some instances *‘local disamenities are the same order of magnitude as the global benefits of abated carbon emissions, which helps explain local opposition to siting.’* The study found some instances in which local costs outweigh global benefits. In this context it is unreasonable to repeatedly dismiss the magnitude of local (neighbour) costs as “low impact”.

- (b) Such condescension is again evoked in the references in the EIS to Total Eren being, in effect, a model citizen with a right to planning fast tracking by the project’s inclusion in the

Priority Assessment Program *‘acknowledging its strategic alignment with government policies and ability to make fast and significant contribution to the renewable energy transition in NSW’*.

This alignment is cited in the EIS as justification for gaining approval (EIS p. xxxi, Executive Summary). One might conclude that rather than justification, assessments made under the Priority Assessment Program require less scrutiny and impartiality. Such perception gives rise to a feeling of an unequal playing field and resulting resentment amongst those who would be affected by the development. That response is heightened by statements in EIS Table -5 – for example in analysing the participation criterion the project is *‘working with NSW’s most experienced environmental consultants to raise the bar for delivering environmental and socially appropriate [projects] the community can trust.’*

Despite numerous references in the EIS to negotiated neighbourhood agreements, to the best of my knowledge none have been reached. This has largely been due to the applicant’s refusal to offer anything other than token amounts in the context of the size of the project and the impact on neighbours. Accordingly, there has been no resolution to the conflict.

Similarly in 8.2.2 (Project Response) on p.307, the EIS states that *‘key decisions were made to “raise the bar” for other developers so that the broader industry can address [community concerns] and become the positive transition to a more renewable generation future that is required’* yet Total Eren representatives merely state “I hear you” when concerns are raised in relation to the impacts on neighbours and have not yet offered any realistic compensation to neighbours or adjustments to the proposal to address our concerns.

I have no confidence that the Middlebrook Solar Farm will *‘raise the bar for successive developments in the region, including in the REZ’* (p.309). I feel uneasy when constantly being told the applicant will deliver a project I can trust.

2. **The Project is not in a Renewable Energy Zone (REZ).** I appreciate that planning guidelines do not require solar farms to be located in a REZ, however there are certain principles which would be served by locating projects within a REZ.
 - (a) The fact that solar developments already exist outside REZs in NSW is not justification for locating new projects outside the zones. Existing developments were approved before the zones were first declared (EIS p.10).
 - (b) There are areas within the New England REZ which have access to existing high voltage transmission lines.
 - (c) The EIS states at p.14 that *‘REZs are being strategically located by the NSW Government to concentrate power generation, transmission and storage’*. To allow solar farms outside REZs runs contrary to this principle and defeats the objective of providing certainty to developers and the community.
 - (d) The limiting factors detailed in the Community profile (Appendix D6 of the EIS) of labour and skills compounded by lack of housing is a likely reason the Tamworth Local Government Area was largely omitted from the New England REZ.
 - (e) The potential cumulative effects of other major projects listed for Tamworth is another issue which calls into question the decision to propose a solar farm outside the REZ. The NSW Government EnergyCo website states that the benefits of the REZs include *‘host community benefits through strategic planning and best practice engagement’*. As noted above, the community engagement conducted thus far by Total Eren has been lacklustre at best. Further, the EIS clearly demonstrates a lack of appropriate strategic planning. In fact, Total Eren has evidently been completely unwilling to consider the cumulative impacts of

Middlebrook Solar Farm and the nearby proposed Acacia Solar Farm, also slated for development in the Marsden Park Road area, on the viability of the projects individually and on the local community. The cumulative impacts of other large projects (for example the Tangaratta Feedmill and expansion of the Baiada Processing Facility) slated for construction in Tamworth in the near future have also been ignored in the proposal.

It would be a poor public policy outcome if developments outside REZs were to receive less due diligence and strategic planning than those inside the REZs. Alternatively, it could be that developers like Total Eren are seeking to avoid the high standards that must be met within the REZs in order to save costs at the expense of the local community. If that is the case, it would be counterproductive if the introduction of REZs, meant to centralise this kind of development in suitable zones, were to in fact incentivise renewable energy development elsewhere.

- (f) Similarly, it would be a poor result if instituting the REZs were to drive developments away from the designated areas in an effort by developers to minimise the costs associated with reasonable benefit sharing. Another benefit listed by the NSW Government EnergyCo website is that REZs will incorporate '*formalised benefit sharing arrangements*'. I am aware that in renewable energy projects elsewhere it is becoming commonplace to set out a proposed formal benefit sharing scheme, including community fund contribution amounts, neighbour benefit sharing formulae, energy offset programs and landscaping programs. This has not been done for the Middlebrook Solar Farm. There has been no formal benefit sharing arrangement proposed by Total Eren beyond vague promises to provide to a community benefit fund and '*develop a model*'. As noted above, nonbinding references to potential payments under neighbour agreements during the consultation process have amounted to no more than token sums (especially in comparison to the formalised programs offered in other renewable energy contexts such as wind farms) and any attempts to discuss options for alternative benefit sharing arrangements have been repeatedly delayed by Total Eren's representatives.
- (g) There will be advantages of scale and reduction in the carbon footprint of construction if projects are concentrated in the REZ rather than being allowed to spill into other locations. For example, the EIS identifies at p. 278 the possibility of specialist industries such as '*cost effective local recycling*' which '*may be available at the time of [Li-ion] battery replacement or decommissioning*'. The '*emerging opportunity*' for REZ concentrations is further explored in the EIS in relation to waste disposal generally (p.277).
- (h) The advantages of locating solar farms within REZs is again highlighted in Table 7-15, however the EIS argues projects will also be necessary outside REZs. The converse argument is simply that more projects should be planned within REZs to achieve the stated objectives of the Zones and also more renewable energy generation. To do otherwise is to admit the lack of rationale for REZ implementation and to abandon the concept of providing certainty to all parties.

Total Eren has made no attempt to make the case for the necessity of siting this development outside the New England REZ. I cannot understand why Total Eren's desire to align the project with various Australian, NSW and Local Government policies encompassed in the Renewable Energy Policy context could not also be achieved within a REZ, thereby achieving further planning objectives. Total Eren should be required to explain why it cannot site a proposed solar farm of this scale within a REZ set up for precisely that purpose. At the very least, the proponent should be required to demonstrate that its proposal meets the community benefit and strategic planning objectives that would be expected of a development within a REZ.

3. **Community engagement and consultation has been a box-ticking exercise** with much stating of “we hear you”, but little meaningful response.

Whilst I understand some of the reasons why Total Eren has selected the Middlebrook site, the company has made no real attempt to understand why locals oppose it. As recently as an email on 20 July 2023, Dr Sherry Mohajerani wrote to me: *‘we would like to understand your view on how the proposed project may impact your lifestyle and how any potential impacts may be mitigated.’* This response came after:

- (a) Discussions with a representative of Total Eren, Luke Scott, when the project was first raised with us a number of years ago;
- (b) A lengthy (more than two-hour duration) face-to-face consultation with Dr Mohajerani also involving my husband and daughter on 20 June 2023 in our house looking at the site.
- (c) Numerous lengthy telephone conversations with Dr Mohajerani;
- (d) Email communications with Dr Mohajerani over a number of months;
- (e) A lengthy “interview” with Lisa Hamilton from NGH on 28 April 2023 also involving my husband and daughter. We recognise unattributed comments in the Social Impact Assessment from that interview.

I recognise some of our responses may have been emotive in those discussions but at all times we have been respectful and sought to engage with the Total Eren representatives. On each occasion I have been left feeling the Total Eren representatives are just doing their job of “consulting”. They leave us feeling that they have no understanding of rural lifestyle or rural character.

The only time there has been any substantive engagement was when we discussed with Dr Mohajerani the possibility of a roadside garbage service for Marsden Park and Middlebrook Road residents as a possible community project. Unfortunately, there is no mention of this suggestion in the EIS to the best of my knowledge.

As dust and road conditions (both during construction and on an ongoing basis) are a major part of my family’s concerns we have regularly mentioned the need to upgrade the Marsden Park and Middlebrook Roads to bitumen standard. This has effectively been scoffed at.

The possibility of an annual financial payment by way of compensation has been raised by Total Eren, however only a token amount has been mentioned. This is despite frequent references in the EIS to a voluntary Neighbouring Benefit Fund and similar. We are frequently implored in the EIS to a simply trust the proponent. How can we properly assess the impact of the project on us if the company is not prepared to have meaningful discussions with us concerning benefit-sharing arrangements? The most recent communications I have had with Dr Mohajerani have not advanced this issue with comments to the effect that payments are more appropriate for wind farms. There has been no attempt to explore appropriate compensation or show true leadership despite numerous references in the EIS to the applicant striving to be an industry leader in project development, delivery and community engagement.

4. The project will **severely impact the visual amenity from both houses on our property** and also from many vantage points on our farm.

The Visual Impact Assessment (VIA) is deficient, inaccurate and misleading. An independent assessment should be commissioned or at least a peer review obtained at the proponent’s expense. I draw attention to the following issues:

- (a) The assessment approach (6.1.1 EIS) states: *'In addition to the proposed PV arrays, the associated infrastructure has the potential to contrast with the existing visual landscape'*. However, the photomontages in particular do not depict the substation, transformers, security fencing, inverters/batteries, site office, carpark, administrative or staff amenity buildings. In other words, infrastructure assessed as likely to contrast with the existing visual landscape has been omitted from the analysis.
- (b) The likely appearance of the 6ha substation has not been disclosed.
- (c) The visual sensitivity assessment understates the true impact in terms of both viewer sensitivity and scenic quality. Whilst the number of viewers might be limited the duration of the view is extensive and pervasive. From the living, office and recreational areas of both houses on our property the solar farm will be visible in almost its entirety. From Receptor 15 (and other receptors) the sensitivity is only recorded as moderate. It is not assessed for Receptor 24 (for reasons unknown) notwithstanding its impact on our main view line.

The duration of the view from both receptors is virtually 'all waking hours' as our homes are also our workplaces. Additionally, they will be seen from many parts of our farm, so whether we are at home, in the office, spending recreational time in our garden or working at many vantage points on our property, we will be exposed to the full expanse of Middlebrook Solar Farm.

- (d) I appreciate that the Visual Landscape Architects have employed the *'new [standardised] method of assessing magnitude of change'* to "quantify" the impacts as set out in the Technical Supplement, however planning advisors and landscape architects I have consulted have informed me that these Guidelines are not without critics:
 - i. This is a 'revolutionary' approach apparently not employed elsewhere in the world.
 - ii. I understand the Guidelines are accepted as a way of making an objective assessment, however such assessment is not seen as effective as it is trying to standardise a subjective impact. As noted at p.79 of the EIS, under Community Values: *'landscape values are highly subjective'*.
 - iii. I understand the Guidelines are already under review.
- (e) The assessment of scenic quality as only 'low' is incorrect. With proper categorisations of Visual Sensitivity/Scenic Quality and Landscape Assessment Character, the visual impact at many receptors would have led to at least *"moderate"* conclusions.

Following the visual reference for scenic quality values in Table 5, our views equate to moderate scenic quality, whereas in Table 17 (for example), all receptors examined are only assessed as low scenic quality.

Furthermore, the Large-Scale Solar Guidelines principles on visual impact state that *'the baseline character of the landscape must be determined through engagement with the community.'* It is therefore disingenuous, and in defiance of the Guidelines, for the proponent to arrive at the conclusion of 'low' existing scenic quality despite also noting in the social impacts analysis that the near neighbours *'highly value their views'*, describing, for example, the view from their dwellings as an *'expanse of natural beauty... relaxing view to look at'* and *'our money shot'*.

- (f) The Landscape Assessment Character categorisation of LCZ03 is totally inaccurate. The land might be a modified environment but it does not have capacity to absorb the change envisaged by the solar energy development.

The landscape elements that contribute to its quality will be changed as follows:

- Loss of some trees;
- Grass will be covered/blocked by solar panels, substations and other infrastructure;
- Rural fences (1.2m high) will be replaced and supplemented by 2.4m high security fences;
- Night lighting; and
- Increased traffic and dust will become part of the landscape.

It is false to note in the Magnitude column of Table 6 that: *'the Project will be a visible change in landscape characteristics from areas at close range. However, the extent of this change is considered minor.'*

It is also incorrect to conclude: *'The Project is of a scale and form that is in keeping with the existing built typology of the rural landscape and as a result the Project could be adequately absorbed by the landscape.'*

There is nothing in keeping with the rural landscape in 750,000 solar panels, a 6ha substation, security fencing, batteries and the like. Whilst farms in the area have sheds and cattle yards for example, there is currently no concentration of infrastructure close to the road or clearly visible to others' houses. Rural development is interspersed with pastures and trees.

It is misleading to suggest that because there are high voltage transmission lines in the vicinity that the substation, solar arrays and associated infrastructure are merely extensions of the industrial taint. The substation and solar arrays are far more concentrated than the existing power line and it is disingenuous to suggest that they are merely an extension of the existing powerlines.

In terms of mitigation, suggestions of relocating the substation to behind a knoll to lessen its visibility (both from the road and surrounding properties) have been dismissed by referring to TransGrid preferences which I assume may relate to access. It may be expedient for Total Eren to have the substation directly off Middlebrook Road to avoid the need for providing a suitable access to a more discrete location, however that expedience should not be the sole determinant.

- (g) At page 77 of the EIS where the Landscape Characteristics of the existing environment are discussed the landform is described as *'flat or gently sloping plains'* which misrepresents the nature of the country. The assessment of the land as flat gives rise to the possible conclusion that because of the topography the Project will not be visible to neighbouring properties. The supporting photograph (Figure 6-1) immediately belies that description as it is clear that the land has been contoured to prevent erosion, a practice that is only necessary on sloping ground.
- (h) We are unable to comment specifically about the treatment of the visual impact from our house (Receptor 24) as it is simply missing from the detailing of Residential Viewpoints in Table 9 of the VIA. We have received advice that, like the other home on our property occupied by our daughter and her partner (Receptor 15), our house site should have received detailed examination. This omission alone should prompt grave concerns about the validity of the VIA.

Other material in the VIA, for example the Viewshed Map (Figure 19) clearly shows the extent of the impact on our view. We built a very substantial new home (Receptor 24) in 2017. The house and recreational facilities were located to take advantage of the sweeping view down the valley. This has been evident to representatives from Total Eren, NGH and Moir Landscape Architecture who have visited.

The site was carefully chosen after fifteen years of ownership of the property where all siting criteria (including maximising views of the surrounding land) were most optimally met.

- (i) On 20 June 2023 Dr Mohajerani brought various photographs supplied to her by Moir Landscape Architecture to our house to discuss the visual impact of the Project. We indicated that there was a huge discrepancy between the view that we were looking at with her in real life and the photographs taken on approximately 11 April 2023 by Moir. The panoramas shown to us bore little resemblance to our actual view. The substantial mountain range on our skyline looked far more distant and lower than in reality. Structures which we can see clearly with the naked eye on the properties included in the Project appeared like dots on the landscape. In fact, the Total Eren representative found it difficult to identify significant farm and natural features on the photographs whereas they were easily identifiable when looking out our living room window (from where the photos were taken).

We are therefore concerned that the photomontages and other material included in the EIS or otherwise shown to us do not correctly reflect the visual impact of the project.

- (j) I am also concerned that most of the images included in the VIA to depict Land Character (for example images 9, 11, 12, 13) are somewhat removed from the project area. Perhaps deliberately, there are no photos which capture the view from properties which look onto the project area so anybody studying the EIS is not given any idea of what actual views are being impacted.
- (k) I draw attention to Figure 17 (substation location, p.41) of the VIA and specifically to the fact that no mitigating factors such as vegetation or topography will reduce the visual impact from my daughter's home (Receptor 15). I note the view from my home, whilst slightly more distant, will also not enjoy the benefit of any such mitigants. Our view will be almost total and unmitigated.
- (l) There is a reference to the visual impact of the security fencing of the perimeter of the site plus specific internal areas being only of negligible impact.
- (m) On p.78 of the EIS under Landscape Condition it is stated that '*a number of rural residential dwellings are scattered around the project, clustered primarily along New England Highway*'. The Viewshed map most accurately casts doubt on this statement as clearly the worst affected residences are located on Marsden Park and Middlebrook Roads. This again calls into question the value of the VIA.
- (n) I am concerned that the cumulative effect of the Middlebrook Solar Farm and the nearby Acacia proposal (in the scoping phase) will become the dominant visual elements in the area, altering the perception of the general character of the landscape.
- (o) I question the assertion on page 97 of the EIS that due to the 'relatively low scale and siting of the Project elements such as the substation, BESS, fencing, access, inverters and transformers were [are] unlikely to alter the existing visual landscape outside the immediate vicinity'. This could only be accurate if "immediate vicinity" is well beyond our property.
- (p) The photomontages included in the EIS (and those that have reluctantly been provided to other affected landholders by Total Eren for use "outside the EIS process") show how very seriously many houses including Receptors 15 and 24 will be impacted notwithstanding the "objective" conclusions reached under the technical guidelines. This difference in conclusion strongly confirms the VIA should be critically reviewed.

(q) Screening by planting trees has been suggested to us as a visual disamenity mitigant. We have explained to the applicant the limitations of this proposal:

- i. Trees planted now will take years to create a visual barrier:
 - trees planted should be local species which are by their nature slow growing.
 - drought occurrences require the trees to be watered to achieve quicker growth.There are limitations on the availability of water for this project.
- ii. Trees planted around the perimeter of the project will not take away the visual pollution from our property due to the topography of the area and the site.
- iii. We do not agree to trees being planted on our property in our view line. We have since 2016 planted over 1,000 trees on our property with the guidance of Local Land Services. They have been planted with a view to mitigate dust from Marsden Park Road; to provide shelter belts for our livestock; and to provide biodiversity corridors. We have deliberately not planted rows close to our house so that the views to the south and south west are not infringed. We wish to retain that aspect not only for the vista which we cherish but as a management tool allowing us to observe crucial locations such as lucerne fields, hay making and storage locations, and water pumping facilities so that any problems (for example fires, bloating cattle, theft) can be quickly identified.

(r) The proponent has made no attempt to adjust its plans, designs or siting to reduce visibility of the proposed development. This is in conflict with the Large-Scale Solar Guidelines principles on visual impact. which require:

*‘2. Applicants must consider landscape character and visual impacts early in the site selection and **design process to minimise impacts and conflicts** where possible.*

*3. Solar energy projects should be **sited and designed to avoid areas with topographical constraints that would increase the visibility of a development.**’*

The proposed site is sloping, and visible to many of the surrounding dwellings. There is a knoll on the land which could be used to screen certain aspects of the development (e.g. the substation and associated infrastructure) from the view of most of the surrounding dwellings, but this has not been incorporated into the design. However, these considerations appear to have been ignored.

(s) In summary, one of our gravest concerns in relation to the Middlebrook Solar Farm is its impact on our visual amenity. We do not believe the EIS assessment reflects either the industrial blight the project will create contrasting to the current peaceful rural character, or the expansive impact of that change.

5. We are concerned the **full impact of glint and glare has not been captured in its treatment in the EIS.**

- (a) Page 97 of the EIS states that 13 residential receivers withing 3km of the project area will not be impacted and that no sections of Marsden Park Road will experience glare from the project, noting existing topography will likely filter glare. This conclusion was apparently reached from a desktop assessment only and further study is required:
 - i. I am not aware of any topographic features between our property and the project area which would filter glare.
 - ii. Allowing a project to proceed on an assumption of a likely filtering of glare is a risk too great to take.

- (b) The glint and glare assessment focussed on the PV panels. It appears to have not considered glint and glare which will be produced by the substation and other infrastructure. The substation will be clearly visible from our house and we are concerned the considerable expanse of steel and other metals will produce much glint and glare which will impact us. Furthermore, it is not clear at what height the panels are depicted – the expected height or the worst case scenario.
- (c) Likewise, there seems to have been no assessment of glint and glare which will emanate from the vehicle carpark area and the large number of earthmoving equipment, tractors, other machinery and vehicles working on the site both during and after construction. From the office or living area of our home we often get glint and glare from farm equipment working on the Whatmore property although this is albeit a single vehicle and only occasionally. We fear that the flashes and glint and glare which will be produced by more than 100 vehicles (see my objection relating to Traffic for substantiation of this figure) will further impact our view and reduce lifestyle amenity.
- (d) Other than the desktop assessment, the glint and glare impact has only been considered from roads and not residences. What if the disregard of the impact on houses is misplaced or we are subjected to invasive glint and glare?
- (e) The night lighting effect of the project is assessed as minimal however any night lighting is out of character for our neighbourhood.

6. I object to the **social amenity effects which will come with the Middlebrook Solar Farm:**

- (a) Visual amenity negatives and loss of rural character will greatly impact how our family enjoys our property. If the project proceeds and we are industrialised I expect that my three daughters, their families, and my extended family will no longer find “Brooklyn” the rural haven it now is. My husband and I will not derive the same pleasure from entertaining and sharing our lifestyle with our grandchildren.
- (b) During construction, and during the operation of the solar farm, dust will be a constant insidious bystander. The area is very dusty even with only usual agricultural pursuits and occasional traffic movements, and even in relatively good seasons. We have learnt to live with the dust in our houses and on our farm but there is a limit, and as we age, we wonder how we will tolerate clouds of dust enveloping us on an almost full time basis. That may sound dramatic but having observed the dust at “Brooklyn” for 21 years I know what an impact greatly increased traffic movements, the operation of machinery, and vehicles moving around the project site will have on how we feel about the family farm.
- (c) The construction stage of the project is predicted to cover 30 months; likewise the decommissioning. That is, about 5 years in total. Even in my daughters’ lifetimes that is a fairly significant burden. For my husband and I it is a very substantial burden.
- (d) The applicant suggests dust can be mitigated by watering Middlebrook Road and the construction site generally. This is a very simplistic approach as I will discuss in my objection based on transport/traffic considerations. I will also discuss the naivety of suggesting the increase in traffic on Marsden Park Road will not be significant.
- (e) Wind is the weather phenomenon always said to have a depressive effect on people’s wellbeing. Wind combined with dust has an even greater reduction in wellbeing. If construction of the project coincides with drier seasons, it is likely the weather will be more windy, and the dust problem will have a significant negative impact on residents’ mental wellbeing not to mention the impact on their physical health.

- (f) We are concerned that as we have declined the approaches of Total Eren and other solar farm aspirants, we have seriously impacted our financial future. We will likely become an island in a sea of solar panels and will not want to continue farming in the area however we cannot see an alternative:
- (i) Our land is well located relatively close to Tamworth which has the health and other services we require as we get older.
 - (ii) It is highly productive land of an economic size in a beautiful location.
 - (iii) We have invested heavily in the improvements on the property including our home which was designed to incorporate a carer's facility to assist us in our later years.
 - (iv) Our daughter and her partner are also happily entrenched on the property.
 - (v) We do not want to be anywhere else but we do not want to live close to a solar farm of such proportions.
 - (vi) We are concerned that should we decide we have to sell to get away from the solar farm our property will be hard to sell. The Loomberah district is highly regarded and commands premium prices but we are advised by real estate agents that farms in the immediate vicinity will be harder to sell – a fact recognised in the EIS. The EIS predicted in the absence of Australian data as to the impact on farm values that properties would remain on the market for longer – this is tantamount to accepting prices will fall. Properties will be on the market longer as less buyers want to be near solar farms. That equates to less demand and in the supply-demand equation lower prices will result. Just because there are not yet any published studies quantifying the financial loss of nearby landholders, it should not be simply dismissed as zero or negligible. It is totally inequitable to do so and runs contrary to the provisions of Section 4.15(1)(b) of the Environmental Planning and Assessment Act 1979. In light of the Court of Appeal's decision in *Randall Pty Ltd v. Willoughby City Council* [2005] NSW CA 205 (in relation to Section 79C which has since been updated) this loss is not limited to planning matters and requires a unique understanding of loss in terms of locality rather than overall economic impact.

In an effort to understand the likely impact on farm values on Marsden Park Road I spoke to a Real Estate Agent in Mildura (the closest sizable centre to Total Eren's Kiamal Solar Farm). He noted that project has no close neighbours and is accessed off the Calder Highway. Farms in the area are much larger than Loomberah properties (minimum 600ha); the average annual rainfall is approximately 150mm; the land is relatively flat and farmland sells for around \$1,250 per hectare.

This compares to Marsden Park and Middlebrook Road land which is closer settled; has gravel road access; 600mm plus rainfall and values approaching \$25,000 per hectare – the Kiamal Solar Farm area is obviously inferior agricultural land to Middlebrook. I would submit the Kiamal Solar Farm is therefore more appropriately located.

It is also of concern that the footprint of Kiamal Solar Farm has already been extended. We fear that Total Eren will in the future seek to expand Middlebrook Solar Farm should it be approved, leading to the further industrialisation of the area and isolating us even more. Other more appropriate locations would accommodate such expansion with far less environmental and social trauma.

- (g) Compensation for neighbours has been recognised in Australia as a cost of doing business for many years with respect to wind farms. As far back as 2011, NSW Planning Guidelines for wind farms suggested that “a gateway for an increased level of initial assessment of the proposed development applies if the applicant does not receive written consent from landowners with residences within 2km of proposed turbines”.

This type of assessment should be adopted for solar farms so that we do not end up in the situation of an EIS on exhibition with aggrieved neighbours still not offered any meaningful compensation.

The compensation aspect has been developed further with respect to wind farms in other jurisdictions with input from the Clean Energy Council and other authorities.

- (h) The last few years since Total Eren first started investigating the project has been very stressful for us. We feel trapped not wanting to move but sensing that our latter years will be rewritten by other parties over which we have no control. It has brought about feelings of defeatism, loss of esteem and helplessness, producing a self-perception of failure.
- (i) I am also concerned about the impact of the project on our neighbours and the wider Tamworth community:
 - The safety of children on the school bus on roads degraded by greater use and frequented by higher traffic flows and pervaded by dust.
 - The pressure on our health system of the demands of an “imported” fly in/fly out workforce.
 - The increased difficulties faced by renters as Tamworth seeks to accommodate a significantly inflated workforce.
 - The struggle of local business owners to attract skilled workers to their enterprises.
- (j) We will experience a loss of sense of place and loss of privacy especially during the construction phase of the project not only due to the visual impact but because hundreds of workers will be in close proximity daily for 30 months or more.

7. I object to the project because of the **greatly increased traffic (especially during construction and decommissioning) which will be generated past our property and on the roads which we travel regularly both north and south.**

My main concerns are:

- (a) Dust which has been discussed elsewhere. This issue cannot be overstated due to its impact on humans and animals alike and the general productivity and amenity of our farm. The dust problem will not only be caused by travel on public roads, but also the 48km of internal roads.
- (b) The condition of our roads. Marsden Park Road and Middlebrook Road are both gravel. They are not well maintained due to the apparent lack of financial resources of Tamworth Regional Council and seasonal conditions with both wet and dry times challenging.
- (c) The EIS Traffic Impact Assessment (TIA) has many deficiencies. Throughout the TIA the assumptions are very strong and unrealistic. Such assumptions are clearly arrived at downplaying the impact of vastly increased traffic movement.
 - i. It is unrealistic to suggest the construction workforce and all supply vehicles large and small will travel to the project site via the New England Highway and then onto Middlebrook Road. Marsden Park Road is a much more direct route from the north and east – Brisbane, Armidale, Bendemeer, Moonbi, Kootingal, Dungowan and Nemingha – and if workers or trucks are travelling from those directions, it is a leap of faith to assume they will travel through Tamworth suburbs onto the New England Highway and then onto Middlebrook Road. It is much more direct to travel via Loomberah, and Duri-Dungowan Roads (both bitumen roads) and then onto Marsden Park Road. I appreciate the applicant intends to encourage workers and deliveries to access via the New England Highway route. How will that be enforced?

Marsden Park Road is not capable of supporting increased traffic.

- ii. The assumption that a large proportion of the workforce will use shuttle buses to travel to work is flawed. Given the workers will also be travelling around the estimated 48km of internal roads with their equipment and tools it is likely they will travel independently to the site.
- iii. The TIA predicts a very low number of movements. I believe there are numerous errors and deficiencies in those predictions. Put simply, the number of shuttle bus and other “passenger” type movements is inadequate to result in the “up to 400” workforce accessing the site.
- iv. Likewise the hours of greatest extra use are incorrect – the peak hours do not correspond to a normal 8 hour working day.
- v. The TIA takes as its baseline an outdated survey (2014). Our discussions with a Traffic Engineer suggest data that old is highly unreliable and it should not simply be grossed up using an arbitrary growth rate. Consequently the conclusions reached could greatly underestimate the increase in traffic flows.
- vi. The TIA notes the possibility of vehicle movements outside peak periods but does not define what those off-peak periods might be. I am concerned about increased traffic movements at dawn and dusk (and night) when there are often kangaroos and other hazards on the roads in the area.
- vii. The hours of peak traffic will coincide with school bus times creating safety concerns on both Marsden Park and Middlebrook Roads given the dust and their narrow and often damaged condition.
- viii. Traffic and civil engineers we have consulted have alerted us to the very serious issue raised by the attempted “justification” of the limited implementation of a turning lane when entering Middlebrook Road off the New England Highway from the north. The developer appears to have revised its assumptions to try to avoid the need for implementation of a safer turning lane off the New England Highway. The TIA only proposes a BAL even though the results of the study suggest an AUL turning lane would be required during the construction period. Such a suggestion is based on strong unrealistic assumptions.
- ix. At T6 (page 130) in the EIS it is noted that the capabilities of Goonoo Goonoo Creek Bridge are yet to be assessed given the amount of traffic and the number and type of heavy vehicles. Surely this assessment should have already taken place. We are aware of some agricultural machinery (not greatly oversized) being unable to use the bridge. What does the developer propose if the bridge is found to not be capable of carrying the required heavy equipment and deliveries?
- x. The TIA notes the potential need for a traffic control plan with speed limit reductions which would be very disruptive, particularly at peak times. Such speed limits would impede New England Highway traffic flows.
- xi. It is also noted in the EIS that the dust problem could be mitigated by applying speed reductions. It is ironic that congestion and variable speeds could result in higher fuel consumption by traffic on both the New England Highway and Middlebrook Road when a stated highlight of the proposal is the reduction in the creation of greenhouse gases.

- xii. I have been advised the TIA grossly understates the likely number of additional heavy and oversized vehicles using the road. There does not seem to have been full account of all trucks needed to carry panels and other infrastructure, road base materials and water for dust suppression on Middlebrook Road and internal roads.
- xiii. Figure 3-7 (page 36 of EIS) depicts turning availability onto Middlebrook Road from the internal access crossing point of Middlebrook Road. This is in contradiction to the assertion in the EIS that access to Middlebrook Road will not be allowed at this point. Access at that point may not be encouraged however how can it be prevented if workers wish to shortcut their travel home rather than traverse along a network of internal roads and especially if they wish to travel to the eastern side of Tamworth or north of Tamworth they are likely to travel down Marsden Park Road.

8. I object to the Middlebrook Solar Farm proposal because it will impact on the **productiveness of our farm:**

- (a) Dust creation has negative impacts on:
 - i. Pasture growth;
 - ii. Water quality for domestic and livestock consumption;
 - iii. Efficacy of weed control spraying; and
 - iv. Wool contamination.
- (b) Possible labour shortages.
- (c) Traffic issues.
- (d) The likely impact of the development on water. We are concerned flows to Spring Creek and potentially aquifers servicing our property will suffer detriment.

Spring Creek is described in the EIS as only flowing after rain. 2023 has not been a particularly wet year however Spring Creek is currently flowing strongly. It has flowed continuously for approximately the last 3 years. We fear this reliable water source could be impacted by earthworks causing diversions or dam effects.

- (e) We are concerned about potential contamination from chemicals and other pollutants following storms and with flooding.

9. I object to **the use of prime agricultural land for industrial purposes:**

- (a) I question the land categorisation used in the EIS. Whilst perhaps following guidelines, I dispute its application:
 - i. I understand the NSW Department of Primary Industries is currently undertaking a review of the classifications in the state as severe discrepancies have been identified.
 - ii. The classifications on our property are clearly inaccurate. After 21 years of ownership we believe we know the capabilities of our land. We have been awarded Top 100 Producer by Meat and Livestock Australia in terms of the grading and eating quality of our beef. We grow prime dryland lucerne hay producing 240 tonnes off four cuts from 10ha in 2022-23 alone. This particular land is given a Class 5 classification if the information in the EIS is correct. Much of our land is of that class (which I believe equates to Class 3 overall). The lesser quality land on our property which may be Class 5 in reality is shown in the EIS to be Class 4. With this type of discrepancy I believe the loss of agricultural production which will result from the Middlebrook Solar Farm proposal is grossly underestimated in the EIS.

- (b) The proponent has not firmly committed to agri-solar (with sheep grazing) and there are many contradictions in the EIS in this regard. It is likely most if not all of the proposed site will be completely lost to primary production.
- (c) Given the heat bank effect which is acknowledged in the EIS I would suggest grazing of sheep is neither humane or efficient.
- (d) Sheep should not be grazed under the panels as there is great probability they will be exposed to risks threatening our clean green lamb production. I have raised the issue with Livestock Production Assurance with whom all livestock producers in Australia need to be accredited in order to market their produce. That organisation has expressed some concern if there is risk of contaminants or livestock stress. I have been informed the actual circumstances should be investigated and all audit criteria satisfied for an LPA registration to continue.

10. I object to the Middlebrook Solar Farm proposal as I believe **the biodiversity risk is too great.**

- (a) I question whether the need for Commonwealth scrutiny pursuant to the Environmental Protection and Biodiversity Conservation Act 1999 has been correctly ruled out. I believe sufficient doubt exists about the significance of the impact on at least one threatened species.
- (b) Evidence of koalas, and the acceptance of the existence of areas of sustainable koala habitat were sufficient for the applicant to change the footprint of the solar farm, however I question whether that change will significantly reduce the risk. Koalas, if present, are likely to be disturbed by large scale development of this magnitude, suffer extreme stress and be forced out of the area. I do not believe fencing some of their habitat and the riparian zones out will be a sufficient safeguard.

Similarly I have concerns for other threatened species. I note it is suggested steps will be taken to protect some trees, however it is acknowledged by the applicant that some trees will be destroyed including trees with hollows.

- (c) I believe we will “lose” some of the birdlife we enjoy on our property as a result of the habitat destruction which will occur close by. In 21 years of ownership we have not fallen any living trees and have only removed dead trees when they constitute a safety hazard. We are concerned that a relatively close neighbour might be entitled to remove 194 trees.
- (d) Other fauna and flora mentioned in the scoping report as threatened species will also be impacted if the project is approved.

Conclusion

- (1) The application should be refused.
- (2) If the application is approved, the following issues should be fully addressed:
 - (a) Marsden Park Road should be upgraded to bitumen standard from the Duri-Dungowan Road intersection to its intersection with Middlebrook Road.
 - (b) Middlebrook Road should be upgraded to bitumen standard from its intersection with the New England Highway to at least its intersection point with the project’s internal road network.

- (c) During construction the applicant should be required to suppress dust arising from the construction work without placing pressures on Tamworth's water supply and a study should be commissioned to ensure any dampening agent will not contaminate waterways or other properties with runoff.
- (d) The construction of an AUL turning lane on the New England Highway.
- (e) The substation should be positioned back from the road so as to minimise its visibility from residences in the valley and from public roads (for example, behind the knoll adjacent to the road).
- (f) No destruction (felling) of any threatened species trees – the footprint should be reduced accordingly.
- (g) Screening with mature indigenous species trees and shrubs in a tiered effect along the road line and around major infrastructure (e.g. substation) with provision for proper ongoing nurture and watering.
- (h) Provision of any tree screenings as requested by neighbours.
- (i) A more comprehensive biodiversity study should be commissioned in relation to endangered species.
- (j) The applicant should enter into meaningful financial agreements with all affected un-associated neighbours recognising the full extent of the detriment suffered including loss of amenity and property value.
- (k) The company should be required to indemnify all neighbours (adjoining and nearby) against claims for any loss or damage in excess of the normal level of public liability insurance held by such neighbours suffered on the project site as a result of escape of fire from neighbouring property.
- (l) The company should be required to compensate all neighbours (adjoining and nearby) for loss incurred due to increases in insurance premiums which may result from the presence of the development (risk of fire escaping from project site).

Janette Marjorie Habgood